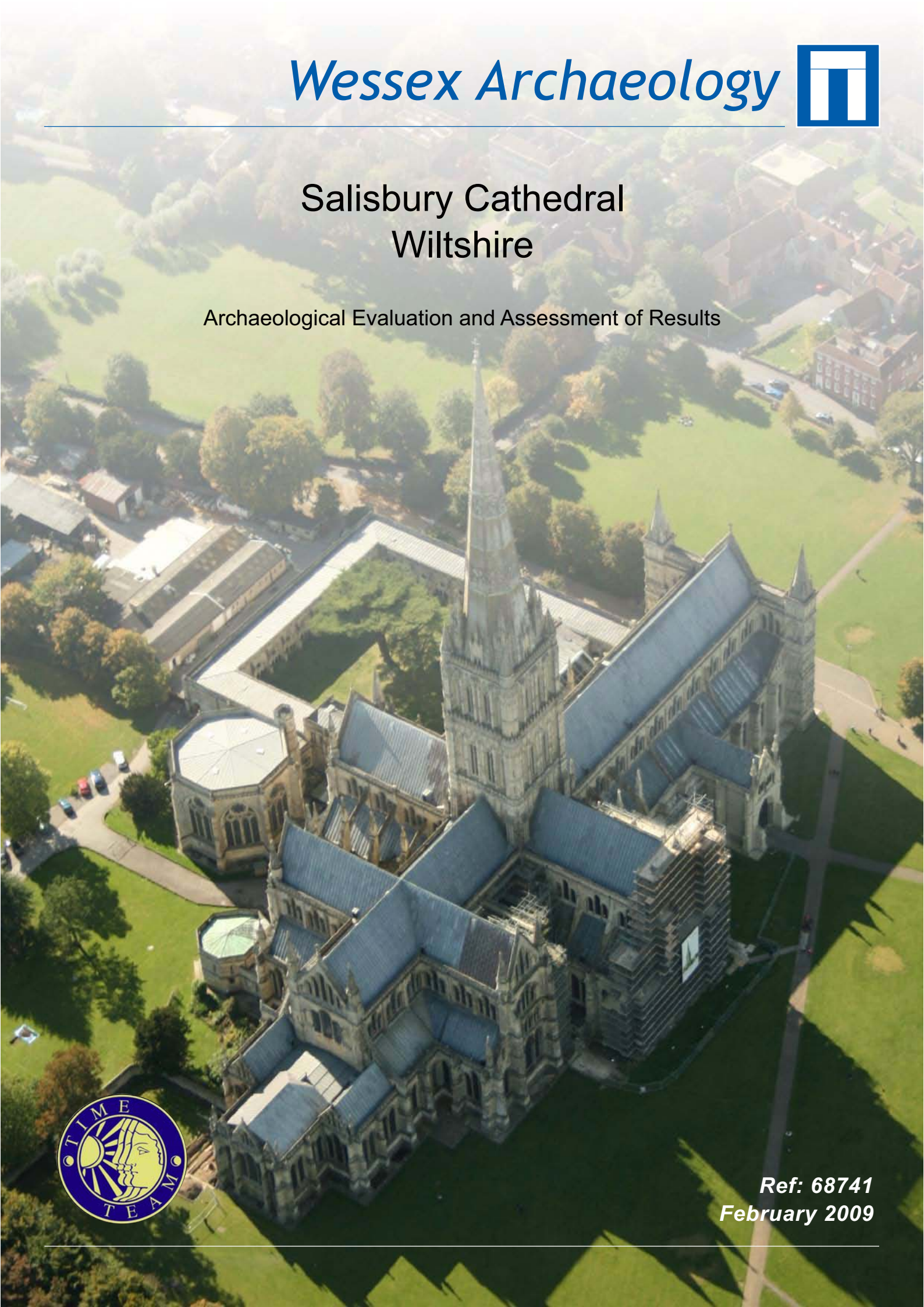
Wessex Archaeology

Salisbury Cathedral
Wiltshire

Archaeological Evaluation and Assessment of Results



Ref: 68741
February 2009

Salisbury Cathedral, Wiltshire

Archaeological Evaluation and Assessment of Results

Prepared on behalf of:
Videotext Communications Ltd
49 Goldhawk Road
LONDON
SW1 8QP

