Wessex Archaeology

Withington, Gloucestershire

Archaeological Evaluation and Assessment of the Results

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Withington, Gloucestershire

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Summary

In August 2005 an archaeological evaluation was undertaken by Channel 4's 'Time Team' on the outskirts of the village of Withington in Gloucestershire, approximately 14km south east of Cheltenham (centred on NGR 403200 214900).

The evaluation concentrated on three areas of investigation: Site A (Manor Court Field), where a local archaeologist had recovered Romano-British finds from mole-hills; Site B, the Scheduled Ancient Monument of Withington Villa (SM GC200), a complex potentially dating from the 2nd - 4th centuries AD, first excavated in 1811; and Site C, an area between Sites A and B, the site of a spring and potential water management.

The project aimed to investigate the nature of the possible structures situated in Site A, and their relationship, if any, to the known villa complex to the west, while evaluation of the villa aimed to assess the nature of the surviving archaeology nearly 200 years after its 19th century discovery. It was hoped that the work within Site C would establish what type of water management was needed to tap a natural spring in order that it could be used as a well.

The project was successful in the identification of the remains within Manor Court Field as a large range of buildings, including a bath-house with mosaic floors, of such a scale that it is likely to represent a separate villa complex and not ancillary buildings associated with the Withington Villa to the east. One of the mosaic floors was possibly designed and laid by the mosaicist responsible for the Orpheus mosaic from Withington Villa, a member of the Corinian school of Cirencester.

The work in the Scheduled area established that nearly two hundred years of agriculture had greatly damaged the underlying remains of Withington Villa, with severe truncation of the mosaic floors and upstanding walls having occurred since its excavation.

No evidence of the spring or associated structures concerned with water management was identified in Site C.

Acknowledgements

This programme of post-excavation and assessment work was commissioned and funded by Videotext Communications Ltd, and Wessex Archaeology would like to thank the staff at Videotext, and in particular Michael Douglas (Series Editor), Melinda Smith (Production Manager), Rebecca Woodhead (Assistant Producer), Kate Edwards (Researcher) and Jenny James (Production Co-ordinator) for their considerable help during the recording and post-excavation work.

The geophysical survey was undertaken by John Gater, Jimmy Adcock and Emma Wood of GSB Prospection. The field survey was undertaken by Henry Chapman (University of Hull). The excavation strategy was conducted by Mick Aston (Bristol University). The on-site recording was co-ordinated by Steve Thompson, assisted by Naomi Hall, both of Wessex Archaeology. The finds were processed on-site by Naomi Hall.

The excavations were undertaken by Time Team's retained archaeologists, Phil Harding (of Wessex Archaeology), Raksha Dave, Kerry Ely, Matt Williams, Ian Powlesland and Brigid Gallagher with assistance from Suzanne Brown, Sarah Welsh, Cassie Newland, Chris Reese, Stuart Whatley, Zena Marsham, Terry Spellman and Steve Yeates.

The archive was collated and all post-excavation assessment and analysis undertaken by Wessex Archaeology. This report was compiled by Steve Thompson, with specialist reports prepared by Lorraine Mepham (finds), Jessica Grimm (animal bone), Nicholas Cooke (coins) and Chris Stevens, Cathie Chisham and Mike Allen (Environmental). The illustrations were prepared by Mark Roughley. The post-excavation project was managed on behalf of Wessex Archaeology by Lorraine Mepham.

The work also benefited from discussion on site with Neil Holbrook of Cotswold Archaeology, mosaic expert David S. Neal, Roman coin expert Richard Reece, Roman water-course expert Zena Marsham and local archaeologist Roger Box. Thanks are also due in this respect to Phil Harding, Phil Andrews, Nicholas Cooke and Paul McCulloch of Wessex Archaeology, Mick Aston of Bristol University and Jan Wills, Gloucestershire County Archaeologist.

Withington, Gloucestershire

Archaeological Evaluation and Assessment of Results

1 INTRODUCTION

1.1 Description of the Site

1.1.1 Wessex Archaeology were commissioned by Videotext Communications Ltd to undertake a programme of archaeological recording and post-excavation work on an archaeological evaluation undertaken by Channel 4's 'Time Team' on the outskirts of the village of Withington in Gloucestershire (**Figure 1**).

1.1.2 This report documents the results of archaeological survey and evaluation undertaken by Time Team, and presents an assessment of the results of these works, along with recommendations for further analysis and dissemination.

1.1.3 The village of Withington is situated in Cotswold District, Gloucestershire, approximately 14km south east of Cheltenham. The evaluation concentrated on three main areas of investigation.

1.1.4 The first (Site A) focused on Manor Court Field, situated 500m south of Manor House. Manor Court Field is centred on NGR 40338 21490 and approximately 148m aOD. The land is enclosed by the River Coln and a tributary of it.

1.1.5 The second area of investigation (Site B) was located on the site of Withington Villa, about 800m south-west of the village, centred on NGR 403120 214850 and approximately 170m aOD. The villa site is considered of national importance and has been designated a Scheduled Ancient Monument (SM GC200).

1.1.6 A third area of investigation, Site C was situated between Sites A and B in the field known as 'Withington Upon Wall-Well', centred on NGR 40330 21489 and approximately 152m aOD.

1.1.7 All three Sites fall within the ESA (Environmentally Sensitive Area) scheme managed by the Department for Environment, Food and Rural Affairs (DEFRA). The underlying geology is Cleeve Cloud Member (Lower Freestone), a clay with limestone fragments overlying Ooidal Limestone.

1.2 Historical Background

1.2.1 The Site lies to the east of Gloucester (*Colonia Nervia Glevensum*), the site of a mid 1st century AD legionary fort which by the end of the century had become a colony of retired military veterans and one of Roman Britain's principal settlements. The Site lies due north of Cirencester (*Corinium*

Dubonnorum), the site of another mid 1st century AD fort which developed into a civilian settlement.

1.2.2 Withington lies close to several major Roman roads - Ermin Street to the south-west (connecting Gloucester and Cirencester), the Fosse Way to the east, and The White Way to the north-east, a road which linked several villa sites to the north of Cirencester.

1.2.3 Several Romano-British villa sites are located nearby, Frocester and Woodchester to the south-east, Chedworth due south and Compton Abdale to the north.

1.2.4 The field to the east of Withington Villa was known as the 'Old Town' or 'Withington Upon Wall-Well', so named from a possible spring situated nearby.

1.3 Previous Archaeological Work

1.3.1 No previous archaeological work has been carried out on Site A except for the recovery of fragments of Romano-British roofing tiles and *tesserae* from mole hills within the field by local archaeologist Roger Box, whose discoveries led to this project.

1.3.2 No work has been carried out in Site C, and in Site B no work has been conducted since the initial discovery of the villa complex, and subsequent excavation by Samuel Lysons in 1811.

1.3.3 *'The remains of a Roman villa were accidentally discovered in the autumn of the year 1811, in the parish of Withington, by some men at plough in the common field, on a piece of land about half a mile south of the village of Withington, belonging to Henry Charles Brooke Ex and Mrs Nicholls. Having been invited by Mr Brooke to assist in the investigation of these remains, I went to Withington in the month of October 1811; and by digging channels in various direction from the pavements already opened, and following the remains of the walls and pavements discovered by those means, a considerable portion of the plan of the building was satisfactorily ascertained.*' (Lysons 1813).

1.3.4 The above extract comes from volume II of Samuel Lysons' publication *Reliquiae Britannico-Romane, containing figures of Roman Antiquities discovered in England*, a multi-volume work published from 1807-1817. The work contains a description of the excavations at Withington and of the discoveries Lysons made. The volume also contains a plan of the area of his excavation showing the various rooms of the villa complex and detailed illustrations of the mosaic floors.

1.3.5 Much of Lysons' account of Withington comprises a description of the Orpheus mosaic which was donated by Mr Brooke to the British Museum (**Figures 2, 3** and **4**). The plan suggests that the villa is a tripartite corridor villa with a bath-house at the eastern end of the structure, and provides approximate dimensions of the rooms and villa complex.

1.3.6 Later analysis of the Orpheus mosaic removed from Withington show that it belongs to the Corinian *officina* or school of mosaic designers based in Cirencester and operating in the first half of the 4th century AD. A later panel depicting Neptune was added sometime around AD 350, designed by the Durnovarian *officina*, based in Dorchester and operating in the second and third quarters of the 4th century (Johnson 1987, 41, 66).

2 METHODS

2.1 Introduction

2.1.1 A project design for the work was compiled by Videotext Communications Ltd, providing full details of the research aims and methods (Videotext Communications 2005). This Project Design was agreed with the County Archaeologist following the granting of Scheduled Monument Consent from English Heritage for work within the Scheduled Area. A brief summary is provided here.

2.2 Aims and Objectives

2.2.1 The project provided the opportunity to undertake an archaeological evaluation in Manor Court Field (Site A), an area where no previous excavation had taken place. The project aimed to test the hypothesis that the possible structures present are ancillary buildings and contemporary with the Withington Villa to the west.

2.2.2 The investigation at Withington Villa (Site B), aimed to ascertain the full extent and orientation of the known villa and establish the date, character and condition of the underlying archaeological remains since their discovery in 1811. The project also planned to open a trench over the site of the now removed Orpheus mosaic to investigate the potential for earlier phases of occupation sealed below the make-up deposits of the removed mosaic.

2.3 Fieldwork Methods

2.3.1 The project design identified two main areas of investigation, to the south and south-east of the village, which would be the focus of geophysical survey using a combination of Magnetic and Resistance survey and subsequent excavation of evaluation trenches. In Manor Court Field excavation and investigation of undisturbed archaeology was permitted whereas only investigation of the archaeology exposed during the 19th century was permitted within the Scheduled Monument Area in Site B, and not undisturbed *in situ* archaeology.

2.3.2 A third area (Site C) was identified for investigation once on site; this was the field in between the Manor Court Field and the SAM, close to the believed site of a spring. Geophysical survey and trenching was undertaken in this area.

2.3.3 Eight evaluation trenches of varying sizes were excavated. Their precise locations were targeted to investigate geophysical anomalies. The trenches were excavated using a combination of machine and hand digging. All machine trenches were excavated under constant archaeological supervision and ceased at the identification of significant archaeological remains, or where natural geology was encountered first. When machine excavation had ceased all trenches were cleaned by hand and archaeological deposits investigated, as outlined in the agreed Project Design.

2.3.4 As all three Sites are designated ESAs (Environmentally Sensitive Areas), the topsoil and subsoil excavated from the trenches were kept separate, and the turf set aside for reinstatement. The excavated up-cast was scanned by metal detector, using detectorists recommended by the Finds Liaison Officer, Portable Antiquities Scheme, Gloucestershire.

2.3.5 All archaeological deposits were recorded using Wessex Archaeology's *pro forma* record sheets with a unique numbering system for individual contexts. Trenches were located using a Trimble Real Time Differential GPS survey system. All archaeological features and deposits were planned at a scale of 1:20 with sections drawn at 1:10. All principal strata and features were related to the Ordnance Survey datum.

2.3.6 A full photographic record of the investigations and individual features was maintained, utilising colour transparencies, black and white negatives (on 35mm film) and digital images. The photographic record illustrated both the detail and general context of the archaeology revealed and the Site as a whole.

2.3.7 At the completion of the work, all trenches were reinstated using the excavated soil in the correct order and turf re-laid.

2.3.8 A unique site code (WIT 05) was agreed prior to the commencement of works. The work was carried out between the 2nd and 6th August 2005. All excavated artefacts and materials were subsequently transported to the offices of Wessex Archaeology in Salisbury where they were processed and assessed for this report.

3 RESULTS

3.1 Introduction

3.1.1 Details of individual excavated contexts and features, a full geophysical report (GSB 2005), and results of the artefact analysis are retained in the archive. Detailed summaries of the excavated sequences can be found in **Appendix 1**, and the results of the geophysical survey are incorporated here. The results of the evaluation are presented here by Site.

3.2 Site A: Manor Court Field

Geophysical Survey

3.2.1 The geophysical survey undertaken in Manor Court Field was successful in the identification of a large range of buildings, of such a scale that it is likely to represent a separate villa complex and not ancillary buildings associated with the Withington Villa to the east (**Figure 5**).

3.2.2 The magnetic survey revealed an area of increased magnetic response (anomaly 17), with negative responses indicative of wall lines (anomaly C) and strong responses interpreted as areas of burning; perhaps furnaces associated with hypocaust systems. The resistance survey identified the limits of the complex of buildings, which coincided with topographical changes within Manor Court Field, and identified a high resistance rectangular anomaly which on excavation was revealed as a sunken room backfilled with demolition rubble (anomaly B).

3.2.3 The resistance survey demonstrated that the complex of buildings within Manor Court Field was larger than Withington Villa. The latter covers an area of approximately 690 square metres, while the newly discovered complex covers some 2400 square metres. Even allowing for the spread of demolished material from the site, the core of the buildings is on a par with the Scheduled villa.

*Trench 1 (**Figures 1, 6 & 7**)*

3.2.4 The turf and topsoil of the pasture field (101) overlay a heavily plough-damaged rubble deposit (102) concentrated at the western end of the trench. Both (101) and (102) produced fragments of ceramic building material (CBM), including roof tile, box flue tile and brick. Stone roof tiles and *tesserae* were also recovered. Five copper alloy coins were found in the topsoil, four dating to the 4th century AD, and the fifth illegible but 3rd to 4th century in date.

3.2.5 Directly below (102) and the topsoil was deposit (103/105), a demolition deposit made up of fragmentary CBM (roof and box flue tile) and stone building material (including *tesserae*). Roman pottery recovered from this deposit had a date range of 3rd to 4th century AD.

3.2.6 Following the removal of (103/105), a substantial building was revealed consisting of an external wall, creating a corridor with an internal (now robbed) stone wall. The corridor floor consisted of a tessellated pavement composed of stone and reused CBM *tesserae*. To the east of the internal wall were the remains of a fine mosaic floor (now almost completely demolished) set into an *opus signinum* surface. An earlier *opus signinum* floor was identified below this. The floor surface had been laid over a hypocaust system constructed from *pilae* columns.

3.2.7 Potentially the earliest deposit identified within Trench 1 was a possible redeposited layer (115) concentrated at the western end of the trench, cut through by the construction cut (111) for external wall (110). Cut (111) was not fully excavated and its full extent is not known, but was at least 2.40 m

wide with a gradually sloping western edge, wall foundation (110) constructed against the eastern edge. Wall (110) was approximately north-south aligned, built of roughly shaped Cotswold sandstone blocks, with only a single course identified (partially excavated). No mortar bonding was identified and it is therefore likely this was the upper layer of foundations for a wall, which was subsequently robbed. A later robber cut was identified.

3.2.8 Following the building of wall (110), there were a series of deliberate backfill depositions within the cut, butting up against (110): (124), showing evidence of burning and therefore likely to have been brought in from elsewhere, and (120), possibly derived from natural geology and original ground surface.

