ARCHAEOLOGICAL EXCAVATION OF TEST PITS AT THE COMMANDERY, SIDBURY, WORCESTER

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Illustrations by Carolyn Hunt

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INVESTOR IN PEOPLE Project P3422 Report 1731 WCM 101771

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Archaeological excavation of test pits at The Commandery, Sidbury, Worcester

Angus Crawford

Part 1 Project summary

Three archaeological test pits were excavated in the vicinity of the chapel at The Commandery, Worcester. The work was undertaken on behalf of Worcester City Council, who intended to construct new surface drainage in the immediate proximity of the remains of the medieval chapel.

The area in question was the subject of an earlier community excavation in 2006 which exposed the remains of a 13th century chapel and a later 14th-15th century vestry. An immediate buffer zone one metre wide had been maintained between the 2006 excavation area and the standing buildings. The proposed drainage works are to be constructed in this area.

Test Pits 1 and 2 revealed the base of the late 17th century brick re-facing of the late 15th century medieval structures of the East Wing and Long Chamber. The test pits also exposed medieval lias stonework foundations for these two buildings, constructed directly above the 14th to 15th century vestry which was probably demolished immediately preceding their construction.

Test Pit 3 revealed that previous drainage works, in the 19th century, had removed a section of the east-facing 13th century chapel wall immediately adjacent to the Commandery House foundations. Further, it revealed that the exposed late 20th century drainage works were inadequate, allowing for rainwater catchment from the surrounding roofs to discharge into the ground immediately abutting the foundations of Commandery House.

Part 2 Detailed report

1. Background

Reasons for the project

Archaeological test pitting was undertaken at The Commandery (NGR: SO 85276 54417), Worcester (Fig 1), on behalf of Worcester City Council. The City Council intends to construct new surface drainage in the area of the excavated medieval chapel. The excavations were required to determine the depth of significant archaeological remains in advance of drainage works and to identify existing buried drainage systems.

1.2 **Project parameters**

The project conforms to the *Standard and guidance for archaeological excavation* (IfA 2008).

The requirements for test pits to be excavated under archaeological conditions were set out by James Dinn (Worcester City Council) in an email dated 2nd October 2009. The project conforms to a project proposal produced by the service (HEAS 2009).

1.3 **Aims**

The test pits were excavated to locate archaeological deposits and determine, where present, their extent, state of preservation, date, type and vulnerability. The purpose of this was to establish their significance, in order to recommend an appropriate treatment to be integrated with the proposed development programme.

More specifically the following aims have been identified:

- To establish the extent of the 13th and 14th century foundation walls and their relationship to the current foundations of the surrounding standing buildings.
- To establish the depth of foundations of all standing buildings surrounding the Chapel and of deposits below the foundations if those foundations are shallow.
- To define the top levels of the chapel north and east wall, and the east wall of the chapel vestry, where they run or are crossed by drains or potential drain lines.
- To identify the locations, levels and falls of existing drains and where they run under later foundations. To identify the top levels of significant archaeological deposits in the same area.

2. Methods

2.1 **Documentary search**

Prior to fieldwork commencing the report titled Excavation and Building Recording at The Commandery was consulted (Miller, Crawford and Dalwood 2007). The report describes a wide range of archaeological, architectural and documentary evidence.

2.2 Fieldwork methodology

2.2.1 Fieldwork strategy

A detailed specification has been prepared by the Service (HEAS 2009). Fieldwork was undertaken between 13th and 16th October 2009. The site reference number and site code is WCM 101771.

Three specifically located test pits, amounting to just over $3m^2$ in area, were excavated (Fig 2).

Excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material as well as to determine their nature. Deposits were recorded according to standard Service practice (CAS 1995).

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural and artefactual evidence, allied to the information derived from other sources.

2.3 Artefact methodology

2.3.1 Artefact recovery policy

The artefact recovery policy conformed to standard Service practice (CAS 1995; appendix 2).

2.3.2 Method of analysis

All hand-retrieved finds were examined and a primary record made on a Microsoft Access 2000 database. They were identified, quantified and dated to period. A terminus post quem date was produced for each stratified context. The date was used for determining the broad phases defined for the site. All information was recorded on pro forma sheets.

The pottery and ceramic building material was examined under x 20 magnification and recorded by fabric type and form according to the fabric reference series maintained by the service (Hurst and Rees 1992; Hurst 1994) www.worcestershireceramics.org).

2.4 Environmental methodology

No deposits suitable for environmental sampling were identified during the excavation of the test pits.

2.5 **The methods in retrospect**

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

3. **Topographical and archaeological context**

The Commandery comprises buildings and land on the north side of Sidbury, immediately outside the medieval city wall (Fig 1). It is well known for its historical role as the headquarters of the Royalist army during the Battle of Worcester in 1651 and since the 1970s as a museum. It is less widely known as the site of a medieval hospital, although the standing buildings are largely comprised of the medieval hospital buildings.