By:
Wessex Archaeology
Portway House
Old Sarum Park
SALISBURY
Wiltshire
SP4 6EB

Report reference: 68741.01

February 2009

Salisbury Cathedral, Wiltshire

Archaeological Evaluation and Assessment of Results

Contents

Summary
Acknowledgements

1 BACKGROUND....1
1.1 Introduction....1
1.2 Site Location, Topography and Geology....1
1.3 Archaeological and Historical Background....1
The Cathedral....2
Bell Tower....3
Cathedral Churchyard....4
Bishop's Palace....4
The Cathedral Close....4
1.4 Previous Archaeological Work....4
2 AIMS AND OBJECTIVES....5
3 METHODS....6
3.1 Geophysical Survey....6
3.2 Evaluation Trenches....6
4 RESULTS....7
4.1 Introduction....7
4.2 Geophysical Survey....7
*Ground Penetrating Radar Survey (**Figure 2A**)....7*
*Magnetic Survey (**Figure 2B**)....9*
Resistance Survey....9
4.3 Evaluation Trenches....10
*Trench 1 – The Beauchamp Chantry Chapel (**Figure 3**)....10*
*Trench 2 (**Figures 4 & 5**)....12*
*Trench 3 (**Figure 6**)....14*
5 FINDS....15
5.1 Introduction....15
5.2 Pottery....15
5.3 Ceramic Building Material (CBM)....16
5.4 Clay pipes....17
5.5 Stone....17
5.6 Glass....17
5.7 Slag....17
5.8 Coins, Jetons and Tokens....18
5.9 Metalwork....19
Copper alloy....19
Iron....19
Lead....19
5.10 Human Bone....20
5.11 Animal Bone....22
5.12 Marine Shell....23
5.13 Other Finds....23
5.14 Potential and Recommendations....23

6 DISCUSSION....24
6.1 Introduction....24
6.2 The Cathedral....24
6.3 The Beauchamp Chapel....25
6.4 The Bell Tower....26
6.5 The Bishop's Palace/Cathedral School....26
7 RECOMMENDATIONS....27
8 ARCHIVE....27
9 REFERENCES....28

Table 1: All finds by material type and by trench (number / weight in grammes)
Table 2: Breakdown of pottery assemblage by ware type
Table 3: Summary of *in situ* burial remains

Appendix 1: Trench Summaries

Figures
Figure 1: Site, trench location and geophysical survey area
Figure 2: Interpretation of geophysical survey data
A. GPR survey
B. Gradiometer survey
C. Resistance survey
Figure 3: Trench 1
Plate 1: Grave 103 and skeleton 104
Plate 2: Trench 1 from the west
Plate 3: Trench 1 from the east
Plate 4: West-facing elevation buttress 116 in 148
Figure 4: Trench 2
Plate 5: Wall 206 from north showing broken keying-in stones 251 and base mortar spread 261
Plate 6: Trench 2 from the west showing remains of central pier base 234 and 233
Plate 7: Trench 2 from the west showing the entrance and spiral staircase foundation 241
Figure 5: Trench 2
Plate 8: South-facing section showingBell Tower make-up layers, wall 206 and robber cut 204
Figure 6: Trench 3
Plate 9: Trench 3 from the north
Front Cover: Aerial view of Salisbury Cathedral
Back Cover: (left) Trench 3 under excavation
(top right) Trench 3 under excavation
(bottom right) Trench 1 under excavation

Salisbury Cathedral, Wiltshire

Archaeological Evaluation and Assessment of Results

Summary

An archaeological evaluation was undertaken by Channel 4's 'Time Team' within the Close of Salisbury Cathedral and the grounds of Salisbury Cathedral School, Wiltshire to investigate the 13th century Bell Tower to the north of the Cathedral and the 15th century Chantry Chapel of Bishop Richard Beauchamp, both of which were demolished at the end of the 18th century.

No archaeological investigation of the Bell Tower had been undertaken before, although the Chantry Chapel had been investigated on two previous occasions, by Tim Tatton-Brown (Salisbury Cathedral Consultant Archaeologist) and the Chapter workmen in 1992 and by Cambrian Archaeological Projects Ltd in 2000. The 2000 evaluation revealed the extent of the chapel foundations and an *in situ* inhumation burial, first identified in 1992 and believed to be that of Bishop Beauchamp himself.