3.2.9 The line of a second, internal wall was identified approximately 1.40m to the east of (110), creating a corridor. Nothing remained of the wall itself, as it had been completely robbed, but its position and alignment could be discerned from the limit of the tessellated pavement within the corridor.

3.2.10 The corridor surface was formed of a tessellated pavement (104), constructed from limestone, Pennant sandstone and CMB *tesserae* on average 30mm square, but fairly crudely shaped. The rough, 'rustic' nature of the surface suggested a potential date of the late 4th or possibly early 5th century AD (D. S. Neal pers. comm.). The pavement was set into make-up layer (119), which was only partially revealed. No independent dating for the pavement was recovered.

3.2.11 At the western end of the trench a layer of roof collapse (107) lay beneath (103/105). This contained abundant fragments of Pennant sandstone roofing slates, 3rd to 4th century pottery and charcoal. Analysis of the charcoal showed that it probably derived from the burning of oak roofing timbers. It seems that when the roof collapsed it fell outside the building and overlay the fills of the construction cut for wall (110). Robbing of the building must have occurred after the roof collapse, as the robber cut (108) for wall (110) was seen to cut through the roof collapse layer (107).

3.2.12 A widespread rubble deposit (106/114) was identified over the eastern part of the trench, containing limestone structural fragments, *tesserae*, CBM and 2nd to 4th century pottery. A single 4th century coin was also recovered from this layer. This deposit resulted from the discarding of unrecyclable robbed material from the structure, and the small fragments of broken stone and CBM suggested a certain degree of post-depositional damage.

3.2.13 Three sondages were excavated through (106/114) in order to investigate underlying deposits or structures. These revealed further demolition deposits, one covering *in situ* structures.

3.2.14 In the south-eastern corner of Trench 1, Sondage 1 was dug to investigate (106/114), which overlay deposit (116/123), in turn overlying *in situ* structural archaeology. At the base of this sondage were three pillars (*pilae*) from a hypocaust system: (125), (126) and (127).

3.2.15 Each of the *pilae* had been robbed or demolished to a certain degree, (125) comprising a single *pedalis* acting as a foundation tile with four smaller *bessales* above, (127) a single *pedalis* and one *bessalis* and (126), the best preserved, which survived to a height of 0.64m, comprising a single basal *pedalis* with 15 complete *bessales*. The *pilae* were set into (128), probably a levelling and construction deposit for the hypocaust system.

3.2.16 Overlying (128) and banked up around each *pilae* was a dark silty deposit (122), interpreted as the residue from smoke and ash blowing through the hypocaust system, the waste products from the *praefurnium* or furnace used to provide the hot air.

3.2.17 No further *in situ* structural elements of the hypocaust were identified within this small sondage, although evidence of what the building had once been like could be deduced from the fragmentary structural remains contained within the large-scale demolition and dump deposit (116/123). These structural remains also provided evidence for several phases of construction within the building.

3.2.18 Deposit (116/123) was concentrated over the eastern half of the trench and was revealed in each of the three sondages excavated through (106/114). It represented a deliberate dump of unrecyclable waste material and was not the result of an accidental collapse of the structure. The deposit contained a very mixed dump of fragmentary box flue tile (*tubulus*), solid tufa voussoir stone (*cuneatus*), fragments of painted wall plaster, fragments of *opus signinum* and at least two sections of fine mosaic. Other finds from the deposit included fragments of dog skull and pottery dating to the 3rd/4th century AD. The fragments of vault stones and flue tiles came from beneath the mosaic fragments, indicating systematic demolition and robbing following by the dumping of unusable material back in to fill the voids between the surviving *pilae*.

3.2.19 Nothing remained *in situ* of the upstanding walls or floor surfaces of the structure, but evidence for these came from mosaic and *opus signinum* from the demolition deposit. Two fragments of fine mosaic were recovered. Fragment (112) was roughly 0.20m square and was constructed of small, fine-grained (white) limestone and Pennant (red-brown) sandstone *tesserae*. This patch of mosaic had been heavily burnt. A second fragment, (129), of a similar composition to (112), was unburnt. The mosaic fragments are considered to belong to the same floor and are dated stylistically to the late 3rd early 4th century. The lozenge-shaped designs and L-shaped pattern schemes are not dissimilar to mosaics from the Woodchester villa dated to the early 4th century (D.S. Neal *pers comm*.; Johnson 1987, 39).

3.2.20 Mosaic fragment (129) was set into a deposit of *opus signinum* (130), the *suspensura* which would probably have been laid over a series of bridging tiles (*bipedales*) resting on the *pilae*. The small surviving fragment which comprised (130) could be seen to overlie an earlier deposit of *opus signinum*, presumably an earlier *suspensura* layer, and therefore an earlier phase of building construction.

3.2.21 Examination of the *opus signinum* fragment showed that it was not waterproof concrete (Z. Marsham pers. comm.). The room revealed in Trench 1 is therefore likely to be a dry heated area – a *caldarium* or hot room, with the *in situ pilae* supporting the floor of the main area of the room. However, a second fragment of *opus signinum* from Sondage 1 showed a quarter round moulding, typical of hot plunge pool lining, implying a pool in the vicinity (D.S. Neal *pers comm*.).

*Trench 4 (**Figures 1, 8 & 9**)*

3.2.22 The turf and topsoil of the pasture field (401) overlay a subsoil deposit (402) containing common limestone fragments, probably the remains of the medieval ploughsoil forming a horizon above archaeological deposits. Layers (401) and (402) both produced pottery dating to the 3rd to 4th century AD.

3.2.23 Beneath (402) was a large rubble deposit (404) which appeared to fill the whole trench, initially believed to be the backfill material of a quarry. However, once this deposit had been removed, a small area of natural geology (405) was revealed, cut by the construction cut (403) for a possible water storage tank, a cold plunge pool of a *frigidarium*, or a possible *natatio* or swimming pool from a bath-house (Group 420). The feature was clearly external and not enclosed within a building. The full extent of the feature remains unknown, but it was 6.10m long by over 1.80m wide and 0.80m deep. The central area formed by the two parallel walls measured 3.20m across.

3.2.24 Following the excavation of the construction cut, a layer of grey clay (407) was laid at the base; this deposit underlay the walls of the structure, and is likely to have acted as waterproofing. Two roughly east-west walls, (406) and (408), formed the sides of the structure, both constructed of roughly shaped limestone blocks with a limestone rubble core, with four surviving courses. The walls were unmortared with no internal bonding material identified.

3.2.25 To the north of wall (408) was a flat area of light yellow clay (413) forming a step or bench between (408) and wall (409), two surviving courses of limestone blocks. This wall had been possibly partially robbed by cut (410), which had removed the western section.

3.2.26 At the southern end of Trench 4, a rubble deposit (418) filled the construction cut for the pool, and to the south of this was clay layer (414), cut by a shallow east-west ditch (411), the date and function of which are unknown.

3.2.27 At the base of structure (Group 420), overlying clay layer (407), was a thin deposit of what appeared to be limestone mortar (419). If the structure is a cold plunge pool, (419) may be the remains of the mortar surface used to hold the lining of the pool in place. Plunge pools would normally have been lined with waterproof *opus signinum* overlain with ceramic tiles, but no evidence for this type of lining was recovered. Alternatively, (419) could be the result of water dripping through the limestone backfill of the pool,

leaching out minerals and creating a thin layer of limestone derived material on the clay surface.

3.2.28 The pool was backfilled with a series of rubble deposits, (416), (415) and (404). These deposits contained large, unworked limestone blocks.

*Trench 5 (**Figures 1 & 10**)*

3.2.29 The turf and topsoil (501) in Trench 5 overlay a rubble rich subsoil deposit (502), containing frequent limestone and CBM fragments and sealing the underlying archaeology. Both topsoil and subsoil contained stone *tesserae*, painted wall plaster, fragments of Roman glass and pottery dated to the 2nd - 4th centuries AD.

3.2.30 The trench was only partially cleaned, over the eastern end, and no further excavation took place. A series of roughly shaped limestone block walls were uncovered, forming a stone channelled hypocaust system, and a possible external wall (508) of the structure was identified, aligned roughly north-west – south-east.

3.2.31 Two clear channels could be seen formed by three distinct limestone block constructions. The first channel was aligned roughly north-east – south-west, bounded by wall (506) to the west and wall (505) to the east. The second channel was of similar dimensions and was bounded by walls (505) and (504). The channel fills - (503) in channel 1 and (511) in channel 2 - were very similar deposits which contained fragments of limestone blocks and broken CBM; no dating evidence was recovered.

3.2.32 Although only partially excavated the structure was clearly identifiable as a stone-lined hypocaust system of 'Union Jack' style, such as those found within the *tepidarium* or warm room of a bath-house. No evidence of walls or floor surfaces remain and it is likely that a certain degree of robbing and recycling of material had occurred.

3.3 Site B: Withington Villa (SM GC200)

Geophysical Survey

3.3.1 The buildings of Withington Villa were identified as an area of magnetic noise, with no clear wall lines discernible from the data (anomaly 10). Only the footprint of the building was identified, with no clear individual rooms revealed (**Figure 5**).

3.3.2 A large rectangular enclosure (anomaly 11) was identified, comprising a southern, east-west aligned wall and an eastern, north-south aligned wall clearly visible to the east of the villa buildings. This was interpreted as a walled courtyard associated with the villa.

3.3.3 The clearest archaeological anomalies identified were a series of well-defined linear and curving linear ditch-type anomalies representing trackways, enclosures and field systems (anomalies 4-9). The form of the anomalies suggests a prehistoric date though some of them may be associated with the villa complex. One possible trackway potentially links the villa

complex of Withington with the newly discovered complex within Manor Court Field.

3.3.4 The magnetic survey also revealed several large pit-type responses (anomalies 12-16), varying in size from 3m to 10m in diameter. These pits may be associated either with earlier activity on the site or the villa itself.

3.3.5 Due to the very dry conditions of the ground and the shallow nature of the topsoil the resistance survey was only partially successful. The position of the villa building was identified, with partial wall lines discerned.

Archaeological Evaluation

3.3.6 Scheduled Monument Consent had been granted before any work was carried out within the area of the villa, and the agreed Project Design stated that excavation should establish the date and characteristics of the structures and should investigate the possibility of earlier phases of occupation beneath the villa. Once trenches had been opened, the work was to be limited to the cleaning and defining of walls previously exposed by Lysons, and the excavation of Lysons' backfill, with no investigation of undisturbed Romano-British deposits. Interpretation of the exposed structures and deposits is therefore limited.

*Trench 2 (**Figures 1 & 11**)*

3.3.7 Trench 2 was initially a hand dug 2m by 2m test pit. This was subsequently expanded following identification of significant archaeological remains. The trench was positioned in attempt to locate the site of the Orpheus mosaic.

3.3.8 Turf and topsoil (201) overlay subsoil (202), which contained abundant limestone blocks and fragments of CBM. The deposit had been quite badly plough-damaged, most probably during the medieval and post-medieval periods.

3.3.9 The uncovering of a roughly north-south aligned limestone block wall (203) in the initial test pit led to the expansion of the trench to investigate it. Wall (203) was not fully exposed and only one course of stone work was identified; it contained a limestone rubble core bonded with limestone mortar.

3.3.10 To the east of wall (203) was deposit (204), a mortar and limestone rich layer interpreted as a possible floor surface or perhaps the make-up layer for a mosaic floor.

3.3.11 A compact demolition layer (205) to the west of (and butting) wall (203) contained limestone and CBM fragments, also limestone mortar, fragments of *opus signinum*, painted wall plaster and structural fired clay with wattle impressions. A small sondage dug to investigate the relationship between (205) and wall (203) revealed (208), a mortar deposit, a possible floor surface or make-up deposit for a floor surface.

3.3.12 At the western end of Trench 2, mortar rich deposit (207) appeared to butt deposit (205), but the relationship remains uncertain. Layer (207) may represent a robbed out wall or perhaps the make-up deposit for a floor.

*Trench 3 (**Figures 1 & 11**)*

3.3.13 Trench 3 was positioned on a large magnetic spike in the geophysics survey, interpreted as a possible pit feature. Turf and topsoil (301) overlay subsoil (302), which is likely to be an old medieval or post-medieval plough soil incorporating limestone fragments from natural geology dragged up by the plough. The subsoil produced a mixture of Romano-British and post-medieval finds.

3.3.14 Below the subsoil, two features cut the natural geology (303). The first was a possible domestic rubbish pit (304). The upper fill (305) produced Malvernian limestone-tempered pottery of later 1st century AD date. The pit was not fully excavated, but the date of the pottery suggests that it might pre-date the construction of the villa. The second feature, (306), was again unexcavated and its date and function are unknown. The upper fill (307) contained common flecks of charcoal and showed evidence of burning which may be indicative of industrial activity.

*Trench 6 (**Figures 1 & 12**)*

3.3.15 The backfill deposits (602) from Lysons' excavations were encountered beneath the turf and topsoil (601) of the pasture field, concentrated towards the eastern half of the trench. Both topsoil and backfill deposits were very loose and friable; both contained Romano-British and post-medieval material including seven 4th century coins.

3.3.16 The backfill (602) partially overlay deposit (603), which extended across the western half of the trench. This was interpreted as undisturbed *in situ* Roman deposits, potentially sealing two rooms which Lysons referred to but did not excavate. Deposit (603) was hand cleaned but not excavated.

3.3.17 Three rooms exposed within Trench 6 could be identified as those exposed by Lysons. The most westerly room was identified as Lysons' Room 'D' (**Figures 2** & **3**), which had once contained the Orpheus mosaic, now in the British Museum. A single wall (604) was interpreted as the eastern north-south wall of the room. Backfill deposit (602) filled the room, and this remained unexcavated.

3.3.18 A second room to the east of Room 'D' was bounded by three partially exposed limestone block walls (604), (605) and (606), with shaped facing stones and a limestone rubble core, bonded with limestone mortar. Only the upper course of each wall was revealed; these were not excavated further. The three walls created a room space of 2.30m wide by at least 1.30m long. Infilling this room space was deposit (607), probably undisturbed *in situ* Romano-British material. This is likely to be the room which Lysons inferred from his plan of the villa but did not expose.

3.3.19 Towards the eastern end of the trench, the north-west corner of Lysons' Room 'F' was identified, clearly recognisable from the fragment of *in situ*

mosaic (610). This mosaic was recorded by Lysons and published in 1813 with a complete plan and is included in a painting of the excavations from (**Figures 2, 3** & **4**).

3.3.20 Room 'F' was bounded by walls (608) (western) and (609) (northern). Both were of similar construction to the walls of Room 'D'. A clear step could be seen within wall (608), interpreted as a door way leading into the room from corridor 'I' to the west (**Figure 2**). The eastern end of wall (609) had suffered a serious degree of truncation, the height of the wall being reduced to approximately 0.05m, and there was no sign of a return forming the eastern wall of the room.