In 2006 a trench was excavated in a yard to the east of Commandery House. This was to test the hypothesis that the hospital chapel lay beneath this area of yard and the existing buildings. The excavation revealed remains of the 13th century hospital chapel, dedicated to St Gudwal (Miller, Crawford and Dalwood 2007, 4-5), exposing the northeast corner buttresses and the surviving eastern and southern walls (Fig 2). Further excavation work within Commandery House located and partially exposed the southeast corner buttresses. An additional wall running north and abutting the northeast buttress was recorded and identified as a probable vestry added in the 14th-15th century. This evidence, combined with the excavation of two skeletons within The Commandery buildings (Goad, Crawford and Head 2004), indicated that further chapel and vestry remains survived below the one metre exclusion zone between the standing buildings and the 2006 trench excavation, and survived below the standing buildings.

4. **Results**

4.1 **Structural analysis**

The test pits and features recorded are shown in Figure 2. The results of the structural analysis are presented in Appendix 1. All test pits were excavated in the yard to the east of Commandery House and the East Range (Fig 1; Plates 1 and 2)

4.1.1 **Test Pit 1 (contexts 15000 to 15012)**

Test Pit 1 was located at the northern extremity of the yard against the south-facing wall of the late 15th century Long Chamber and straddled the eastern half of the visible 14th to late 15th century wall, identified as a possible vestry. The aim was to identify the remaining extent of the chapel wall and to identify and record the foundations of the medieval Long Chamber.

Phase 1 Chapel vestry (14th to late 15th century)

Remains of the 14th to late 15th century chapel annex wall were located but were less extensive than anticipated (context 15010). The remains were consistent with those identified during the 2006 excavation season and were visible as a continuation of the wall length, running north, and constructed of red sandstone ashlar blocks with a red sandstone rubble core (Fig 2 and 3). Detailed stone construction was obscured by a pinkish lime mortar coating the original stone coursing (Plate 3).

Phase 2 Demolition of chapel vestry (late 15th century)

The northern end of the vestry wall ended 0.40m short of the late 15th century Long Chamber. The deposit immediately sealing the vestry wall (context 15009) consisted of medieval building material, probably a combined demolition and foundation layer that was observed to extend directly below the medieval foundation stones of the Long Chamber (context 15001).

Phase 3 Construction of the Long Chamber (1468 to 1473)

Directly over the demolition layer was the foundation wall for the construction of the Long Chamber (context 15011; Plate 3). This consisted of roughly-finished rectangular blocks of lias with the occasional use of roof tiles to level irregular courses. The stones were gradually stepped inwards to form an offset foundation platform until they reached a maximum (visible) height of 1m. Bonding was formed using a pale pink lime mortar visible in a number of joints. As with contemporary late medieval walls found during excavations at The Commandery, the foundations were not laid in a trench but rather built directly off the demolition/construction horizon to form a plinth for the timber-framed building.

Phase 4 Accumulation of deposits against Long Chamber foundations

Three distinct archaeological layers were identified abutting the Long Chamber foundations and overlying the demolition of the chapel vestry (Plate 4; Fig 4). The earliest deposit (context 15008), formed shortly after the construction of the Long Chamber, contained residual material from the demolition of the chapel vestry. This included floor tiles of 13^{th} to 15^{th} century date and general discarded refuse including animal bones and pottery sherds of distinctive Cistercian-type ware (late 15^{th} to 16^{th} century date).

Two further overlying deposits contained residual medieval and post-medieval pottery (contexts 15006 and 15007). These deposits represented re-surfacing or general made-ground accumulation outside the building during the 16th to 17th centuries. Context 15002 contained frequent brick, tile and mortar fragments. This layer abutted the medieval foundations and protruded below the brick re-facing (discussed below) and appeared to be contemporary with this phase of building work during the late 17th century. The most recent deposit (context 15001) was not securely dated but post-dates the late 17th century as it abutted the brick re-facing.

Phase 5 Re-facing of medieval Long Chamber in brick

In the late 17th century the Long Chamber was refaced in brick; although later alterations in the brick fabric were noticeable (context 15012). The brickwork rests on a contemporary initial layer of roof tiles. This overlies the medieval lias foundations and protrude slightly over the made ground deposit of contemporary date (context 15002).

4.1.2 Test Pit 2 (contexts 17001 to 17007)

Test Pit 2 was located at the western extremity of the yard against the east-facing wall of the late 15^{th} century East Range (Fig 2) and was targeted to straddle a further part of the exposed 13^{th} century chapel wall.

Phase 1 Medieval floor surface of 14th to 15th century date

The earliest deposit identified was a clay surface that appeared to be an original phase of flooring construction, as a deliberate homogenous deposit, within the chapel vestry (context 17005). This feature was not excavated as it underlaid the foundations of Commandery House (Fig 4). Therefore no artefacts were retrieved that could date this deposit.