Investigation into the Chantry Chapel revealed possible evidence of the preparation of the ground prior to the building of the Cathedral in 1220 in the form of a large chalk raft, laid down to create a dry working platform and to stabilise the ground, and possible evidence of an earlier cemetery of 1219. The buttresses of the 1220 construction were revealed and were clearly disturbed by the construction of the Beauchamp Chapel. The base of the walls of the Chapel and four burials associated with the 15th century construction were exposed. The empty graves of Bishop Beauchamp and John Cheney, whose tombs had been moved inside the Cathedral when the chapel was demolished, were identified, as was a grave possibly belonging to the Bishop's brother William. The fourth grave (previously believed to be that of Bishop Beauchamp) was investigated although the identity of the individual remains unknown.

The Bell Tower investigation revealed evidence for the early 13th century workshops or dwellings of the Cathedral workmen sealed beneath ground preparation deposits of the Tower. The Tower itself had been extensively demolished with no evidence of the worked stone facing of the walls remaining. Evidence of its later use as an inn was identified.

Work within the grounds of the Cathedral School revealed evidence of structures, possibly part of 18th century stables.

Publication of the results of the evaluation is proposed, in an article to be prepared by Tim Tatton-Brown, Salisbury Cathedral Consultant Archaeologist, within the context of ongoing research into the fabric and history of the Cathedral. The place of publication is to be confirmed.

Salisbury Cathedral, Wiltshire

Archaeological Evaluation and Assessment of Results

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), Jane Hammond (Production Manager), Ben Knappett and Jim Mower (Assistant Producers), Louise Ord (Researcher), Emily Woodburn (Production Coordinator) and Kerry Ely (Location Supervisor) for their considerable help during the recording and post-excavation work.

The geophysical survey was undertaken by John Gater, Emma Wood and Jimmy Adcock of GSB Prospection. The field survey was undertaken by Henry Chapman, University of Birmingham The excavation strategy was devised by Mick Aston. The on-site recording was co-ordinated by Steve Thompson with on-site finds processing by Lorraine Mepham, both of Wessex Archaeology.

The excavations were undertaken by Time Team's retained archaeologists, Phil Harding (of Wessex Archaeology), Brigid Gallagher, Ian Powlesland, Raksha Dave, Faye Simpson, Tracey Smith and Matt Williams assisted by Kevin Blockley (of Cambrian Archaeological Projects Ltd), Jaqueline McKinley, Philip Boyes, Michael Fleming and Sophie Nias-Cooper (of Wessex Archaeology), Neville Constantine, Richard Hewitt and Scarlett Rose McGrail (of Museum of London Archaeology Service) and Cally Langhurst. Helen Geake (University of Cambridge) provided on-site identification of small finds.

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) Nicholas Cooke (coins), Jacqueline McKinley (human bone) and Jessica Grimm (animal bone). The 15th century Italian *quattrino* was identified by Martin Allen (Fitzwilliam Museum, Cambridge). The illustrations were prepared by Kenneth Lymer. The post-excavation project was managed on behalf of Wessex Archaeology by Lorraine Mepham

The work benefited from discussion with Mick Aston of Bristol University, Phil Harding and Jackie McKinley of Wessex Archaeology, Kevin Blockley of Cambrian Archaeological Projects Ltd, Salisbury Cathedral Consultant Archaeologist Tim Tatton-Brown, Medieval Standing Buildings Specialist Richard K. Morriss and Ralph Griffiths, Professor of Medieval History, University of Wales, Swansea.

Finally thanks are extended to the Dean and Chapter of Salisbury Cathedral and to the Salisbury Cathedral School for allowing access for geophysical survey and evaluation.

Salisbury Cathedral, Wiltshire

Archaeological Evaluation and Assessment of Results

1 BACKGROUND

1.1 Introduction

1.1.1 Wessex Archaeology was 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' within the Close of Salisbury Cathedral and the grounds of Salisbury Cathedral School, Wiltshire (hereafter the 'Site') (**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.

1.2 Site Location, Topography and Geology

1.2.1 Salisbury Cathedral lies within the Cathedral Close at the centre of the 13th century planned medieval town of Salisbury, which grew up between the small settlements of West Harnham, Fisherton and the settlement around St Martin's church (RCHME 1980, xxxiii).