3.3.21 This truncation was also clear from the remains of the mosaic floor within Room 'F'. Mosaic (610) was constructed from a background of 30mm square white limestone *tesserae* with the design in dark red Pennant sandstone *tesserae*. An area of approximately 3.30m by 1.20m survived. The mosaic was set into a limestone mortar bonding deposit (611), clearly seen where the mosaic was truncated towards the eastern end. Deposit (611) was also truncated at this point and could be seen to overlie make-up, foundation deposit (612).

3.3.22 At the eastern end of the trench, to the east of Room 'F', remnants of backfill (602) were revealed.

3.4 Site C

Geophysical Survey

3.4.1 The magnetic survey within Site C (**Figure 5**) demonstrated the westward continuation of anomalies identified in Site B, including the possible trackway joining the two villa complexes (anomaly 25). A number of the anomalies were interpreted as possible channels or water conduits associated with the believed well or spring which gave rise to the name 'Withington Upon Wall-Well'. The survey also identified a high resistance anomaly which corresponded with the magnetic results and which was interpreted as a possible shrine connected with the spring (anomaly 26, D and E).

*Trench 7 (**Figure 1**)*

3.4.2 Beneath turf and topsoil (701) was subsoil layer (702), containing abundant limestone fragments and probably the result of medieval or post-medieval ploughing, dragging up natural limestone fragments from the underlying geology. The topsoil contained Romano-British pottery including Spanish amphora of 1st-3rd century date. The subsoil overlay the natural basal geology (703) and no archaeological features or deposits were encountered.

*Trench 8 (**Figures 1 & 13**)*

3.4.3 The turf and topsoil (801) overlay subsoil (802). As in Trench 7, this contained abundant limestone fragments probably resulting from post-Roman ploughing. The topsoil contained Romano-British material.

3.4.4 Two features were revealed cutting through the subsoil. The first was an east-west aligned ditch (804) cut into the natural basal geology (803). This was

initially believed to be a Romano-British water conduit, but it appeared to cut the potentially post-Roman subsoil. Ditch (804) contained two fills, the lower (806) representing slumping from the feature edges and the upper (805), representing gradual infilling of the feature.

3.4.5 To the west of (804) was a possible wall (808) set within construction cut (807). This feature remained unexcavated and its date and function are unknown.

3.4.6 No evidence of Romano-British water management or a shrine associated with the spring was identified within Site C.

4 FINDS

4.1 Introduction

4.1.1 Finds were recovered from all eight of the trial trenches excavated. The assemblage relates largely to the construction and use of the Roman villa (stone and ceramic building material, including a number of *tesserae*), with a small amount of post-Roman material.

4.1.2 All finds have been quantified by material type within each context, and totals by material type and by trench are presented in **Table 1**. Subsequent to quantification, all finds have been at least visually scanned in order to gain an overall idea of the range of types present, their condition, and their potential date range. Spot dates have been recorded for selected material types as appropriate. All finds data are currently held on an Access database.

4.1.3 This section presents an overview of the finds assemblage, on which is based an assessment of the potential of this assemblage to contribute to an understanding of the site in its local and regional context, with particular reference to the use of the villa.

4.2 Pottery

4.2.1 The pottery assemblage is almost exclusively of Romano-British date, with a handful of post-Roman sherds. Condition overall is fair to poor, with most sherds showing edge and surface abrasion; oxidised wares (samian, Oxfordshire finewares) have in many cases lost all traces of surface slips. Mean sherd weight overall is 12.4g.

4.2.2 The whole pottery assemblage has been quantified by known ware type (e.g. samian, Black Burnished ware) or ware group (e.g. shelly wares) within each context. Spot dates have been recorded on a context by context basis, and the presence of diagnostic sherds noted. **Table 2** gives the overall ware totals by period.

Romano-British

4.2.3 Apart from some finewares that have been identified to type, the Romano-British assemblage has been very broadly divided. Two coarseware types can be identified to type and/or source area (Severn Valley wares and Black

Burnished ware (BB1) from the Poole Harbour area of Dorset); other coarsewares have been subdivided into miscellaneous classes for greywares, oxidised wares and whitewares.

4.2.4 While this assemblage is described as Romano-British, there are 12 sherds (all from one context – pit (304) – and probably all from a single handmade vessel) in 'Malvernian' limestone-tempered fabric (Peacock 1968, group B1), which could be of pre-conquest date. The vessel is a small, everted rim jar with a band of tooled linear and arced decoration around the neck. Malvernian B1 wares of Iron Age tradition often appear in the area well into the later 1st century AD.

4.2.5 Imports are very scarce, comprising a few sherds of samian and amphora, the latter including Dressel 2-4 and Dressel 30 types. Finewares were instead largely supplied by British sources, amongst which Oxfordshire products are the most obvious, both whiteware (one *mortarium*) and red colour coated ware (including *mortaria* and flanged bowls: (Young 1977), type C51, dated AD 240-400+).

4.2.6 Greywares predominate amongst the coarseware assemblage; these almost certainly represent the products of more than one source, probably including the Severn Valley and Oxfordshire production centres. Diagnostic vessel forms are limited to three everted rim jars and a flared bowl/dish, none particularly chronologically diagnostic. There are a few sherds of Black Burnished ware (BB1); diagnostic forms, although limited ('dog dish' and dropped flange bowl), suggest that this pottery type was reaching the site from the 2nd century AD. Distinctive oxidised Severn Valley wares were recognised in small quantities; it is possible that other sherds remain unidentified amongst the other oxidised wares, which could also include Oxfordshire products.

4.2.7 The use of Oxfordshire finewares confirms activity on the site into the late Roman period, and this is supported by the presence of Midlands shelly wares in characteristic late Roman forms, e.g. hooked rim jars.

Post-Roman

4.2.8 One sherd of a medieval shelly ware was identified, from a strap-handled jug, probably of local origin, from Trench 5 (topsoil). Six post-medieval sherds are also present, including coarse redwares and stoneware, all from topsoil or disturbed contexts.

4.3 Ceramic and Stone Building Material

4.3.1 Large quantities of building material were recovered from the site, both ceramic and stone, particularly from Trench 1. All of this represents redeposited material, deriving from demolition rubble deposits. Some structural elements of the villa did survive, but these were recorded *in situ* and not removed from site. These included fragments of mosaic floors (one of which, in Trench 6, was exposed by Lysons in the 19th century), hypocaust pillars (*pilae*) and stone walls.

4.3.2 For both material types, the assemblage has been quantified by type, and totals are presented in **Table 3**. Broad stone types have been identified for the stone building material: limestone (Lias or Oolitic), sandstone (mostly Pennant but possibly including some Old Devonian Red) and tufa. All are from sources within the county, either in the Cotswolds or the Forest of Dean, and a similar range has been observed at other sites in the area, for example Great Witcombe, Cirencester and Frocester (Bevan 1998a).

4.3.3 No attempt has been made to identify different fabric types within the ceramic assemblage, as much of the assemblage comprises variants of relatively fine, orange-red fabrics with few visible inclusions, although certain distinctive fabrics have been noted. It is possible that at least some of the ceramic building material used on the site was made locally, perhaps even on the site itself (although no evidence for this was found); *tegula* wasters at Great Witcombe, for example, suggest tile production at that site (Bevan 1998b).

Roof tiles

4.3.4 Roof tiles are relatively scarce within the ceramic assemblage, *imbrex* and *tegula* tiles making up just 7.9% of the total combined. Other roof tile may be included within the miscellaneous flat tile category, and some may have been reused as ceramic *tesserae*, but the absence of diagnostic *tegula* flanges suggests that this scarcity is real. Indeed, these tiles were not necessarily used as roofing material at all – evidence from Great Witcombe, for example, indicates that both types were used to line drains, and *tegulae* were used as bases for hypocaust pillars (*pilae*) (Bevan 1998b). A few *tegulae* exhibit finger-smeared 'signatures', generally concentric semi-circles at the end of the tile.

4.3.5 Stone roof tiles are more common, particularly in Trench 1 (largely from topsoil). They occur in two stone types – Lias limestone and Pennant sandstone. A few retain nail holes, but there are no examples with complete surviving dimensions. Three fragments of sandstone roof tile (one from (101) and two from (202)) show signs of surface vitrification, from exposure to high temperatures, perhaps from destruction by fire or from some industrial process (similar evidence is provided by the glass and copper alloy: see below).

Box flue tiles

4.3.6 Ceramic box flue tiles are relatively common (35.3% of the total ceramic assemblage by weight). Box flue tiles (or *tubuli*) were designed to carry heat from the underfloor hypocaust system behind the walls around a room; they would have been mortared into place in pipe-like arrangements, usually vertical (see Brodribb 1987, fig. 30). The *tubuli* from Withington are fragmentary, but certainly included examples of rectangular cross-section, with the wider faces scored or combed (as keying for plaster) and the narrower faces (*c.*100mm width) left plain. There are also examples (all from Trench 1) which appear to be from 'half-box' tiles, an uncommon form resembling *tegulae* with a cut-away gap in the middle of the flange (*ibid*., 65-7); these are also scored or combed. The scoring or combing takes various forms, either multi-directional linear, or curvilinear – comparable examples

are illustrated from Great Witcombe (Bevan 1998b, figs. 31-2). No roller-stamped examples were observed.

4.3.7 Various fabric types were observed amongst the *tubuli*, but a significant proportion appeared to be in a single fabric (or variants thereof) – relatively soft-fired (resulting in grey, unoxidised core and slightly soapy feel) and frequently slightly laminating, quite fine, with few visible inclusions.

Bricks

4.3.8 Bricks were manufactured in various standard sizes and performed various functions within Roman buildings. The only complete examples from Withington are four *bessales* from demolition rubble layer (116) in Trench 1, two of which remain mortared together (the *in situ pilae* from Sondage 1, constructed of *bessales* and *pedales* were not removed from site). One has a curvilinear, finger-smeared 'signature' on one face. All four are of similar dimensions, approximately 185mm square. The main function of the *bessalis* was to form pillars (*pilae*) to support the floor above the hypocaust, as seems to be the case here.

4.3.9 Other brick fragments could derive from further *bessales*, or from other, larger brick forms. Some brick fragments, all from Trench 1, which are markedly thicker (around 50mm) and which all occur in a coarse, grog-tempered fabric with a grey core, are likely to represent part(s) of a larger brick form, perhaps the *pedalis*, which was used as capping or base brick for *pilae*.

Tesserae

4.3.10 Both ceramic and stone *tesserae* were employed on the site. They are particularly common amongst the stone assemblage – 51% by weight but 90% by number. Three different stone types were identified: Pennant sandstone, Lias limestone and Oolitic limestone, of which the Lias limestone examples are by far the most common (1490 out of 1636 *tesserae*). These, with the ceramic *tesserae*, would have enabled designs utilising red, dark red, grey and white colour schemes. While the *tesserae* vary in size, and were obviously not strictly standardised, two main size ranges are apparent (in both ceramic and stone) – large (approximately 30mm square) and small (approximately 10mm square). Oolitic examples are almost invariably large, while both large and small examples are present in Lias limestone, sandstone and ceramic examples.

4.3.11 The distribution of ceramic and stone *tesserae* does show some differences between the two types. Ceramic *tesserae* occurred in Trenches 1 and 4, with just a few other examples in Trenches 5 and 6. Stone *tesserae* were particularly common in Trench 1, with about half as many in Trench 5; smaller groups came from Trenches 2, 4 and 6.

Miscellaneous building material

4.3.12 The ceramic assemblage is very fragmentary, and a significant proportion (18.3% by weight) could only be categorised as 'flat tile' (which could include undiagnostic roof or flue tile), or 'brick/tile', i.e. fragments lacking measurable thicknesses.

4.3.13 Miscellaneous pieces amongst the stone assemblage include a small, roughly rectangular Oolitic limestone block from rubble-rich layer (202) in Trench 2, two smaller Oolitic fragments from topsoil in Trench 1, and eight fragments of tufa, only one of which, from rubble layer (116) in Trench 1, shows any signs of deliberate shaping. This is a slightly tapering block about 290mm in length, and is probably a solid voussoir block (*cuneatus*) used in vaulting. The other pieces could have been used as rubble infill for the cores of walls (Bevan 1998a).

4.4 Opus Signinum and Wall Plaster

4.4.1 Other building material is represented by *opus signinum* and plaster. The former was a concrete-like substance used for flooring and to face walls, in particular as the lining for tanks or baths. Nearly all this material came from rubble deposits in Trench 1. One large fragment from rubble layer (116) comprises two distinct layers of *opus signinum*, the upper surface retaining the traces of a mosaic floor in the form of mortar (with *tesserae* impressions) and a few *in situ tesserae* (small examples in white and blue-grey limestone and red ceramic). This fragment of *opus signinum* is not waterproof concrete (Z. Marsham pers. comm.), but a second, smaller fragment of *opus signinum* from Trench 1 carries a quarter round moulding, typical of hot plunge pool lining (D.S. Neal *pers comm*.).

4.4.2 A small amount of wall plaster was recovered, mostly from Trench 1. Alongside monochrome (red or green) fragments from Trenches 2 and 5, the fragments from Trench 1 are polychrome, with decoration in red, yellow, blue and purple. These fragments are too small, and the overall quantities insufficient to determine overall decorative schemes, although it does seem that some comprise linear bands whereas others appear to include more 'freestyle' decoration.

4.5 Glass

4.5.1 The small collection of glass is very fragmentary. Identifiable post-medieval fragments occurred in five contexts, all topsoil or disturbed contexts. The remainder is presumed to be of Romano-British date, although there is very little here which is clearly diagnostic, apart from a single polygonal bead (rubble rich deposit (202)), and a ribbon handle (Trench 1 topsoil). Fragments are all in blue-green glass. Several pieces (mostly from Trench 1) appear distorted, representing either glass waste, or vessel/window glass which has been subjected to high temperatures, perhaps in destruction by fire.

4.6 Metalworking Slag

4.6.1 The small amount of slag recovered consists mainly of iron smithing slag; a small piece of melted copper alloy and two small fragments of lead slag came from Trench 1 topsoil.

4.7 Metalwork

4.7.1 The metalwork includes coins, as well as objects of copper alloy, iron and lead.

Coins

4.7.2 Sixteen Roman coins were recovered. All sixteen are copper alloy *antoniniani* or *folles* of the late 3rd or 4th centuries AD. Roman coins were recovered from Trenches 1, 2, 5 and 6, although most were recovered unstratified.

4.7.3 Five coins (Objects 7, 14, 27, 31 and 38) could not be dated closely, although their size and form suggest a late third or fourth century date. All of the coins which could be closely dated date to the 4th century. Five are *Gloria Exercitus* issues (or copies of) and date to between AD 330 and 345 (Objects 1, 13, 29, 30 and 37). Such contemporary copies are not unusual as site finds, and may have been struck semi officially to make up for shortfalls in official coin supply. One coin, Object 16, struck by Constans dates between AD 341 and 348. The remaining five coins (Objects 9, 19, 12, 15 and 28), are all issues of the House of Valentinian, dating to between AD 364 and 378 AD.