Phase 2 Demolition of chapel vestry (late 15th century)

As with Test Pit 1, a layer of discarded medieval building material with a combined demolition and construction foundation layer was identified (context 17004) that abutted the surviving 13th century chapel wall (context 17007; Fig 3 and 4). This extended directly below the stone foundation of the late medieval East Wing, therefore post-dating the demolition of the vestry and predating the construction of the East Wing.

Phase 3 Construction of East Wing (late 15th century)

As with the Long Chamber the foundations of the East Range were constructed with rectangular blocks of lias bonded with a pinkish lime mortar (context 17006). The final course was constructed using green sandstone ashlars with an upper chamfer (Plate 5). The foundations of the East Range abutted the north wall (context 17007) of the 13th century chapel (Plate 6). This confirmed the construction sequence: the East Range and the Long Chamber (constructed during the late 15th century) were built following after the demolition of the chapel vestry but while the 13th chapel building was still standing. The remains of the chapel wall were observed to survive to a height just below the current surface level at right angles to the East Range for a distance of 1.58 m from the building (Plate 6 and 7).

Phase 4 Accumulation of deposits against East Wing foundations

Three distinctive deposits were identified post-dating the demolition of the chapel vestry and the construction of the East Wing (contexts 17001, 17002 and 17003; Fig 4). As with the accumulated deposits recorded in Test Pit 1, artefactual evidence points to accumulated deposits or deliberate ground raising works during the 16th and 17th centuries.

4.1.3 Test Pit 3

Test Pit 3 was located at the southern extremity of the yard against the north facing wall of the late 17th century Commandery House and was targeted on the east wall of the chapel, and the visible rain water drains (Fig 2).

Phase 1 Chapel (13th century)

Removal of a mixed/disturbed ground deposit (context 16001) revealed that the chapel wall was constructed of greenish-grey sandstone blocks with a mortared red and green sandstone rubble core (Fig 3). A single exterior facing stone block had been removed as had the core fill and internal facing stones to accommodate 19th century and later drainage work.

Phase 2 Construction of Commandery House (c1680)

Construction of the Commandery House wing was, for the most part, accomplished in brick although it incorporated the reuse of robbed out or exposed wall stones from the 13th century chapel (Fig 3 and 4). The initial foundation level was constructed, somewhat irregularly, of re-used stone placed directly over the surviving chapel foundations in an east west direction (Plate 8).

Phase 3 Construction of drains (19th century to present)

Excavation of overlying mixed/disturbed soil revealed the remains of the 13th century chapel and later drainage works. This included a 19th century system constructed of horse shoe drains placed base to base to form an oval-shaped pipe. Although partially removed this initial drainage system had required the removal of the outer facing stonework of the chapel to accommodate the pipe (Plate 9). This system was removed at some point, probably for the *in situ* system of more recent drainage works. The current drainage system combines an iron, probably Victorian period downpipe connected to an earthenware pipe that in turn flows to a modern plastic drain box. A further series of piping runs south from the drain box and has been cut through the foundations and runs under the flooring of Commandery House.

5. **The artefact assemblage**

5.1 Introduction

The assemblage, recovered from the test pits is summarised in Tables 1 and 2. The pottery assemblage retrieved from the three test pits consisted of 12 sherds of pottery weighing 121g. In addition fragments of roof and floor tile, brick, stone, mortar, iron, glass, animal bone, oyster shell and clay pipe stem were recovered. The group came from eight stratified contexts and could be dated from the medieval period onwards (Table 1). Level of preservation was generally good with the majority of sherds displaying only low levels of abrasion.

period	material class	count	weight(g)
late med/early post-med	ceramic	8	65
medieval	ceramic	9	2614
medieval	ceramic	20	4911
medieval	ceramic	7	1132
medieval	ceramic	2	12
medieval	glass	5	7
medieval	stone	1	106
medieval	stone	1	40
late med/early post-med	ceramic	8	65
medieval to post- medieval	ceramic	15	1307
medieval to post- medieval	ceramic	5	398
post-medieval	ceramic	1	355
post-medieval	ceramic	1	3
post-medieval	ceramic	2	44
post-medieval	glass	1	1
post-medieval	mortar	3	156
undated	bone	54	727
undated	metal	1	4
undated	mortar	4	110
undated	organic	3	29
undated	organic	7	27
Totals	158	12,113	

Table 1: Quantification of the assemblage

5.2 **The pottery**

All sherds have been grouped and quantified according to fabric type (Table 2). A total of three diagnostic form sherds were present and could be dated accordingly, the remaining sherds were datable by fabric type to their general period or production span. Where mentioned, all specific forms are referenced to the type series within the report for Deansway, Worcester (Bryant 2004) or Webster (1976, 1996).

period	fabric code	fabric common name	count	weight (g)
Medieval	63	Brill/Boarstall ware	1	10
Medieval	99	Miscellaneous medieval ware	1	2
Late medieval to early post-medieval	· —	Speckled brown glazed ware – 'Cistercian type' ware	6	27
Late medieval to early post-medieval	69	Oxidised glazed Malvernian ware	1	13
Late medieval to early post-medieval		Southern white ware, Tudor green	1	25
Post-medieval	78	Post-medieval red sandy ware	2	44

Table 2: Quantification of the pottery by period and fabric-type

Medieval period

Only two sherds of medieval pottery were identified within the assemblage. One from context 15008 was identified as a fragment of Brill/Boarstall jug strap handle (fabric 63). The sherd featured a dark green glaze with a distinctive slash and stab decoration to the outer surface and was most probably of 13th century date. Sherds of this type from Deansway have been proposed to date more specifically from 1250 to 1300 (Bryant 2004, 319). The remaining medieval sherd from context 1505 featured a pale green glaze but could only be classified as a miscellaneous medieval ware (fabric 99, context 17004) due to the small size of the sherd making identification problematic.