1.2.2 The ground immediately around the Cathedral is a churchyard surrounded by a stone wall, containing many burials from *c*. 1219-1789. After this date it was landscaped, with the later grave stones being laid flat under the turf. The land around the graveyard, known as 'The Close', contains many fine houses, some of which are now in private hands, three museums and a National Trust property.

1.2.3 Salisbury Cathedral School occupies the former Bishop's Palace within the Close and the part of the Site under investigation is currently in use as playing fields and school grounds. It is surrounded by a 13th to early 16th century crenellated Close wall.

1.2.4 The Cathedral Close is centred on NGR 414294 129561 at a height of approximately 45m above Ordnance datum (aOD). The underlying geology is river gravel over Upper Chalk (BGS, Salisbury Sheet 298 D, 1:50000 Solid and Drift Edition).

1.3 Archaeological and Historical Background

1.3.1 The following archaeological and historical background contains extracts from the project design (Videotext Communications 2008), prepared in consultation with Salisbury Cathedral Consultant Archaeologist Tim Tatton-Brown, and the Royal Commission on the Historic Monuments of England 1993 publication *Salisbury Cathedral - Perspectives on the Architectural History*.

The Cathedral

1.3.2 The first Norman cathedral was built inside the Iron Age hill fort of Old Sarum and was consecrated by Bishop Osmund (later St. Osmund) in 1092, later expanded at the beginning of the 12th century by Bishop Roger. By the end of the 12th century the Cathedral had become too small, and the surrounding town too confined within the old hill fort site. The excessive winds and shortage of water, as well as the possible rivalry with the dioceses of Wells to the west and Winchester to the east, provided the impetus for the moving of the Cathedral to a new location, following the building of a new secular cathedral at Wells in the 1170s, on a new site close to the old (Cocke and Kidson 1993, 3).

1.3.3 The planning of the movement of the cathedral is believed to have begun in the reign of Richard I (1189-99) with the initial involvement of Hubert Walter, Bishop of Salisbury from 1189 until he moved to Canterbury in 1194. With the appointment as dean in 1199 of Richard Poore, the brother of Bishop Hubert Poore, preparations were set under way. It is unclear why work was not started during the more settled early years of King John's reign (1199-1216), although it is clear that the plans for the Cathedral Close were still being considered during this period. The appointment to Bishop of the former dean Richard Poore in 1217 saw the revival of the new cathedral plans and in 1218 these received formal approval by Rome by the granting of a papal licence to move the cathedral (Cocke and Kidson 1993, 3).

1.3.4 On the 2nd June 1219 a wooden chapel and cemetery were consecrated on the Site, and 1st November (the Feast of All Saints) in the same year was set as the official date of the movement of the cathedral community from Old Sarum to the new site. In April the following year the foundation stones were laid, as chronicled by William de Wanda who became dean in 1220 (Cocke and Kidson 1993, 3; Blum 1991, 9-10). The cathedral at Old Sarum was demolished, and masonry began to be transported to the new site for reuse.

1.3.5 Salisbury Cathedral is almost unique in being a completely new cathedral on a new site built after the 12th century. The construction of the east end of the cathedral began in 1220, and the three eastern chapels were consecrated in 1225. The central and largest chapel was dedicated to the Holy Trinity and All Saints (and known as the Lady Chapel from the 16th century), the northern chapel to St Peter and the Apostles, and the southern to St. Stephen and the Martyrs. By 1226 the tombs of Bishops Osmund, Roger and Jocelyn were moved form Old Sarum to the new building. In 1263 the site of the cloister was enlarged and in 1258 the Cathedral was consecrated, with the Cloister, Chapter House and Bell Tower completed by 1266 (Cocke and Kidson 1993, plate 17).

1.3.6 The site is traditionally believed to be a virgin site upon a gravel terrace just above the flood plain; the siting of the Cathedral, which was laid out very accurately north-south and east-west, was thus unaffected by any pre-existing buildings.

1.3.7 The huge, 123m high tower and stone spire were added at the beginning of the 14th century and a system of flying buttresses and internal relieving arches was added in the 14th and 15th centuries to support the tower.