4.7.4 The coins point to activity on the site in the late 3rd and 4th centuries. It is clear that the majority of the coins from the site date to the AD 330s onwards, with none later than AD 367 in date. This need not necessarily indicate that activity on the site ceased at this date, as supplies of coins dating between AD 378 and 402 to Britain were fairly sporadic, and they are less likely to occur in small assemblages from sites.

Copper alloy

4.7.5 Other objects of copper alloy include a length of curved, D-sectioned rod, with incised decoration on the upper surface, perhaps a bracelet fragment (rubble deposit (106)). No other objects are identifiable; most comprise small fragments, some of which are in very poor condition and appear to have been burnt (mostly from Trench 1).

Iron

4.7.6 The iron consists mainly of nails and other structural items. Most of these came from Trench 1, including a large group of over 100 nails from topsoil (101). The iron is in poor condition, most objects showing heavy corrosion, and no other objects are identifiable.

Lead

4.7.7 The lead appears to consist entirely of waste fragments and offcuts.

4.8 Animal Bone

4.8.1 121 bones were hand-recovered and no sieving was carried out. All bones derive from mammals or birds. No bones from fish or amphibians were present. 78 come from Roman contexts, three from medieval contexts and 35 from post-medieval contexts (using the pottery as dating evidence). Five bones derive from an undated context. For the purposes of this discussion,

the contexts were grouped into Roman and post-Roman, leaving out the undated ones.

Condition and preservation

4.8.2 All of the Roman and post-Roman bone fragments were moderately well preserved and well over half of the material was not identified to species (**Table 4**).

4.8.3 Loose teeth were abundant in the material, attesting to the poor preservation. Gnawing was rare, seen on only one bone (wild boar calcaneus), and this indicates that scavenger destruction was not a significant biasing factor.

Animal husbandry

4.8.4 For the Roman contexts, the domestic mammals, horse, cattle, sheep/goat, pig and dog are all well represented, with a predominance of sheep/goat (**Table 5**). In the post-Roman contexts, cattle, sheep/goat, pig and dog are also well represented, with a predominance of cattle.

4.8.5 A complete adult dog skull with mandibles was observed in Roman context (116). The skull derives from a medium-sized dog with a wolf-like appearance and a pronounced cranial crest (basal length based upon the mandible and according to Brinkmann 1924: 171.4 mm or Dahr 1937: 170.6 mm). The dog's teeth were hardly worn, showing that it died in its prime.

4.8.6 The large adult calcaneus, found in context (101), might derive from wild boar, but as the context is dated post-medieval, it might actually derive from a large pig. Only a single bird bone was found, of a pigeon from topsoil (101).

4.8.7 A small number of Roman (11) and post-Roman (3) bones could be aged. The Roman sheep/goat bones were aged as follows: 1 > 5 months, 1< 20-24 months, 2 <3.5 years and 2 > 3-3.5 years. A Roman pig bone derived from an animal older than 2-2.5 years and a cattle jaw from a *c*. 3 year old animal. Context 120 contained a fragment of a very young pig skull. Among the post-Roman material was the bone of a *c*. 7-10 month old lamb and a cattle molar of an individual over 3 years of age.

Consumption and deposition

4.8.8 Butchery marks were only seen once on a sheep/goat femur shaft from a Roman context (117) and probably occurred during filleting. The overall poor to fair condition of the material can account for the little evidence of butchery found. Only two small post-Roman bone fragments were burnt. A sheep/goat ulna from Roman context (117) was covered by bronze and iron staining.

4.9 Marine Shell

4.9.1 Apart from one scallop shell from Trench 1 topsoil (101), all of the shell recovered is oyster, and includes both left and right valves – in other words, both preparation and consumption waste.

4.10 Potential and Further Recommendations

4.10.1 Apart from building material, this is a relatively small assemblage – there is little in the way of cultural material or domestic refuse. Apart from isolated instances (e.g. small fragments of tessellated floor, some walls), little of the building material (indeed, any material) is *in situ* and most was found in redeposited demolition deposits. The building materials used are comparable to those from other villa sites in the region. While the recovery of a complete dog skull amongst the Roman faunal assemblage is interesting, this assemblage otherwise comprises the usual range of domesticates and has little to contribute to an understanding of animal husbandry practices.

4.10.2 All finds have been recorded to a basic archive level. Further analysis is unlikely either to refine further the provisional dating (provided largely by the pottery and coins) or to provide more details of the nature of the Roman buildings. Any publication text prepared could include data gathered as part of this assessment stage, and could include illustrations of a few selected finds.

4.10.3 Given the large quantities of ceramic and stone building materials recovered, much of which relate to demolition deposits, recommendations for long-term storage could include a discard policy for these materials, to be agreed with the recipient museum.

5 ENVIRONMENTAL RESULTS

5.1 Introduction

5.1.1 Bulk samples were taken to evaluate the presence of charred and charcoal remains and to indicate both the potential significance of the sampled contexts and the potential palaeo-environmental significance of the remains.

5.1.2 The samples revealed the probable presence of grains of spelt wheat in low quantities. Wood charcoal from the possible burnt roof collapse was in keeping with this interpretation and was probably derived from charred beams of oak.

5.1.3 Three bulk samples of between two and 28 litres were taken from Roman deposits associated with the villa bathhouse in Trench 1 and were processed for the recovery and assessment of charred plant remains and charcoals.

5.2 Methods

5.2.1 Bulk samples were processed by standard flotation methods. The coarse fractions (>5.6 mm) were sorted, weighed and discarded. Flots were scanned under a x10 – x40 stereo-binocular microscope and the presence of charred remains quantified (**Table 6**) to record the preservation and nature of the charred plant and charcoal remains. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997).

5.3 Results

5.3.1 Two of the flots were very small with very little material. The other (from the possible roof collapse) had substantial amounts of well preserved charcoal. While roots were relatively sparse in the latter sample, occasional modern insect remains, fresh mollusc shells and shells of burrowing snails (*Cecilioides* sp.) were recovered. These may indicate the possibility of contamination or intrusive elements introduced into the samples.

Charred Plant Remains

5.3.2 The only remains recovered were several grains of hulled wheat, emmer or spelt (*Triticum dicoccum/spelta*) from the roof collapse (107) and layer overlying the mosaic (118). No remains of chaff were seen and very few other seeds. The absence of such remains might concur with the probable role of the building as a bath-house. However, a stokehole associated with a bath-house at Truckle Hill did produce abundant remains of spelt wheat chaff (Wessex Archaeology 2005).

5.3.3 The Roman Villa at Turkdean, Gloucestershire (Holbrook 2004) produced ample remains of both grain and chaff of spelt wheat (author's own observation), while spelt was also recovered from Romano-British settlements at Tewkesbury (Stevens 2004) and Droitwich (Greig 1997). Given the possible evidence for the burning of parts of the villa and presence of grain, it is probable that future excavations might recover such remains, as well as providing evidence for the spatial distribution of processing activities and storage facilities.

Charcoal

5.3.4 Charcoal was noted from the flots of the bulk samples and is recorded in **Table 6**. The sample from (107) contained high numbers of large fragments of ring-porous heartwood, most probably of oak. This would certainly be consistent with the wood deriving from a burnt roof collapse

Land Molluscs

5.3.5 During the processing of bulk soil samples for the recovery of charred remains, snails were noted, and recorded in the flots (**Table 6**). The presence of these shells can broadly characterise the nature of the wider landscape.

5.3.6 Molluscan remains included introduced Helicellids, and numerous shells of *Discus rotundatus*, *Oxychilus* sp., *Cochlicopa* spp., *Vallonia* spp. *Carychium* sp. and *Trichia* sp. Also there was one shell of Clausiliidae. Some of the shells appeared very fresh, occasionally with the periostracum still present, indicating they may be modern inclusions.

5.4 Potential and Further Recommendations

Charred plant remains

5.4.1 While the charred cereal grains indicate that spelt wheat was perhaps cultivated and certainly brought to the site, the samples have no further potential.

Charcoal

5.4.2 Only the charcoal from the probable roof collapse (context 107) had any further potential. Full analysis would confirm the identification of oak wood timbers and confirm that no other species are likely to be present. There is little potential beyond this confirmation.

Land molluscs

5.4.3 The snail assemblage is typical of open and rubbly anthropogenic areas. Detailed analysis is unlikely to provide any further significant palaeo-environmental. In addition the shallow nature of the deposit and presence of potentially modern shells suggest that these remains are unlikely to have any further potential.

6 DISCUSSION

6.1 Introduction

6.1.1 This project provided the opportunity to investigate the condition of the surviving archaeological remains of the nationally important Romano-British villa complex of Withington which had not been exposed since the beginning of the 19th century. The work was able to assess the damage which occurred over the last 194 years from agriculture and assess the condition in which the Site was left following the antiquarian excavations.

6.1.2 The work at Withington was also able to investigate the hypothesis that the remains within the Manor Court Field were in fact Romano-British and contemporary with the Scheduled Ancient Monument to the west, and to look for evidence of water management possibly associated with both sites.

6.2 Site A: Manor Court Field

6.2.1 The overall extent of the buildings in Manor Court Field was successfully identified through geophysical survey, and these were shown to be part of a villa complex in its own right, larger than the Scheduled villa site to the west.

The Bath-House

6.2.2 The only part of this complex which was excavated (in Trenches 1, 4 and 5) was the bath-house, consisting of a number of rooms. The bath-house was associated with an external sunken feature, possibly a reservoir for water storage, a cold plunge pool or a possible swimming pool.

6.2.3 The room revealed in Trench 1, which had been extensively robbed, is likely to have been the *caldarium* or hot room of the bath-house, a dry heated area which would normally have led to a hot plunge pool. This was inferred from the surviving structural evidence, both *in situ* (hypocaust *pilae*) and redeposited (*opus signinum* and mosaic fragments). The dimensions of the room were at least 8m by 2.50m; the floor had seen a certain degree of repair and possibly a full replacement. No direct evidence for the hot plunge pool was recovered, only a single piece of redeposited *opus signinum* with characteristic moulding.

6.2.4 Nor was the position of the furnace or *praefurnium* for the hypocaust system located. It is possible it would have been sited on the eastern side of the building close to the tributary of the Colne and close to the possible water reservoir identified in Trench 4, due to the potential fire hazard.

6.2.5 It is clear there were at least three phases of construction within Trench 1, with evidence of the initial construction, later repair and alteration, and final phase of robbing and recycling of material. The earliest phase, involving the construction of the hypocaust system, is likely to date to the 2nd century. It is rare to find to find hypocausts constructed from tile *pilae* at a later date.

6.2.6 The second phase, of repair and alteration, is likely to date to the late 3rd early 4th century when it is considered that there was a revival in mosaic art, and many villa sites show evidence of refurbishment (Johnson 1987, 33). The style of the mosaic fragments in Trench 1 show that they both belong to the same floor surface, designed with 'L' shaped schemes and lozenge patterns not dissimilar to the early 4th century Great Pavement at Woodchester (D.S. Neal *pers. comm*.). This belongs to the Corinian *officina* or school of mosaicists based in Cirencester, and working in the first half of the 4th century. The Corinian school was also responsible for the Orpheus mosaic removed from the Withington villa and now in the British Museum (Johnson 1987, 37-41). It is therefore likely that the same mosaicists laid both the Orpheus mosaic in the Withington villa and the mosaic which once covered the *pilae* hypocaust in Trench 1.

6.2.7 The external wall of the bath-house building (110), revealed in Trench 1, formed a corridor with a second wall to the west of the hypocaust heated room. This corridor contained a tessellated pavement (104) which has been tentatively dated to the late 4th or possibly early 5th century because of its '*crude and rustic nature*' (D.S. Neal *pers. comm*.). This represents the third phase of construction within the bath-house and confirms activity potentially 300 years after the initial construction. However, it is unclear if this tessellated pavement represents a simple repair to an existing corridor or was a completely new addition to the bath-house.

6.2.8 The final phase of the bath-house saw the robbing of wall (110), leaving only the foundation material. It would seem that the structure had by that time partially collapsed, either from neglect or from deliberate demolition, as the roof collapse layer was cut by a robber trench.

The Tank or Pool

6.2.9 The interpretation and date of the structure within Trench 4 remains uncertain. There are four possibilities as to its function. It could have been a cold plunge pool within the bath-house *frigidarium*, but if so, then a number of aspects of the structure are unusual, chiefly the lack of *opus signinum* (and possibly tiled) lining. An *opus signinum* lining might have been removed from the tank/pool (perhaps as part of robbing activity), but there seems no logical reason for this. Alternatively, perhaps construction was abandoned before the structure was completed and it is in fact an unfinished cold plunge pool. However as the other rooms, the *tepidarium* and *caldarium* were both

completed and subsequently robbed it would appear unusual for the plunge pool not to have been completed also.

6.2.10 The main argument against interpretation as a plunge pool appears to be its location. Areas of natural geology were exposed around the structure, and no evidence of flooring was observed, implying that it was an external feature, and not within the bath-house at all.

6.2.11 A second possible function is as a tank for the storage of water to be used within the bath-house. This may have been necessary if access to water was sporadic and it needed to be stockpiled. Excavations at Stanwick villa, Northamptonshire, for example, revealed a pair of water tanks fed from a small spring nearby and potentially timber-lined (Neal 1989, 162-3). However, no evidence was identified of a conduit or aqueduct to feed water into the bath-house from the main water source within the area, the river Colne and the tributary from it, or from the small spring to the west of the structure.

6.2.12 A third possibility is that this is a swimming pool or *natatio*, used for recreational bathing. Swimming pools were usually associated with large public bath-houses or *thermae*, located within large urban centres and run by the State. Other examples are known from military sites such as the Legionary fort at Caerleon in Wales. Swimming pools have been recorded on villa sites such as High Wycombe (D.S. Neal *pers comm*), but this is not the norm for Romano-British villas.

6.2.13 This interpretation therefore seems unlikely. The structure is quite small, just over 3m across, perhaps too small for a swimming pool. There is no evidence for any waterproof lining, either wood or *opus signinum*, which would have been necessary (although the same suggestions of unfinished construction or later robbing can be put forward as for the plunge pool).

6.2.14 Alternatively, it is possible that the structure was not contemporary with the bath-house at all but was a later construction. No dating evidence was obtained for its construction.

The 'Union Jack' hypocaust

6.2.15 The dating of the structure identified within Trench 5 is unclear. The 'Union Jack' channelled hypocaust exposed is potentially of 4th century date, from the nature of its construction - there was a trend away from tile *pilae* towards channelled hypocaust systems in the 4th century because of the decline of tile production. Pottery dating from the 2nd to 4th centuries was recovered from this trench. The 'Union Jack' channelled hypocaust is therefore possibly from a later phase of alteration than the main bath-house structure.

6.2.16 However, it is possible the change in construction technique is due rather to the function than to chronology. The stone construction of the 'Union Jack' hypocaust provided gentle radiant heat in contrast to the rapid and efficient heating provided by *pilae* constructed hypocausts. The stone hypocaust would be more suited to the *tepidarium* or warm room which required gentle warming and not the almost overpowering heat of the *caldarium*.