Late medieval to early post-medieval

The late medieval to early post-medieval pottery assemblage consisted of only three fabric types with the dominant fabric being speckled brown glazed ware ('Cistercian type' ware; fabric 72) from contexts 15007, 15008 and 17002. All sherds appeared to be from fine walled drinking cups and could be dated from the late 15th to 16th century. While oxidized glazed Malvernian ware was produced from the late 13th to early 17th century a single sherd (context 17002; fabric 69) was identified as being of a late production and therefore probably of 16th to early 17th century date. A complete jug handle of southern white ware (Tudor green - fabric 70.1) was recovered from context 15007 and could be dated from the 15th to 16th century.

Post-medieval

The remaining two sherds from the assemblage were of post-medieval red sandy wares (context 15001; fabric 78) and were representative of general domestic wares produced in this fabric during the 17^{th} and 18^{th} centuries

5.3 **Other artefacts**

Medieval floor tiles

The floor tile assemblage consisted of nine floor tiles and fragments of both decorated and plain glazed tiles (contexts 15005, 15007, 15008 and 17004). The tiles represented both general square pavement tiles and triangular edging tiles with the plain tiles finished with a dark green or yellow glaze. Almost all of the tiles exhibited high degrees of wear to the upper glazed surface probably caused by extensive exposure to footfall traffic. The noticeable exception was one distinctly decorated fragment of a Malvernian tile from context 15008 (Fig 5) that could be dated from 1450 to 1500 from a parallel example from Great Malvern Priory (Molyneux and McGregor 1997). The remainder of the floor tiles could only be broadly dated to the 13th to 14th centuries.

Roof tiles

Forty-seven fragments of roof tile were present within the assemblage. The tile was of a longlived type produced between the 13th to 18th centuries and were not studied in detail. Therefore dating of contexts has been dependent on association with other more datable artefacts

Glass

Five shards of glass (7 g) were present within the assemblage. Of these one was identified as a small shard of post-medieval green window glass of either triangular or diamond shape (context 15001). The remainder of the shards were medieval in date with one from context

15008 retaining traces of brown painted decoration and probably originating from either a 13^{th} century chapel or a 14th-15th century vestry window.

Brick, stone and mortar

A single brick fragment from context 15002 was identified as being of late 17th to mid 18th century date based on the thickness (50mm) and based on previous research undertaken on the Newport Street (Worcester) brick assemblage. A fragment of undiagnostic blue lias stone from context 15006 and an undiagnostic fragment of green sandstone from context 15007 were probably residual medieval building materials from earlier building works. Further building material consisted of seven fragments of mortar were retrieved from contexts 15002, 15006 and 15008.

Clay tobacco pipe

A single fragment of clay pipe stem was present in context 15002 and could only be dated to a broad production span of 17th to 18th century.

Animal bone and oyster shell

Fragments of oyster and muscle shells as well as fragments of animal bone were also not closely studied. However they are indicative of general kitchen waste being discarded on the site from the later medieval period onwards.

context	material class	object specific type	count	weight(g)	start date	end date	context <i>terminus</i> <i>post quem</i> date
15001	ceramic	roof tile	2	480	1201	1799	Late 17 th to 18 th
15001	ceramic	pot	2	44	1699	1799	century
15001	glass	window	1	1	1699	1799	
15002	ceramic	clay pipe	1	3	1600	1799	Late 17 th century
15002	ceramic	brick	1	355	1675	1750	
15002	ceramic	roof tile	5	398	1201	1799	
15002		mortar	3	156]
15002	bone	animal bone	1	1]
15006	bone	animal bone	5	33			16 th to late 17 th
15006	ceramic	roof tile	5	405	1201		century
15006	organic	oyster	1	8	0	0	
15006		mortar	3	41	0	0	
15006	glass	window	1	1	0	0	
15006	stone	Blue Lias building stone	1	40	0	0	-
15007	ceramic	pottery	1	25	1401	1599	Late 15 th to 16 th
15007	ceramic	pottery	2	5	1475	1599	century
15007	ceramic	roof tile	8	422	1201	1599	
15007	bone	animal bone	7	53	0	0	
15007	glass	window	1	1	0	0	
15007		coal	3	29	0	0	
15007	ceramic	floor tile	1	458	1201	1499	
15007	stone	Green sandstone	1	106	1201	1499	
15008	bone	animal bone	31	552	0	0	Late 15 th century
15008	ceramic	roof tile	15	4030	1201	1550	
15008		oyster	6	19			
15008	ceramic	floor tile	1	91	1450	1500	
15008	ceramic	floor tile	1	273	1201	1550	
15008	glass	window	3	5	1201	1550	