1.3.8 Requests to Rome for the canonisation of Bishop Osmund began by 1226 after his remains were brought from Old Sarum and the requests were

pursued again from 1387. The Bull of Canonisation was granted by Pope Calixtus III in 1457 and demanded that Osmund's tomb be '*set up in a more worthy place'*, identified by Leland in the 16th century as located centrally within the Trinity Chapel. It was demolished in 1538-9. In 1789 the former tomb on the sleeper wall between the Trinity Chapel and St. Stephen and the Martyrs' Chapel was destroyed. The area west of St. Osmund's tomb was adapted by Bishop Beauchamp for a chantry chapel, but was eventually used by Bishop Blyth (d. 1499) after Beauchamp constructed his chantry chapel to the south of the Trinity Chapel sometime before his death in 1481. The Beauchamp chapel complemented the Hungerford Chapel, built 1464-71 on the north of the Trinity Chapel, and is likely to have been constructed at a similar time (Cocke and Kidson 1993, 12-14). Other than these changes (and the destruction of several stone altars and statues and stained glass windows) the main fabric of the building remained unaltered until the 18th century.

1.3.9 A series of programmes of alteration, restoration and repair were instigated in the 18th century (Cocke and Kidson 1993, 24-8), but by far the most controversial were undertaken by the Bishop, Shute Barrington, advised by the architect James Wyatt. It was Wyatt who, from about October 1789 when the Cathedral was closed to September 1792, supervised the removal of the 13th century *pulpitum* (choir screen), the remaining medieval glass, the Beauchamp and Hungerford Chapels and the Bell Tower (see below). At that time the tomb chest of Beauchamp was moved to the south side of the nave. The 19th century architect Pugin described Wyatt as '*the Destroyer…this monster of architectural depravity – this pest of cathedral architecture'* as the 'restoration' was motivated by aesthetic considerations rather than the need for repair or maintenance (Frew 1979; Cocke and Kidson 1993, 28).

1.3.10 Between 1863 and his death in 1878 Sir George Gilbert Scott was in charge of the restoration of the whole Cathedral, and after Scott's death in 1878 the restoration was continued by G.E. Street. In 1950 almost 9m of the top of the spire was replaced and the entire structure strengthened.

Bell Tower

1.3.11 In the mid 13th century, about 60m north of the northern entrance, stood a massive stone, timber and lead three-storeyed belfry; the lower walls were *c*. 3m thick and the belfry and spire measured 60m in height. It was thought to have at least ten bells by 1531, eight of which were still in use in the 18th century. From the late 16th century the belfry served as an alehouse, kept by the bell ringer. The timber and lead upper part was demolished in the 1750s, and in 1790 the rest of the Bell Tower was dismantled during the 'restoration' by Wyatt and the stone facing sold off, allowing an uninterrupted view of the Cathedral from the north. Before its demolition the Bell Tower housed England's oldest documented clock (there by 1386), now restored and on display in the Cathedral's north nave aisle.

1.3.12 It seems as if there were always a number of lay people living in the area around the Bell Tower. In 1382 Reynold Glover was granted a building to be used as a shop as long as he maintained the clock. In 1473, the belfry itself had three shops in it and in the 16th century a joiner leased a shop in the North Gate for 70 years. In 1626 all the inns in the Close were suppressed, except for the one in the belfry (Cocke and Kidson 1993, plates 17-19; Videotext Communications 2008, fig. 6).

Cathedral Churchyard

1.3.13 The large rectangular area around the Cathedral was the graveyard from *c*. 1220-1789. It contains very large numbers of burials and is still consecrated ground, although not used for burial since 1789. Between 1787 and 1791 many 'improvements' were carried out in the Cathedral Close, including the draining and levelling of the churchyard and the burying of gravestones, now covered by lawns.

1.3.14 There are several references to masons living outside and to the east of the Cathedral during construction work in the early 13th century. The area was probably used for temporary workshops, the masons' lodge, carpenters' shops, smiths' forges, plumbers' shops, *etc*, during this period. The ground level of the churchyard was reduced in the mid 19th century.