6.3 Site B: Withington Villa

6.3.1 The geophysical survey mapped the position and footprint of the Scheduled villa but was unable to identify individual rooms or walls within it. The existence of a possible surrounding rectangular walled courtyard was identified, post-dating a larger, subcircular ditched enclosure of probable prehistoric date. Clear field systems and possible trackways could be seen connecting the two villa sites together.

6.3.2 Further investigation of the villa through evaluation trenches, although limited due to the Scheduled Monument Consent, was able to show that severe truncation of the underlying archaeology had occurred on the site and that some of the structures identified by Samuel Lysons in the early 19th century have been destroyed during the intervening 194 years.

6.3.3 Some interesting chronological evidence came from the upper layer of a pit (unexcavated) in Trench 3, which produced sherds of Malvernian limestone-tempered pottery, potentially of pre-conquest date and possibly relating to the occupation of the site prior to the construction of the villa.

6.3.4 Trench 6 was positioned over an area of the villa complex instantly recognisable from the plans and paintings of the 1811 excavations. The exposed rooms and walls could be related to Lysons' plans of the site. There was clear truncation damage to the mosaic and walls of Lysons' Room 'F' which had occurred since their excavation. Lysons recorded the room as approximately 6.10m square with the mosaic intact (**Figures 2 & 3**) but it became clear that walls Lysons had recorded as upstanding had been subsequently truncated at the eastern end down to foundation deposits. The mosaic itself only survived for 3.20m - almost half of the floor had been destroyed.

6.3.5 This destruction did, however, provide an opportunity to investigate the make-up deposits of the room beneath the mosaic. The room had a single make-up layer which overlay the natural, and was in turn covered by a deposit of limestone mortar onto which the mosaic had been set. It was clear that there was no hypocaust system present; the room would instead have been heated by free-standing braziers.

6.3.6 A doorway into Room 'F' from corridor 'I' through wall (608) was identified, not recorded in the 1811 excavations, but there was no evidence of the door or posts on which it could hang. Wall (609) was identified as that separating Room 'F' from the unlabelled room to the north, but no evidence was revealed of corridor 'E', due to the constraints of the evaluation trench, and it was clear that any trace of corridor 'G' had been truncated.

6.3.7 Lysons inferred the location of two smaller rooms positioned between corridor 'I' and Room 'D', but the exact dimensions were unknown as they were not exposed. The dimensions of the small room to the east of Room 'D' were revealed through exposure of walls (604), (605) and (606).

6.3.8 One of the aims of the project had been to identify the room where the Orpheus mosaic had been removed, and investigate the possibility of earlier phases of construction. Due to time constraints the excavation of the 19th century backfill deposits to the west of wall (604) did not occur, but it was clear that below the make-up layers of mosaic (610) in Room 'F' was natural geology and that there was no evidence of earlier phases of archaeology.

6.3.9 Evidence of possible earlier phases of activity can, however, be deduced from the geophysical survey showing a possible prehistoric enclosure, with the later villa positioned within it, and from the identification of possible Late Iron Age pottery within an unexcavated rubbish pit.

6.4 Site C: a possible spring?

6.4.1 The geophysical survey revealed potential evidence for the continuation of a trackway connecting the two villa sites, and a water management system and shrine associated with the spring. The evaluation trenches, however, failed to confirm this. A number of features were revealed but were undated and also unlikely to have been associated with water management. No evidence of a shrine was identified.

7 ARCHIVE

7.1.1 The excavated material and archive, including plans, photographs and written records are currently held at the Wessex Archaeology offices under the project code 59468 and site code WIT 05. It is intended that the archive should ultimately be deposited with the Corinium Museum, Cirencester.

8 RECOMMENDATIONS

8.1.1 Given the above assessment of the results of the evaluation, no further analysis of the structural evidence, finds or environmental data is considered to be necessary. A report on the evaluation will be submitted to the Gloucestershire Sites and Monuments Record, and it is recommended that a report summarising the results of this assessment is published in the *Transactions of the Bristol and Gloucestershire Archaeological Society*.

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Table 1: Finds totals by material type and by trench (number / weight in grammes)

Material	**Tr 1**	**Tr 2**	**Tr 3**	**Tr 4**	**Tr 5**	**Tr 6**	**Tr 7**	**Tr 8**	**TOTAL**
Pottery	153/2338	37/339	20/124	3/23	28/453	33/198	8/58	6/28	**288/3561**
Romano-British	*152/2334*	*36/337*	*20/124*	*3/23*	*27/422*	*30/195*	*8/58*	*5/27*	***281/3520***
Post-Roman	*1/4*	*1/2*	-	-	*1/31*	*3/3*	-	*1/1*	***7/41***
Ceramic Building Material	741/76,471	102/8741	5/296	244/6835	130/9087	51/2671	2/84	1/126	**1276/104,311**
Fired Clay	48/782	1/23	-	6/30	12/209	1/2	-	-	**68/1046**
Opus Signinum	207/9359	-	-	1/16	1/59	-	-	-	**209/9434**
Wall Plaster	29/1071	2/8	-	-	1/20	-	-	-	**32/1099**
Stone	993/54,479	91/6780	-	183/2368	471/14,851	94/3068	-	-	**1832/81,546**
Glass	32/63	10/58	1/3	-	4/8	7/7	-	-	**54/139**
Slag	10/119	61/1286	-	-	-	1/5	-	-	**72/1410**
Animal Bone	105/561	10/46	35/263	4/62	6/45	10/64	-	-	**170*/1041**
Shell	6/66	1/1	-	-	1/27	-	-	-	**8/94**
Metalwork	255	48	-	5	24	47	-	1	**380**
Coins	*7*	*2*	-	-	*1*	*7*	-	-	***17***
Copper alloy	*21*	-	-	-	*2*	*1*	-	-	***24***
Iron	*181*	*26*	-	*4*	*6*	*22*	-	*1*	***240***
Lead	*46*	*20*	-	*1*	*15*	*17*	-	-	***99***

*number of fragments (Table 4 gives number of bones)

Table 2: Pottery totals by ware type

Date Range	Ware type	No. sherds	Weight (g)
ROMAN	Amphora	3	113
	Samian	2	7
	Black Burnished ware	8	92
	Greyware	115	1284
	Grog-tempered ware	2	31
	Malvernian B1 ware	12	73
	Oxidised ware	31	463
	Oxon colour coat	59	692
	Oxon whiteware	1	30
	Severn Valley ware	10	188
	Shelly ware	36	518
	Whiteware	2	29
	sub-total Roman	*281*	*3520*
MEDIEVAL	Medieval shelly ware	1	31
POST-MEDIEVAL	Redware	5	9
	Stoneware	1	1
	Sub-total post-Roman	*7*	*41*
	OVERALL TOTAL	**288**	**3561**

Table 3: Ceramic and stone building material totals by type and by trench (number / weight in grammes)

Material	Type	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5	Tr 6	Tr 7	Tr 8	TOTAL
CBM	imbrex	10/1381	10/460	-	-	2/152	9/741	-	-	**31/2734**
	tegula	4/1331	12/2342	2/158	-	2/1132	4/483	-	1/126	**25/5572**
	box flue	293/29,951	8/386	-	15/1618	55/4873	1/17	-	-	**372/36,845**
	tessera	81/1269	-	-	200/383	31/404	13/174	-	-	**325/2230**
	brick	72/32,917	-	-	5/3966	6/919	-	-	-	**83/37,802**
	flat tile	106/5132	29/3101	3/138	9/677	16/1206	18/1169	-	-	**181/11,423**
	misc brick/tile	175/4490	43/2452	-	15/191	18/401	6/87	2/84	-	**259/7705**
	Total CBM	***741/76,471***	***102/8741***	***5/296***	***244/6835***	***130/9087***	***51/2671***	***2/84***	***1/126***	***1276/104,311***
STONE	roof tile	151/25,497	16/3070	-	3/1124	7/1057	5/684	-	-	**182/31,432**
	tessera	829/21,617	74/2479	-	180/1244	464/13,794	89/2384	-	-	**1636/41,518**
	other	13/7365	1/1231	-	-	-	-	-	-	**11/8396**
	Total stone	***993/54,479***	***91/6780***	**-**	***183/2368***	***471/14,851***	***94/3068***	**-**	**-**	***1832/81,546***

Table 4: Animal bone condition and potential (% of total)

Context	Unid.	Gnawed	Loose teeth	Burnt	Measure-able	Age-able	Butchered	Total number of bones
Roman	62	-	10	-	6	14	1	78
Post-Roman	55	3	5	3	-	3	-	38

Table 5: Animal bone species present as a percentage of identified bones

Context	Horse	Cattle	Sheep/ Goat	Pig	Dog	Large Pig/ Wild boar	Pigeon
Roman	3	20	60	13	3	-	-
Post-Roman	-	41	18	24	6	6	6

(Roman n=30 and post-Roman n=17)

Table 6: Assessment of the charred plant remains and charcoal

Trench no	Context	Sample	Volume	Flot size	Roots %	Grain	Chaff	Notes	Other charred	Notes	Charcoal >4mm/ >2mm	Other	Residue Charcoal	Analysis
ROMAN														
?Roof collapse														
Tr 1	107	1	28	600	5	C	-	5x T. d/s grain	C	1 indet. frag seed capsule	300/ 100ml	moll-t (A*) smb-(C)	-	C
Layer adhering to mosaic 112														
Tr 1	118	2	2	5	30	B	-	10x T. d/s grain	-	-	2/1ml	moll-t(B)	-	-
Layer at base of hypercaust system														
Tr 1	122	3	9	8	5	-	-	-	-	2x Chenopodiaceae	2/1frgs	moll-t (A)	-	-

KEY: A** = exceptional, A* = 30+ items, A = ≥10 items, B = 9 - 5 items, C = < 5 items, (h) = hazelnuts, smb = small mammal bones; Moll-t = terrestrial molluscs Moll-f = freshwater molluscs;

Appendix 1: Trench Summaries

Trench 1

	Max Depth: 1.36	Length: 11.60m	Width: 2.40m
Context No.	**Type**	**Description**	
101	*Layer*	Turf and topsoil, mid grey brown silty clay.	
102	*Layer*	Demolition deposit, which has been churned up and damaged by ploughing. mid grey brown silty clay loam.	
103	*Layer*	Demolition deposit concentrated at the eastern end of Trench 1, equal to 105, mid grey brown silty loam.	
104	*Surface*	North south aligned strip of tessellated pavement, forming corridor between two walls. Contains reused material, limestone, CBM and Pennant sandstone *tesserae*, on average 0.03m by 0.03m square.	
105	*Layer*	Rubble deposit directly below 102, similar to 102 but not suffered plough damage, mid to light grey brown silty loam, with common CBM and tesserae. Equal to 103.	
106	*Layer*	Rubble deposit, containing larger blocks and fragments of CBM and structural material, *Opus signinum* and voussoir tufa vault stones. Mixed deposit of mid grey brown and reddish brown silty clay loam.	
107	*Layer*	Deposit of roofing collapse, mid to dark grey brown silty clay with abundant Pennant sandstone roofing tiles.	
108	***Cut***	**Cut of robber trench for the removal and subsequent recycling of stones from wall 110.**	
109	*Layer*	Fill of 109, mid to light greyish brown sandy loam, similar and probably same deposit as 105.	
110	*Wall*	North-south aligned Cotswold sandstone wall foundation within construction cut **111**, formed external wall and is butted by internal corridor tessellated floor 104.	
111	***Cut***	**Construction cut for wall 110, contains wall 110, backfill 124 and 120.**	
112	*Floor fragment*	Component of deposit 116, a fragment of fine mosaic, set in to *opus signinum* floor 130. Has been burnt and had 118 adhered to its surface.	
113	*VOID*	VOID	
114	*Layer*	Identical to 106, revealed within sondage.	
115	*Layer*	Mid yellow brown clay deposit at western end of Trench 1, cut through by construction cut 111, a potential dump of redeposited natural.	
116	*Layer*	Group including 129,130,112 and 131, a mixed deposit of demolition rubble unused material not recycled, containing mosaic fragments *opus signinum* floor fragments and tufa voussoir vault stones, lies below 106.	
117	*Layer*	Light yellow sandy loam deposit concentrated at the eastern end of Trench 1, possible mortar dump.	
118	*Layer*	Very dark brown/black deposit adhered to mosaic fragment 112, result of the burning of a substance onto the floor surface. Origin unknown.	
119	*Layer*	Make up deposit for tessellated floor surface 104., light grey brown silty clay.	
120	*Layer*	Mixed mid brown and light yellow silty clay deposit, fill within construction cut 111, backfill.	
121	*VOID*	VOID	
122	*Layer*	Located at base of hypocaust system, a very dark brown/black sand silt layer, result of smoke and ash blowing through hypocaust chamber. Lies in between *pilae*.	
123	*Layer*	Equivalent to 116.	
124	Layer	Burnt deposit within construction cut 111, deliberate back fill of mid reddish brown silty clay.	
125	*Structure*	*In situ* hypocaust column, *pilae*, set into 128.	
126	*Structure*	*In situ* hypocaust column, *pilae*, set into 128.	
127	*Structure*	*In situ* hypocaust column, *pilae*, set into 128.	
128	*Layer*	Light yellow brown clay deposit. Probable construction level at which hypocaust was built, *pilae* set into it.	
129	*Floor fragment*	Fragment of fine mosaic, same floor as 112 except unburnt, component of 116.	
130	*Floor*	*Opus signinum* floor into which mosaic 112 is set, overlies earlier floor 131.	

	make-up	
131	*Floor fragment*	*Opus signinum* floor fragment, earlier phase of flooring as overlain by 130 and 112.

Trench 2

	Max Depth: 0.30m	Length: 11.05m	Width: 1.40m
Context No.	**Type**	**Description**	
201	*Layer*	Turf and topsoil, mid grey brown silty clay loam.	
202	*Layer*	Mid brown silty loam, rubble rich deposit, ploughed, and broken up, and directly below topsoil.	
203	*Wall*	North-south aligned roughly shaped limestone block wall, not fully exposed and only one course identified. Both faces show worked surfaces.	
204	*Layer*	Possible floor surface. Buff mortar and stone rich deposit, positioned on eastern side of wall 203. Not excavated and so nature unknown.	
205	*Layer*	Compact demolition layer on the west of wall 203, appears to butt deposit 207, relationship not known Not excavated and so nature unknown.	
206	*Layer*	Disturbed deposit, probable fill of plough scar.	
207	*Layer*	Light brown mortar rich deposit at western end of trench, nature unclear as unexcavated, possible robbed out wall or floor. Unknown.	
208	*Layer*	Buff mortar deposit revealed in sondage below 205, possible floor surface or make-up deposit for floor, unclear as not fully exposed.	