context	material class	object specific type	count	weight(g)	start date		context <i>terminus</i> <i>post quem</i> date
15008	ceramic	pottery	1	10	1201	1299	
15008	ceramic	pottery	1	1	1475	1599	
15008		mortar	1	69			
15008	Iron	nail	1	4			
17002	ceramic	pottery	3	21	1475	1599	Late 15 th to 16 th
17002	ceramic	pottery	1	13	1501	1625	century
17002	bone	animal bone	10	88			
17004	ceramic	floor tile	5	1518	1201	1500	13 th to late15th th
17004	ceramic	roof tile(flat)	12	2031	1200	1550	century
17004	ceramic	floor tile	1	274	1201	1399	1
17004	ceramic	pottery	1	2	1200	1550	

Table 3 Summary of context dating

6. **Synthesis**

6.1 Medieval

Further elements of the demolished walls of the 13th century chapel was exposed in Test Pits 1 and 2, with features consistent with those identified during the 2006 excavation. The construction consists of greenish blue sandstone facing blocks to both the interior and exterior walls of the chapel with a sandstone rubble and mortar core. The chapel vestry extension, added between the 14th and 15th centuries, was also further exposed. Artefactual evidence suggests that the vestry probably had a medieval tiled floor of plain yellow, green and decorated tiles and painted glass windows. Further, a decorated floor tile of mid to late 15th date, associated with the demolition layer, may indicate that the vestry had flooring refurbished shortly prior to its demolition.

During the late 15th century the vestry extension was demolished, and both the East Range and the Long Chamber were constructed directly over the demolished remains. The southern end of the East Range was constructed directly against the north wall of the 13th century chapel. This indicates that the chapel was still standing during this late 15th century phase.

While both the Long Chamber and East Range foundations consisted of coursed lias stonework, the southern end of the East Range incorporated at least two chamfered blocks of greenish blue sandstone. These were probably re-used from a demolished building. These faced lias foundations were not constructed in a trench, but were constructed in the form of a plinth for the timber-framed structures of both the Long Chamber and the East Range. This is consistent with other excavated late medieval hospital buildings at The Commandery (Miller *et al* 2007), where the plinths were solid structures, filled with rubble and earth. The platform plinth of the Long Chamber and the East Range was consistently between 0.50m to 0.60m high. The interpretation of this unusual construction technique is that it was undertaken to raise the floor level above regular flood events.

6.2 **Post–medieval**

After the construction of the Long Chamber and the East Range, soils were allowed to either accumulate against the plinth face or surfaces were deliberately raised to the present ground level. This level also corresponds with what was the maximum visible height of these buildings foundations.

The demolition of the 13^{th} century chapel probably coincided with the extension of the southern end of the East Range and construction of Commandery House in *c* 1680. While the East Range extension foundations were not observed, those of Commandery House were. These were constructed from red and green sandstone blocks, roughly aligned and most probably robbed from the 13^{th} century chapel walls over which they are directly constructed.

6.3 Modern

The modern features were dominated by the drainage systems identified in Test Pit 3. These included the remains of both 19th century and more recent drainage systems. The 19th century system consisted of horseshoe drains placed base to base to form an improvised oval shaped pipe. The direction of the remaining pipework suggests that it probably linked into the surviving iron downpipe located in the corner of Commandery House. This was eventually replaced in the 20th century by earthenware pipes taking water from the down pipe and through the foundations of Commandery House (Plate 10).

More recently a plastic surface drain has been connected where the rainwater pipe turns to run through the foundation of Commandery House. Of note was that the access hole of the east side of the drainage box was not capped during installation, allowing the roof runoff to discharge directly into the ground next to the foundations of Commandery House (Plate 11).

7. **Publication summary**

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

Three archaeological test pits were excavated in the vicinity of the chapel at The Commandery, Worcester. The work was undertaken on behalf of Worcester City Council, who intended to construct new surface drainage in the immediate proximity of the remains of the medieval chapel. The area in question was the subject of an earlier community excavation in 2006 which exposed the remains of a 13th century chapel and a later 14th-15th century vestry. An immediate buffer zone one metre wide had been maintained between the 2006 excavation area and the standing buildings. The proposed drainage works are to be constructed in this area.

Test Pits 1 and 2 revealed the base of the late 17th century brick re-facing of the late 15th century medieval structures of the East Wing and Long Chamber. The test pits also exposed medieval lias stonework foundations for these two buildings, constructed directly above the 14th to 15th century vestry which was probably demolished immediately preceding their construction. Test Pit 3 revealed that previous drainage works, in the 19th century, had removed a section of the east-facing 13th century chapel wall immediately adjacent to the Commandery House foundations. Further, it revealed that the exposed late 20th century drainage works were inadequate, allowing for rainwater catchment from the surrounding roofs to discharge into the ground immediately abutting the foundations of Commandery House.