Bishop's Palace

1.3.15 The Bishop's Palace, built immediately to the south-east of the cathedral and called 'New Place' in 1219, has evolved over the centuries to become the present-day series of buildings, including a late 15th century chamber block built by Bishop Beauchamp (1450-81), along with a crenellated porch and tower. Part of the original 13th century fabric survives in the stone undercroft, built in Bishop Poore's time. The buildings were wrecked in the late 1640s and completely rebuilt after 1660. The garden was formalised by Bishop Seth Ward in the later 17th century after a period of different uses of the building, including as an inn. The palace has housed the Cathedral School since 1948 when the Bishop moved to a smaller house in the Close.

The Cathedral Close

1.3.16 The northern and north-eastern Close wall was built in the 13th century, with reused materials from Old Sarum. A licence to crenellate the top of the walls of the Close was obtained in 1327, but the walls were never fully completed. The south-eastern Close walls were built over the period from the later 14th to the early 16th century, with the Harnham gate on the south left unfinished.

1.3.17 Outside the churchyard was a road, with house plots beyond, first laid out in *c*. 1197. In Chapter decrees of 1213 the canons were to build "fair houses of stone" on these house plots. Most were finished by the end of the 13th century and of those houses remaining many contain much medieval work.

1.3.18 The Close suffered damage during the Civil War due to the fact it was a stronghold that could be easily defended. A Parliamentary Survey of 1649 describes the Close dwellings in detail. In the 1650s the Close was run by the Mayor of Salisbury (following the abolition of the Dean and Chapter in 1648) and the cloister was used as a prison.

1.4 Previous Archaeological Work

1.4.1 Relevant archaeological work known to have been carried out within the Cathedral and its environs includes the following:

1.4.2 1959-1993 (Cathedral Close): Complete survey by the RCHME of Close houses (including the Bishop's Palace), Close walls and gates, etc (RCHME 1993).

1.4.3 1962 – present (Bishop Wordsworth's School): various small scale excavations and watching briefs carried out in the eastern part of the Close.

1.4.4 1992 (Eastern Garth Cemetery): excavations on the site of the Beauchamp Chapel were undertaken by the Chapter workmen under the supervision of Tatton-Brown. Two trenches were excavated, aligned north-south from the south wall of the Trinity Chapel, and identified the disturbed remains of the tomb of John Cheney (d.1509). The evaluation also revealed sections of the southern wall and eastern wall of the Beauchamp Chapel, including a re-used grave slab within the eastern wall (Tatton-Brown 1992; Blockley 2000, fig. 2).

1.4.5 1993 – present (Cathedral repairs; Bishop Wordsworth's School): following the RCHME survey, Tim Tatton-Brown has been recording various parts of the building during repair work. He has also recorded features uncovered in the school grounds and carried out similar work around the cathedral since his appointment as archaeological consultant in 1990 of the historic fabric during restoration works (e.g. Tatton-Brown 1991; Keen and Cocke 1996).

1.4.6 1999 (Cathedral Plumbery): brief rescue excavation by Wessex Archaeology of the area on the south side of the nave, known as the Plumbery, revealed medieval remains interpreted as the foundations of workshops pre-dating the construction of the Cloister. Medieval glass found on the site appeared to represent material deposited after lead-stripping during the 18th century. Nineteenth century remains between the Cloister buttresses were interpreted as those of glazing repairs rather than large-scale window fabrication (Wessex Archaeology 2000; Butterworth 2005).

1.4.7 2000 (Bishop Beauchamp's Chantry Chapel): excavation by Cambrian Archaeological Projects identified the foundations of the chapel itself, a modern drain, the grave slab exposed in the 1992 evaluation and an inhumation burial thought to be Bishop Beauchamp. The burial appeared to be contained in a wooden coffin with iron nails (Blockley 2000).

1.4.8 2008 (Cathedral nave): an excavation by Cambrian Archaeological Projects in the centre of the nave, in advance of the installation of the pump, reservoir and drains associated with a new font. The 13th century foundations were revealed as well as various burials, which were not excavated (Blockley 2008).

2 AIMS AND OBJECTIVES

2.1.1 A project design for the work was compiled (Videotext Communications 2008), providing full details of the research aims and methods. A brief summary is provided here.

- To characterise the nature of sub-surface archaeological remains with the specific aim of refining a chronology for investigation areas. Specific aims within this general approach include an attempt to establish a date of construction and plan for the Bell Tower. The nature of the Bell Tower foundations and their relationship to the river gravels below were also to be investigated.

- To establish the presence or absence of evidence relating to the construction of the Cathedral.