Trench 3

	Max Depth 0.47m	Length: 2.10m	Width: 1.50m
Context No.	**Type**	**Description**	
301	*Layer*	Turf and topsoil.	
302	*Layer*	Limestone fragment rich subsoil, mid grey brown silty loam, probably old plough soil, medieval?	
303	*Natural*	Natural geology, mid brown silty clay with small limestone fragments.	
304	***Cut***	**Cut of possible domestic rubbish pit. Not excavated.**	
305	*Layer*	Mid grey brown upper fill of **304**. Not excavated.	
306	***Cut***	**Cut of feature. Not excavated.**	
307	*Layer*	Light to mid yellow brown silty clay with common flecks of charcoal. Not excavated.	

Trench 4

	Max Depth: 1.39m	Length: 9.90	Width: 1.80m
Context No.	**Type**	**Description**	
401	*Layer*	Turf and topsoil; mid grey brown silty loam.	
402	*Layer*	Subsoil deposit, mid grey silty loam with common fragments of limestone.	
403	***Cut***	**Constuction of possible cold plunge pool, part of Group 420.**	
404	*Layer*	Upper rubble fill of the backfilled possible pool, light yellow degraded sandstone and limestone, with abundant blocks of stone.	
405	*Natural*	Natural geology, small area of Cornbrash type material.	
406	*Wall*	Southern east-west aligned wall of possible plunge pool, roughly shaped limestone blocks with a rubble core, overlies clay deposit 407.	
407	*Layer*	Deposit of grey clay at base of cut of pool, acting as water proofing and has stone walls constructed upon it.	
408	*Wall*	Northern east-west aligned wall of possible plunge pool, roughly shaped limestone blocks with a rubble core, overlies clay deposit 407. Possibly inner wall and part of step or bench into pool.	
409	*Wall*	Probable outer wall, rough shaped limestone blocks, partially truncated by 410. Probably	

		formed step with 408 and area of clay 413.
410	***Cut***	**Probable robber cut for the removal of part of wall 409.**
411	***Cut***	**Cut of shallow northwest southeast aligned ditch, unknown date or fuction, cuts deposit 414.**
412	*Layer*	Deliberate backfill of robber trench 410.
413	*Layer*	Deposit of light brown yellow clay, located on a small flat area between walls 408 and 409, and likely forming the base for a bench or seated area in the pool.
414	*Layer*	Deposit of light yellow brown clay at the south end of the trench of unknown origin, cut through by 411.
415	*Layer*	A fairly thick deposit of light brown yellow clay which overlies rubble deposit 416 and is sealed by 404 within the backfilled plunge pool. Possibly derived from the lining of the pool acting as waterproofing. Unclear of origin.
416	*Layer*	Lower rubble deposit below 415, limestone unshaped blocks.
417	*Layer*	Fill of undated ditch 411, mid grey brown silty clay.
418	*Layer*	Redeposited natural limestone blocks, against wall 406. Fill of construction cut 403.
419	*Layer*	Light yellow limestone mortar deposit at the base of the plunge pool, overlies the clay deposit 407, and possible is the remains of the mortar which held tiles in place. Unclear.
420	*Group*	Group number for possible Roman cold plunge pool or water tank.

Trench 5

	Max Depth: 0.40m	Length: 6.30m	Width: 1.90m
Context No.	**Type**	**Description**	
501	*Layer*	Turf and topsoil, mid grey brown silty clay.	
502	*Layer*	Mixed deposit of limestone blocks and CBM, within a grey brown silty clay, directly below 501.	
503	*Layer*	Rubble fill deposit, in channel formed between 504 and 505, collapse and demolition rubble. Identical to 508 and 509. Not excavated.	
504	*Wall*	.	
505	*Wall*	Rough faced limestone block wall; diagonally shaped structure creating channel with wall 504 and 506; part of hypocaust .	
506	*Wall*	Rough faced limestone block wall, creating channel with wall 505, part of hypocaust .	
507	*Wall*	Not fully excavated wall forming part of hypocaust channel.	
508	*Wall*	Rough faced limestone block wall, part of hypocaust.	
509	*Layer*	Equivalent to 503.	
510	*Layer*	Equivalent to 502. Not excavated.	
511	*Layer*	Equivalent to 503.	

Trench 6

	Max Depth: 0.38m	Length: 22m	Width: 1.60m
Context No.	**Type**	**Description**	
601	*Layer*	Turf and topsoil; mid grey brown silty loam.	
602	*Layer*	Mixed light yellow grey and grey silty loam, backfill deposit from Lysons' 1811 excavations.	
603	*Layer*	Mid grey brown silty clay loam, interpreted as undisturbed *in situ* Romano-British deposit, which is sealing potentially 2 rooms which Lysons did not excavate.	
604	*Wall*	Partially exposed roughly shaped limestone block wall, north-south aligned, and bonded on northern end to west end of wall 605. Not fully excavated, and room which it bounds not exposed.	
605	*Wall*	Partially exposed roughly shaped limestone block wall, east-west aligned, and bonded on west end to north end of wall 604 and eastern end to north end of 606. Not fully excavated, and room which it bounds not exposed.	

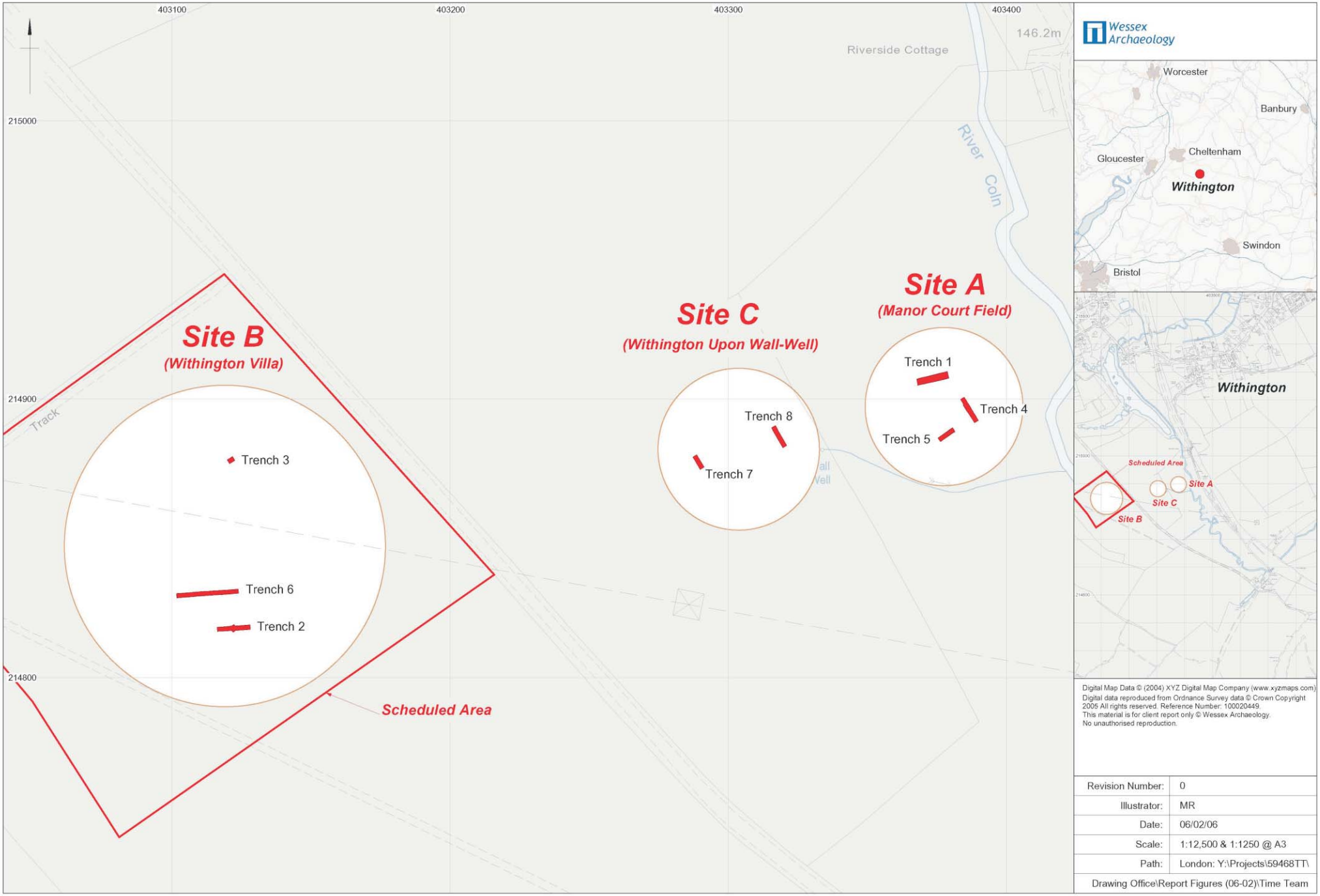
606	*Wall*	Partially exposed roughly shaped limestone block wall, north-south aligned, and bonded on northern end to east end of wall 605. Not fully excavated, and room which it bounds not exposed.
607	*Layer*	Mid brown silty loam, interpreted as undisturbed room fill within walls 604, 605 and 606. Not excavated.
608	*Wall*	Roughly north-south aligned, roughly shaped limestone block wall. Bonded at northern end to west end of wall 609, a clear step can be seen, creating a doorway into room with mosaic floor 610. This room was exposed by Lysons.
609	*Wall*	Roughly east west aligned roughly shaped limestone block wall. Bonded at west end to northern end of wall 608, forms a room with mosaic floor 610. This room was exposed by Lysons. Eastern end of wall shows truncation and no return of wall was found, as identified by Lysons.
610	*Floor surface*	A mosaic floor comprising *tesserae* of limestone and Pennant sandstone. Exposed by Lysons and damaged towards the eastern end. Overlies mortar surface 611. Confined within walls 608 and 609.
611	*Layer*	Limestone mortar bedding layer for the laying of mosaic 610, overlies make-up layer 612
612	*Layer*	Mid to light brown silty clay loam, rubble deposit, underlying mosaic floor 610.

Trench 7

	Max Depth: 0.22m	Length: 5m	Width: 1.6
Context No.	**Type**	**Description**	
701	*Layer*	Turf and topsoil; mid brown silty clay.	
702	*Layer*	Mid brown silty clay subsoil with common limestone fragments.	
703	*Natural*	Natural limestone geology.	

Trench 8

	Max Depth: 0.68m	Length: 5.90m	Width: 1.90m
Context No.	**Type**	**Description**	
801	*Layer*	Turf and topsoil; mid brown silty clay.	
802	*Layer*	Mid yellow brown silty clay subsoil.	
803	*Layer*	Natural geology.	
804	***Cut***	**Cut of east west aligned ditch, unknown date or function.**	
805	*Layer*	Upper fill of **804**, mid yellow brown silty clay.	
806	*Layer*	Fill of **804**, concentrated on northern side mid yellow brown clay.	
807	*Cut*	Construction cut for possible unexcavated wall 808.	
808	*Wall*	Possible wall, unexcavated.	



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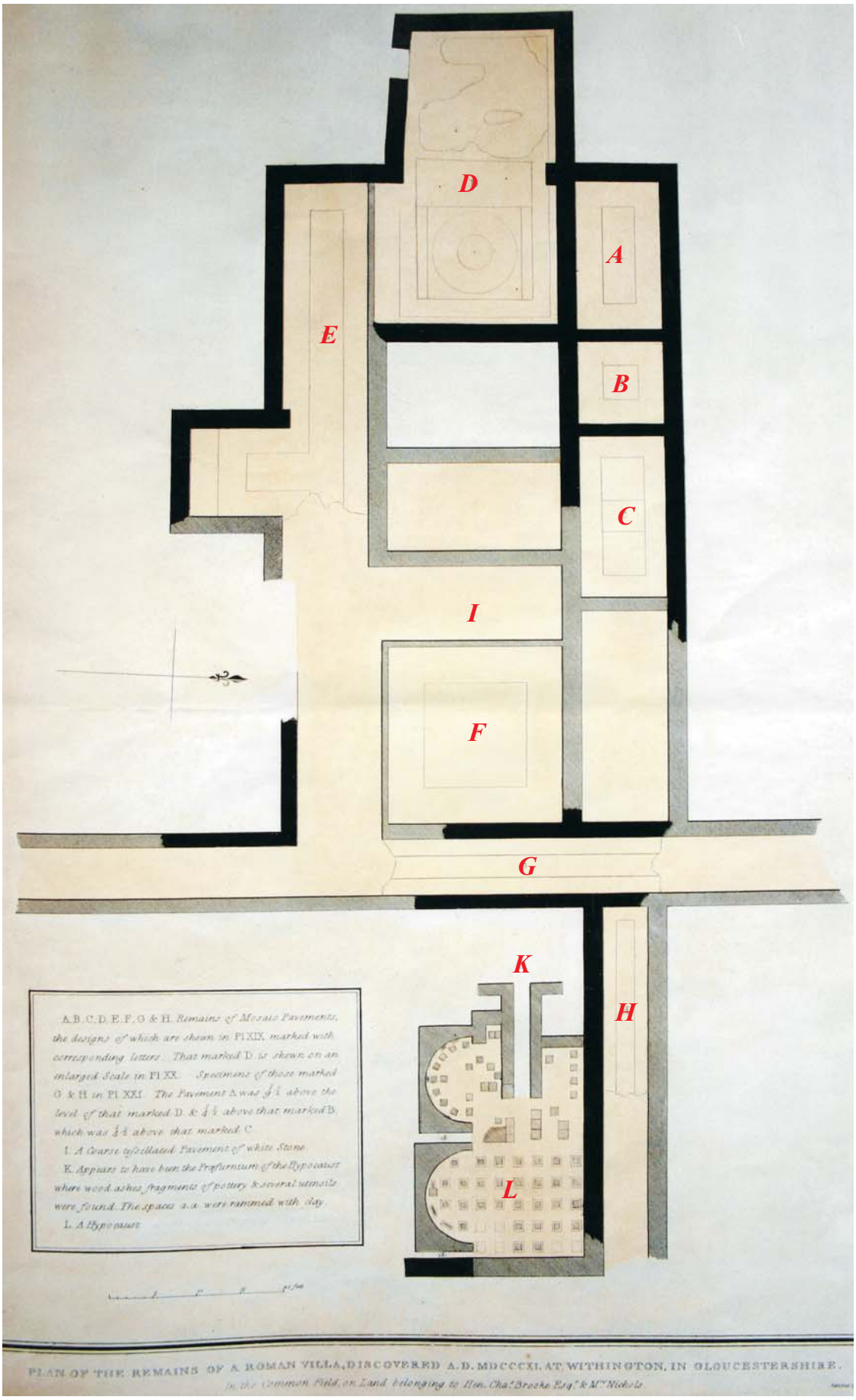
Site and Trench Locations showing Sites A, B & C