8. Acknowledgements

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Worcester County Council, the Worcester City Archaeology Officer James Dinn and the staff of The Commandery Museum.

9. **Personnel**

The fieldwork and report preparation was led by Angus Crawford. The project manager responsible for the quality of the project was Hal Dalwood. Fieldwork and finds analysis was undertaken by Angus Crawford, and illustration by Carolyn Hunt. Greg Kitson contributed to the fieldwork.

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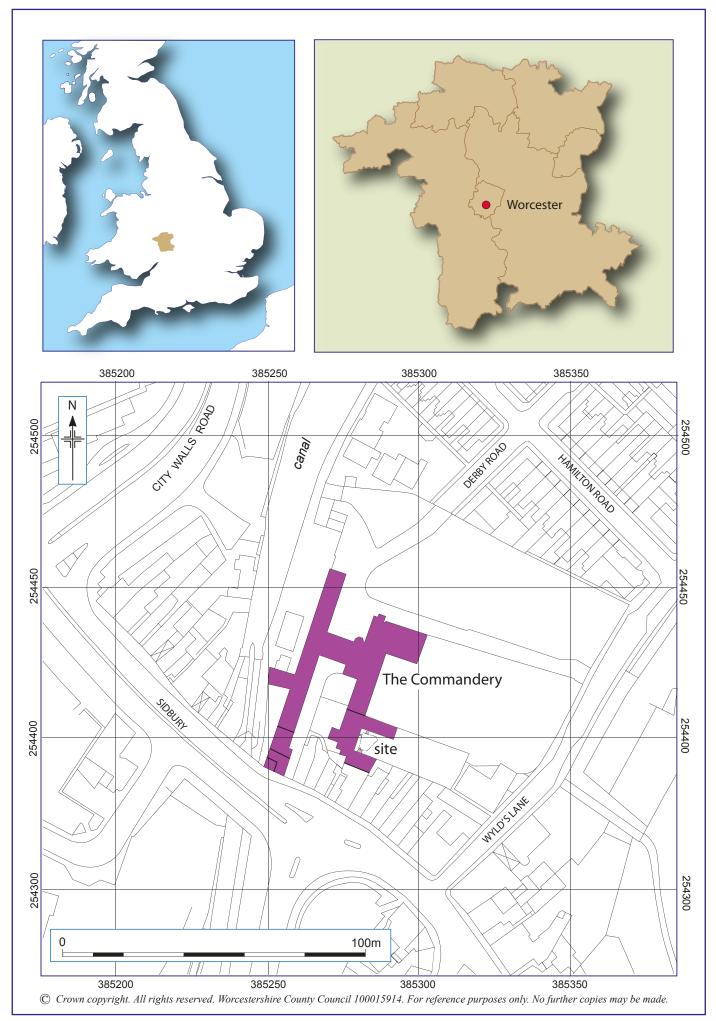
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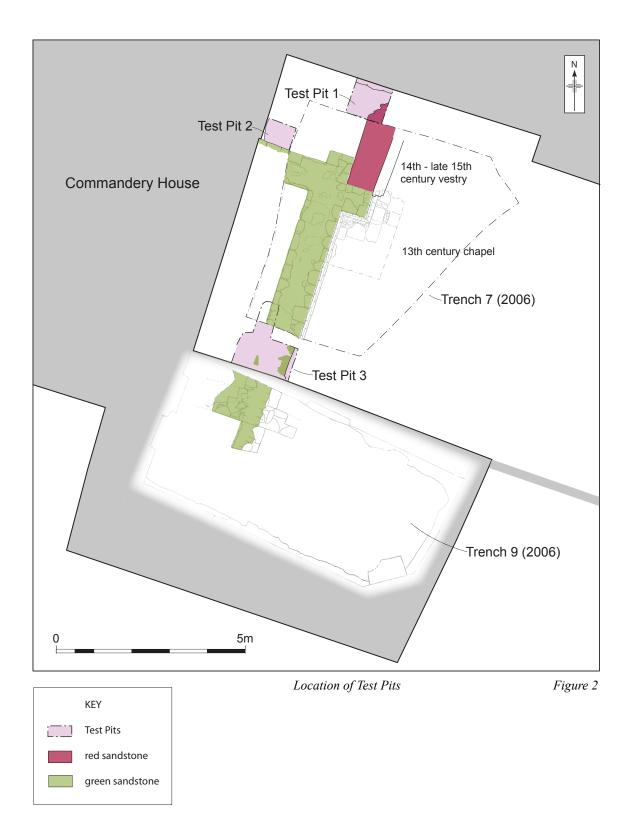
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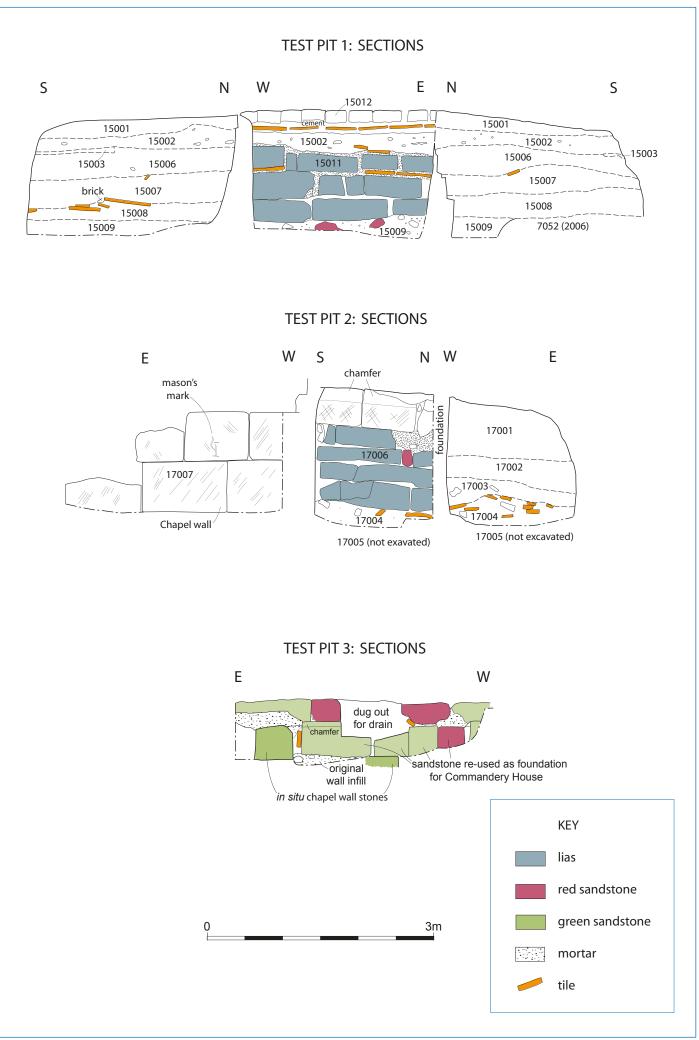
Figures