Figure 1



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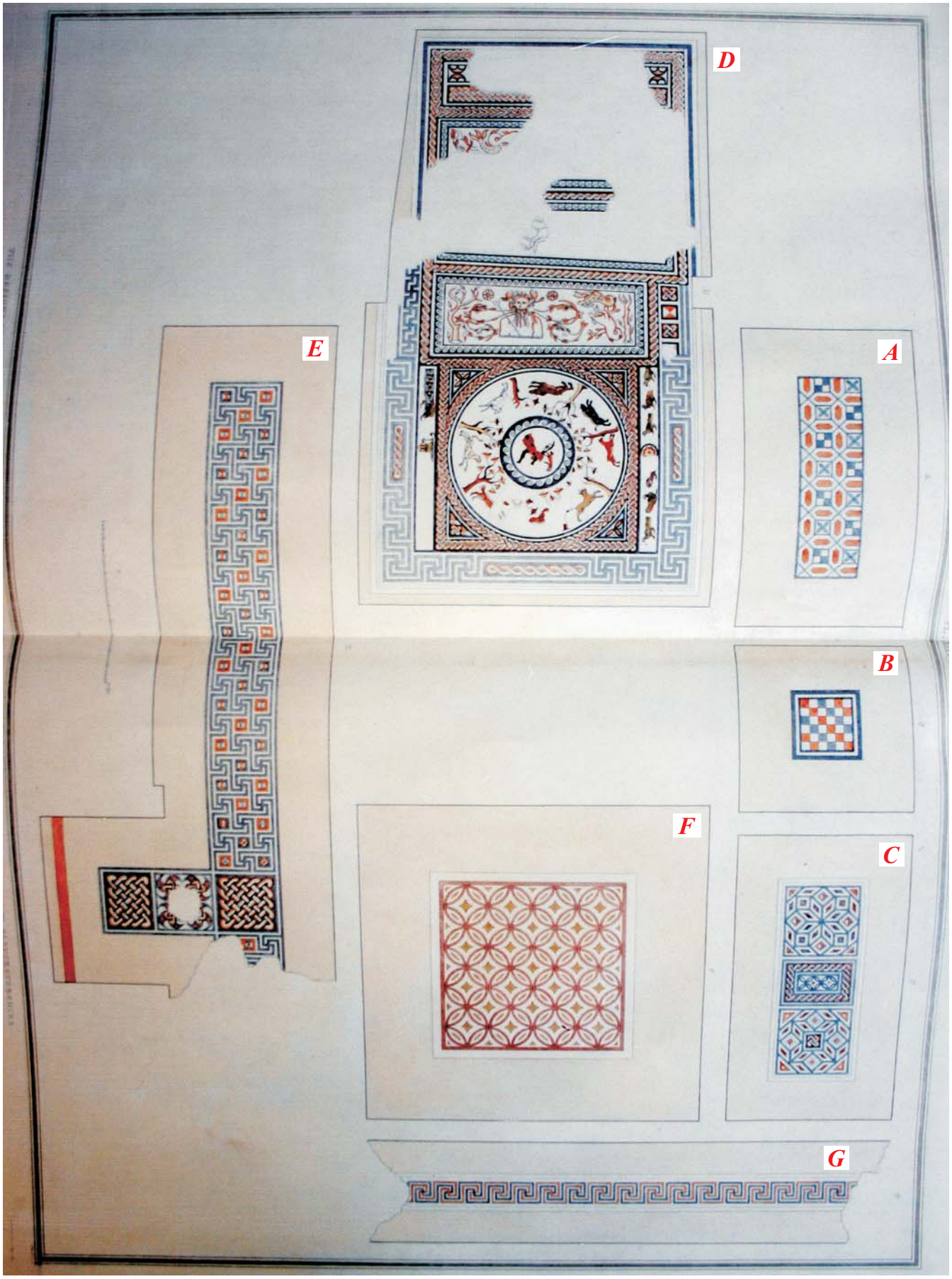
Lysons' plan of Withington Villa

Figure 2



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Lysons' illustrations of the mosaics of Withington Villa

Figure 3

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Painting of the excavations of Withington Villa

Figure 4

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Key: Magnetic Interpretation

- Archaeology
- ?Archaeology
- Increased Magnetic Response
- ?Former Track/Boundary
- ?Natural
- ?Ridge & Furrow
- Ferrous
- Effect from Overhead Cables
- 12 Geophysical Anomaly

0 100m

Key: Resistance Interpretation

- High Resistance - ?Walls/Floors
- High Resistance - Building Footprint
- Low Resistance - Archaeological/Natural
- High Resistance - Modern Track
- B Geophysical Anomaly

Geophysical data courtesy of GSB Prospection Ltd

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Site showing interpretation of Geophysical Survey results and Trench locations

Figure 5

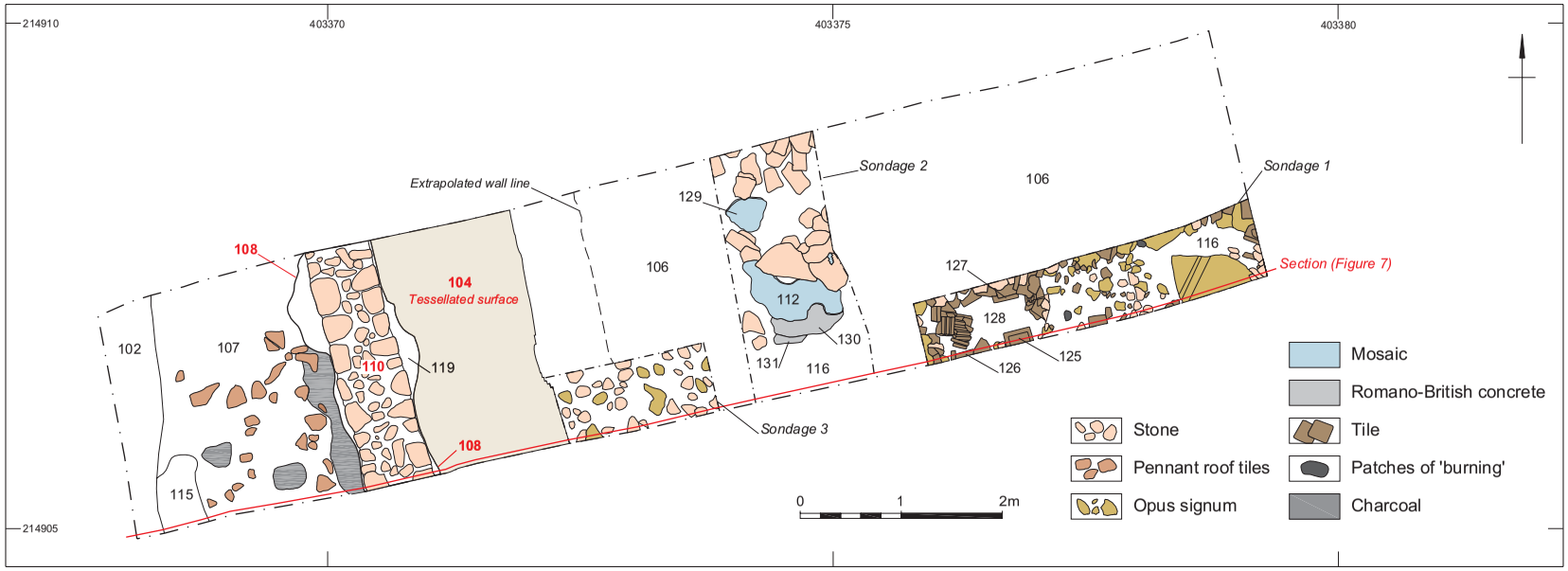

Plate 1: Trench from west (1m & 0.5m scales)

Plate 2: Tessellated pavement 104 and wall 110 from south (1m & 0.5m scales)

Plate 3: Sondage 2 from north showing mosaic fragments 112 and 129 (1m & 0.5m scales)

Plate 4: North facing section of Sondage 1 showing *in situ* *pilae* 125 and 126 (1m & 0.5m scales)

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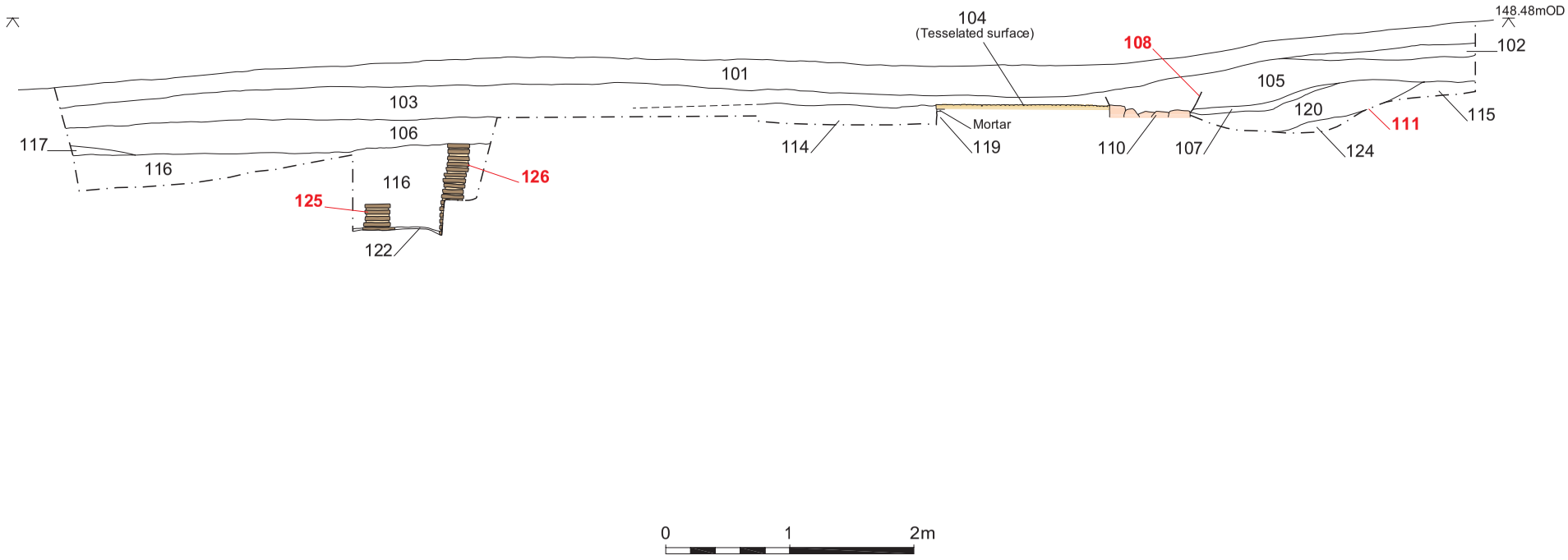
Detail of Trench 1 with Plates 1-4

Figure 6

Trench 1 - Section

EAST *WEST*



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North facing section of Trench 1

Figure 7

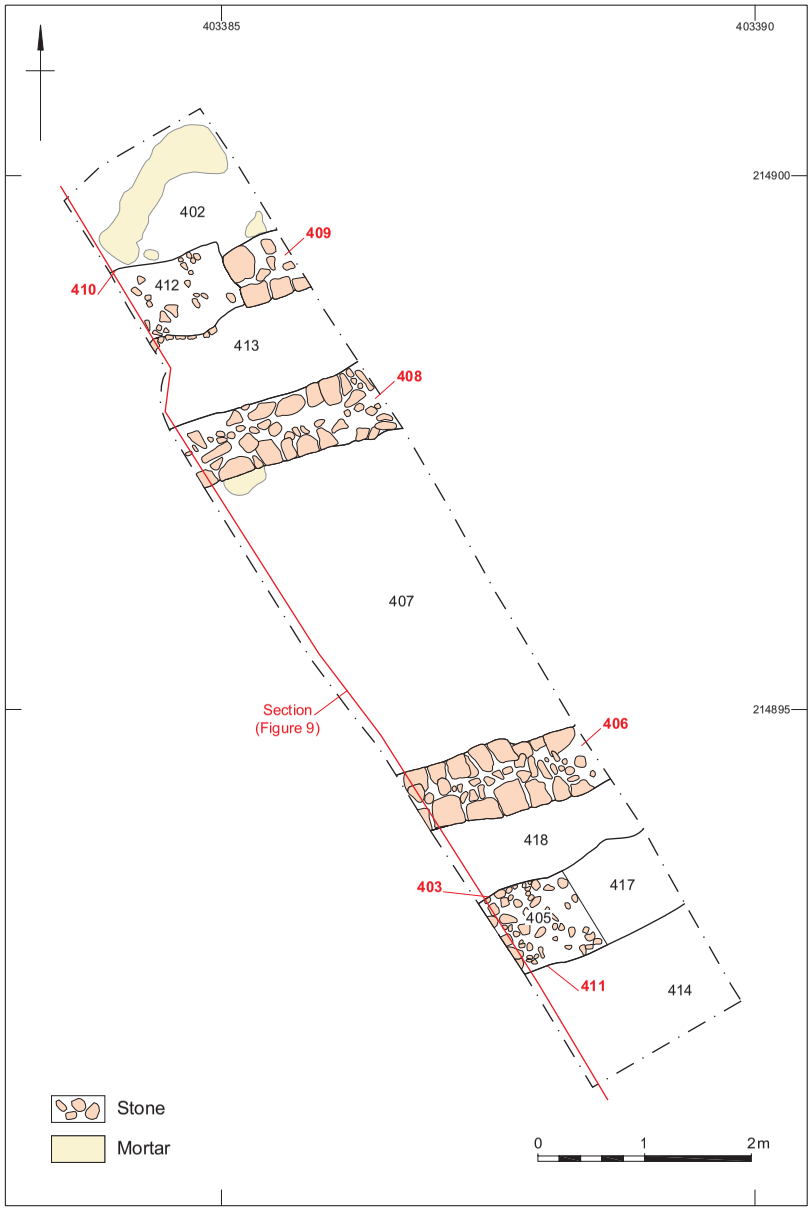

Plate 5: Trench 5 from south
(1m & 0.5m scales)

Plate 6: North facing elevation of Wall **406**
(1m scale)

Plate 7: South facing elevation of Wall **408**
(1m scale)

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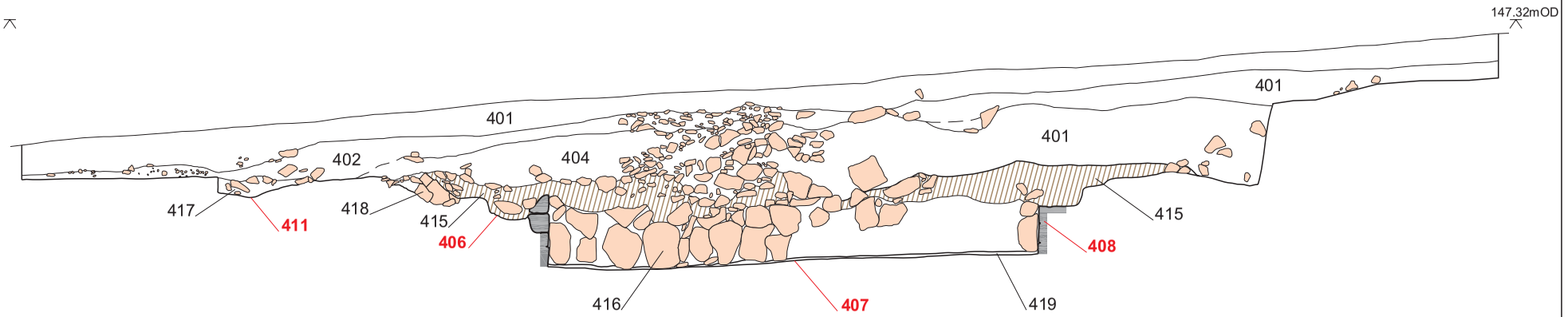
Detail of Trench 4 with Plates 5-7