Test Pits 1, 2 and 3: plans of final excavation levels





Fragment of medieval floor tile from context 15008. The shield in the corner bears the instruments of the passion. The inscription translates as "The peace of Christ amongst us always. Amen" (Molyneux and McGregor, 1997)

Plates



Plate 1 looking west: Greg Kitson removing growth accumulated on the chapel and vestry walls in preparation for their preservation by re-burial. Test pit 1 is located to his immediate right and test pit 2 is yet to be opened but was located at the top centre of the photograph.



Plate 2 looking west: The east wall of the 13^{th} century chapel after preparatory cleaning. Test pit three has been commenced and is located (just visible) at the top left of the photograph while the north wall of the chapel is just visible at the top right (location for test pit 2).



Plate 3 looking north: Test pit 1 with the late medieval stone foundations of the Long Chamber exposed and constructed over demolition material from the vestry. The remains of the vestry wall are in the bottom right corner.



Plate 4 looking east: Test pit 1 with accumulated post-medieval deposits/made ground overlying the vestry and abutting the foundations of the Long Chamber. The deposits at right were removed during the 2006 excavation.



Plate 5 looking west: Test pit 2 with exposed late 15^{th} century East Range foundations abutting the 13^{th} century chapel wall to the left. The Lias foundations have settled into the pre-construction demolition layer(removed) which directly overlies a clay layer identified as part of the vestry floor. The photo clearly shoes the chamfered green sandstone unitised in the final foundation coursing for the East Range overlaid by the late 17^{th} century brick re-facing.



Plate 6 looking south west: Test pit 2 with exposed north wall of 13th century chapel abutted by the exposed late 15th century East Range foundation. The chapel wall here survives to just below the modern ground surface.



Plate 7 looking west: Test pit 2. The brick wall of the East Range extension (late 17th century) sits directly upon the surviving chapel wall and abuts the late 15th century East Range (at photo scale location) and continues to the left of the photograph.



Plate 8 looking south: Test pit 3. The remains of the east wall of the 13th century chapel runs top to bottom with the external face to the left (stones removed to accommodate 19th century drain, just visible) and the internal wall face visible below the surface drain. Chapel stonework has been reused for the foundations of the north wall of Commandery House (painted white). This section of the standing building sits directly upon the remains of the chapel wall.



Plate 9 looking east: Test pit 3 with 19th century drainage system and contemporary removal of chapel wall to accommodate pipe work. Existing modern surface drain in foreground.



Plate 10 looking south: Test pit 3 showing existing modern drainage system with roof downpipe to upper right and surface drain to left. The pipe work runs through the Commandery House foundations (left of the photographic scale).