Figure 8

Trench 4 - Section

SOUTH EAST *NORTH WEST*



Stone

Clay

0 1 2m

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North east facing section of Trench 4

Figure 9

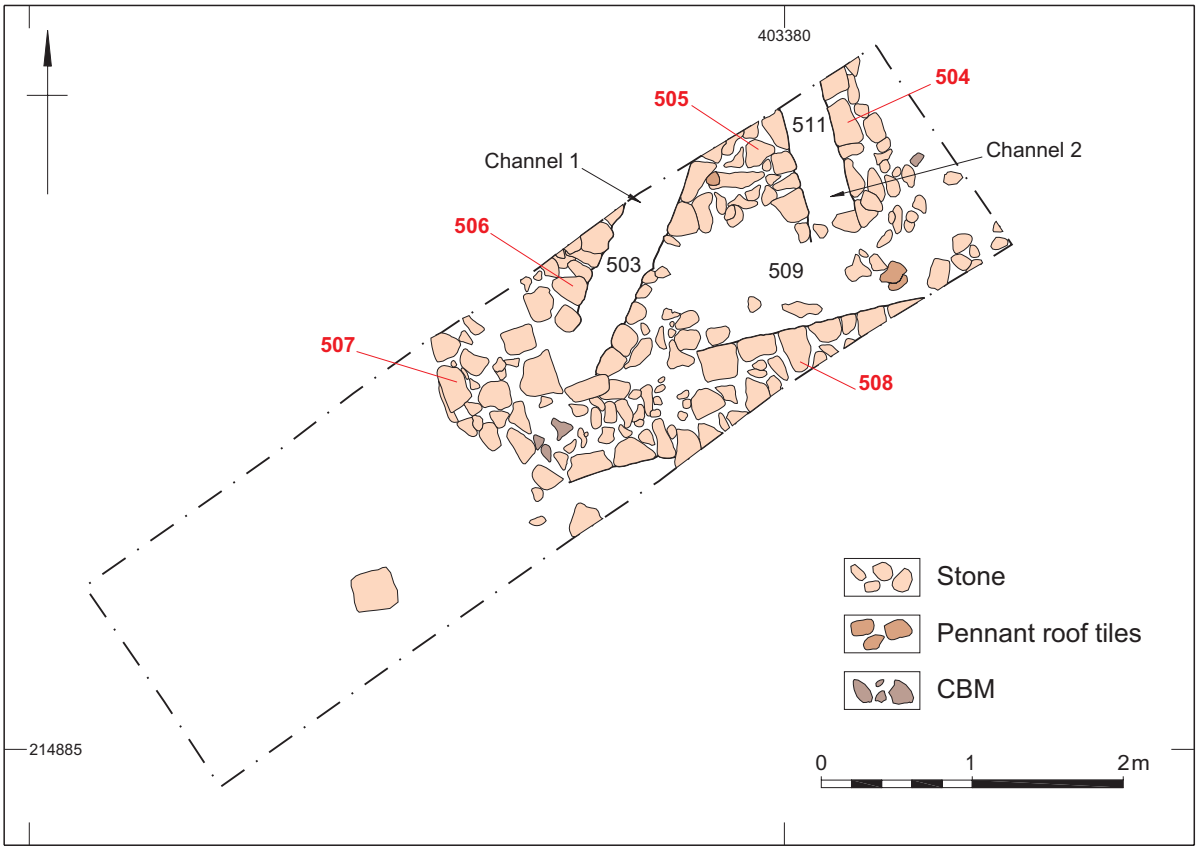

Plate 8: Trench 5 from east
(1m & 0.5m scales)

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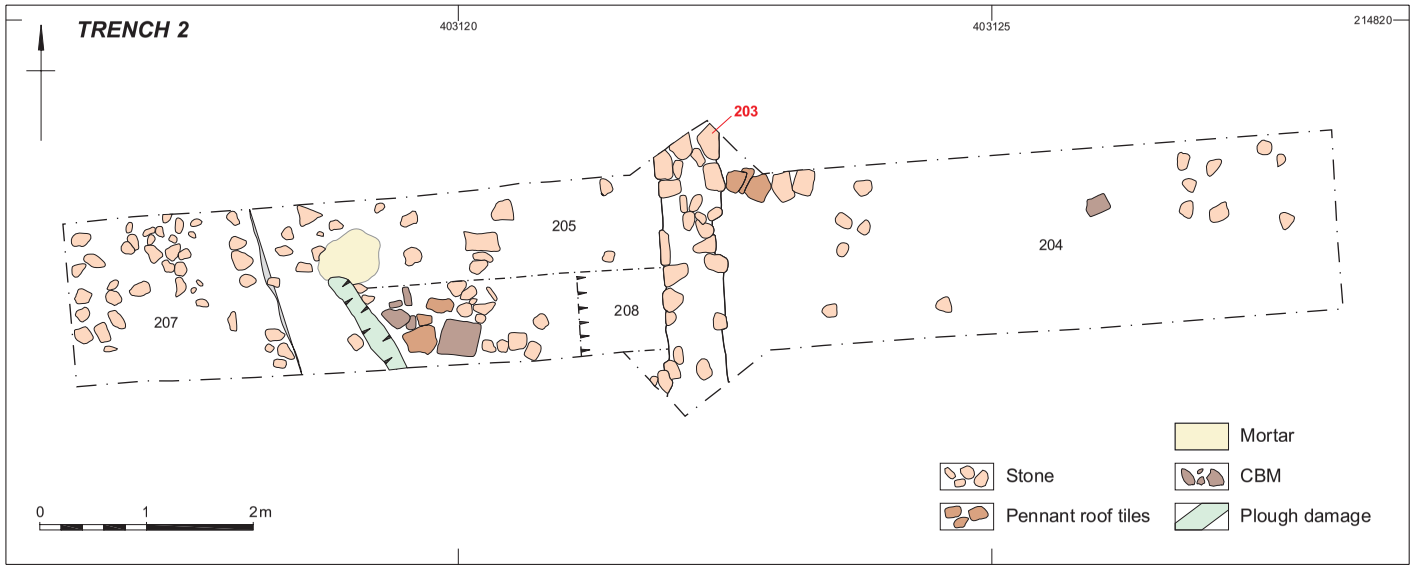
Detail of Trench 5 with Plate 8

Figure 10



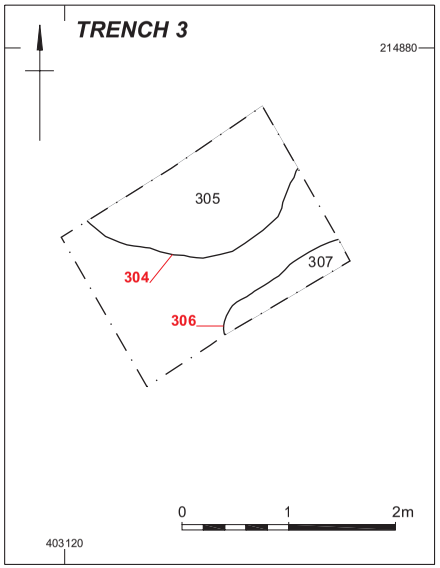


Plate 9: Trench 2 from west (1m & 0.5m scales)

Plate 10: Trench 2, Wall **203** from north (1m & 0.5m scales)

Plate 11: Trench 3 from south west (1m & 0.5m scales)

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Detail of Trenches 2 and 3 with Plates 9-11

Figure11

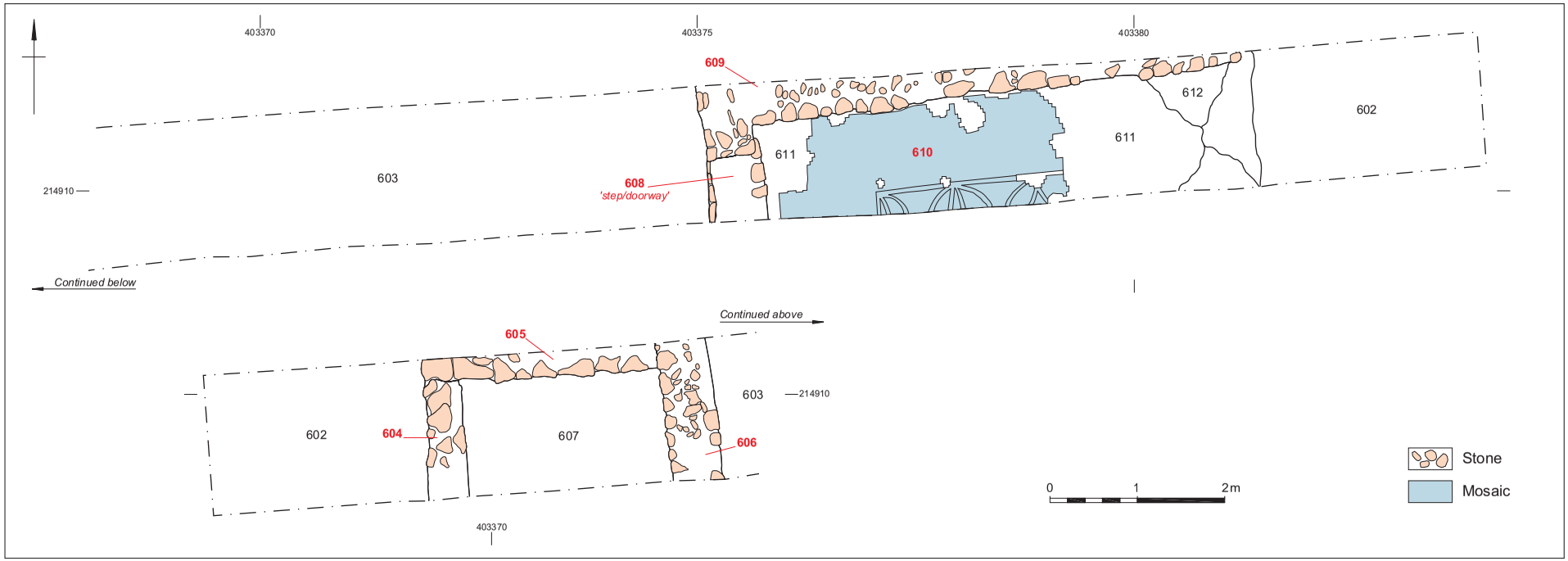

Plate 12: Trench 6 from west (1m & 0.5m scales)

Plate 13: Trench 6 from east (1m & 0.5m scales)

Plate 14: Close up of Wall **609**, step in wall **608** and mosaic **610** from the west. Recorded as Room F by Lysons in 1811 (1m & 0.5m scales)

Plate 15: Close up of mosaic **610**, in Lysons' Room F (0.5m scale)

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Detail of Trench 6 with Plates 12-15

Figure 12

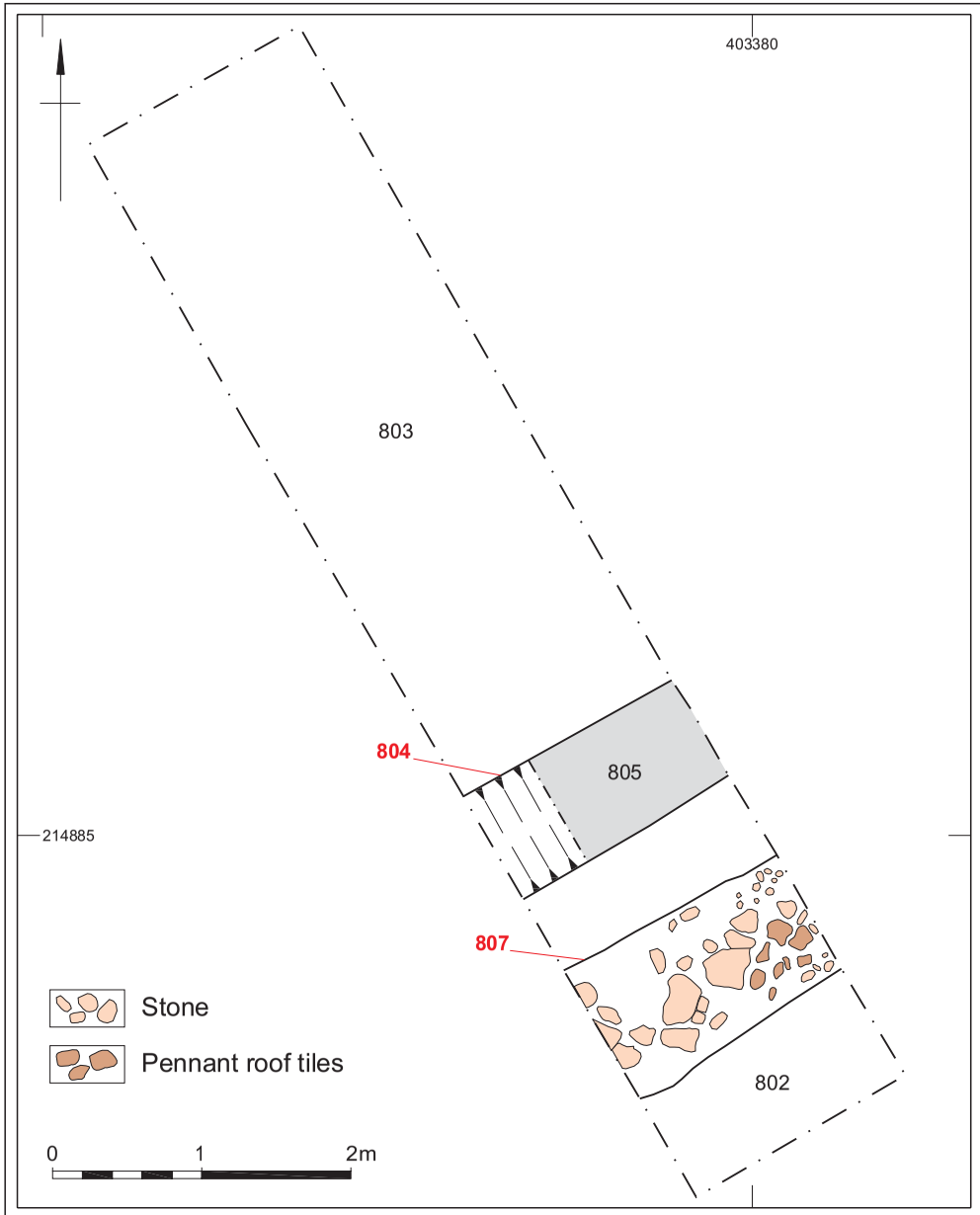

Plate 16: View of Trench 8 from south
(1m & 0.5m scales)

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Detail of Trench 8 with Plate 16

Figure 13

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