Plate 11 looking west: Test pit 3 showing uncapped end of surface drain, during light rain, discharging into archaeological deposits and against the foundations of Commandery House to the left.

Appendix 1 Test pit descriptions

Test Pit 1

Maximum dimensions: Length: 1.05m Width: 1.10m Depth: 0.68m

east-west

Orientation:

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
15000	Weed matting and gravel	Modern protective layer placed over 2006 excavation ground surface.	Surface
15001	Yard soil	Loosely compacted greyish black sandy silt. Contains occasional small rounded and sub-rounded pebbles. Occasional fragments of building material (brick and tile). Cut by modern posthole (5004)	
15002	Construction/ renovation layer	Light to mid brown silty/clayey sand. Firm compaction with frequent inclusions of green sandstone fragments, roof tile fragments and mortar. Cut by modern posthole (5004).	0.09-0.23m
15003	Dumped layer	Dark grey to black lens of sandy silt and ash. Cut by modern posthole 5004	0.22-0.26m
15004	Modern posthole	Slightly rectangular post-hole with rounded corners and vertical sides. Flat base with gradual break of slope to north end.	0.00-0.28m
15005	Posthole fill	Loosely compacted crushed gravel, probably Cotswold limestone.	0.00-0.28m
15006	Made ground	Mid/reddish brown silty/clayey sand. Firm compaction with frequent inclusions of green sandstone fragments, roof tile fragments and mortar	0.18-0.35
15007	Made ground	Mid brown silty/clayey sand. Firm compaction with frequent inclusions of ash, small mortar fragments and roof tile fragments. Occasional small green and red sandstone fragments.	0.29-0.52
15008	Domestic discard (Kitchen refuse?)	Mottled greyish brown coarse silty sand of loose compaction. Frequent inclusion of large charcoal, ash flecks and occasional oyster and mussel shells.	0.40-0.60m
15009	Demolition/ construction layer	Mottled light to dark brown silty coarse sand of firm compaction. Frequent inclusions of large red and green sandstone fragments, small tile fragments and mortar fragments.	0.59-0.68m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
15010	Vestry wall	Red and green sandstone vestry wall of 14 th to 15 th century date. Covered by layer of pinkish mortar. Context 7052 of 2006 excavation.	0.55m to upper height of wall
15011	Late 15 th century medieval foundation of Long Chamber	Roughly regular coursing of rectangular blue Lias stone foundation. Various individual stone sizes ranging from110mm to 70mm thick. Includes roof tile used to level courses. Bonded with pinkish coloured lime mortar.	0.10-0.60m
15012	Brick re-facing of Long Chamber (late 17 th century)	Layer of roof tile as initial foundation course with brick course with exposed headers, then normal brick coursing above.	0.10 at base

Test Pit 2

Maximum dimensions: Length: 0.62m Width: 0.8m Depth: .78m

Orientation: north-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
17000	Weed matting and gravel	Modern protective layer placed over 2006 excavation ground surface.	Surface
17001	Made ground/yard soil	Greyish/black sandy silt, loosely compacted. Contains occasional small rounded and sub-rounded pebbles. Occasional fragments of building material (brick and tile).	0.01-0.35m
17002	Made ground	Mid/reddish to dark brown clayey silty sand. Firm compaction with moderate inclusions of small green sandstone fragments, roof tile fragments and charcoal flecks	0.32-0.52m
17003	Made ground	Reddish to dark brown silty/clayey sand. Firm compaction with occasional inclusions of roof tile fragments and small green and red sandstone fragments	0.44-0.60m
17004	Demolition/ construction layer	Mottled light to dark brown silty coarse sand of firm compaction. Frequent inclusions of large red and green sandstone fragments, small tile fragments and mortar fragments	0.53-0.70m
17005	Floor deposit	Unexcavated blue-grey clay layer with frequent flecks of charcoal	0.70m to surface (not excavated)

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
17006	Medieval foundations of East Range.		0.00 -0.62m

Test Pit 3

Maximum dimensions: Length: 1.65m Width: 0.95m Depth: 0.40m

Orientation: east-west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
16000	Weed matting and gravel	Modern protective layer placed over 2006 excavation ground surface.	Surface
16001	Disturbed ground/backfill	Dark grey to black fill. Mix of dark grey to black soil and drainage gravels from Victorian and modern drainage work.	0.00-0.38m
16002	Foundations	Late 17 th century stone foundations of Commandery House	Exposed to a depth of 0.38m
16003	Drain	Horseshoe drain of 19 th century date	0.10-0.22m
16004	Chapel wall	West wall of 13 th century chapel identified in 2006 excavations as context 7051	Maximum height below surface of 0.20m

Appendix 2 Technical information

The archive

The archive consists of:

25	Context records AS1
1	Photographic records AS3
43	Digital photographs
1	Drawing number catalogues AS4
1	Context number catalogues AS5
1	Levels record sheets AS19
1	Box of finds
1	Computer disk

The project archive is intended to be placed at:

Worcester City Museum Foregate Street Worcester WR1 2PW Tel (01905) 25371