- To characterise the nature of sub-surface archaeological remains in relation to the Chantry Chapel and burial attributed to Bishop Beauchamp. Specific aims within this general approach include the forensic characterisation of any preserved human remains.

3 METHODS

3.1 Geophysical Survey

3.1.1 Prior to the excavation of evaluation trenches, a geophysical survey was carried out across the Site by GSB Prospection Ltd using a combination of resistance, magnetic and ground penetrating radar (GPR) survey. The survey grid was set out by Dr Henry Chapman and tied in to the Ordnance Survey grid using a Trimble real time differential GPS system.

3.2 Evaluation Trenches

3.2.1 Three trenches of varying sizes were excavated, following the geophysical survey and positioned to answer the research aims stated in the project design (**Figure 1**).

3.2.2 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. When machine excavation had ceased all trenches were cleaned by hand and archaeological deposits investigated.

3.2.3 At various stages during excavation the deposits were scanned by a metal detector and signals marked in order to facilitate investigation. The excavated up-cast was scanned by metal detector.

3.2.4 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 and Total Station. 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.

3.2.5 None of the *in situ* human remains were lifted and only one of the burials found was fully exposed. Disarticulated human bone recovered from other contexts was recorded on site and immediately reburied, together with coffin nails from the fully exposed burial.

3.2.6 A full photographic record of the investigations and individual features was maintained, utilising digital images. The photographic record illustrated both the detail and general context of the archaeology revealed and the Site as a whole.

3.2.7 At the completion of the work, all trenches were reinstated using the excavated soil.

3.2.8 A unique Site code (SAL 08) was agreed prior to the commencement of works. The work was carried out between the 30th September and 3rd October 2008. The archive and all artefacts were subsequently transported

to the offices of Wessex Archaeology in Salisbury where they were processed and assessed for this report.

4 RESULTS

4.1 Introduction

4.1.1 Details of individual excavated contexts and features, the full geophysical report (GSB 2008), details of artefactual and environmental assessments, are retained in the archive. Details of the excavated sequences can be found in **Appendix 1**.

4.2 Geophysical Survey

4.2.1 Geophysical survey was undertaken in four areas around Salisbury Cathedral: Area 1 (the Bell Tower); Area 2 (the Hungerford Chapel); Area 3 (the Beauchamp Chapel); and Area 4 (the Bishop's Palace/Cathedral School) (**Figures 1 & 2**). The results of the GPR survey were by far the most revealing and are presented in detail below.

*Ground Penetrating Radar Survey (**Figure 2A**)*
Area 1: Bell Tower

4.2.2 The shallowest slices from this area are dominated by broad responses which, although classified as landscaping and garden features, actually pertain to the likely spread of demolition material within the topsoil from the Bell Tower and ancillary buildings (A). The *in situ* structure of all these buildings starts to become discernible at around 0.4m below ground level and extends to a depth of approximately 1.3m for the ancillary structures and beyond 2.0m for the Bell Tower.

4.2.3 The ancillary buildings are not as well defined as the Bell Tower and this is likely to be a combination of the less substantial construction and the materials used; these potentially later features may well have been brick-built, a material which is less readily detectable by GPR than stone.

4.2.4 A reasonable level of detail has been recorded over the Bell Tower and it can be seen that the shallowest (or most robbed-out) foundations are to be found on the south-east corner, whilst the deepest are those in the south-west. The south-east buttress also has a well defined 'quiet zone' (B) at its core; the definition of this 'space' is very sharp and coincides with the remains of an internal stairwell. A wall-line (C) has also been identified which runs through the central pier (D) although, from the GPR data alone, it is not clear whether this is contemporary with the tower; in fact excavation revealed this to be part of an earlier structure.

Area 2: Hungerford Chapel

4.2.5 Again, shallow slices are characterised by a broad zone of increased amplitude, in this case likely to represent a former layout of the grounds and footpaths as the primary zone has a curving limit which appears to respect the Cathedral. From within this zone the obvious footprint of the Hungerford Chapel (F) is clear from around 0.5m, and remains visible down to beyond 2.0m. It is unclear as to whether the strong reflector towards the centre is anything more than just a response associated with the footings of an adjacent Cathedral buttress.

4.2.6 Beneath what has been interpreted as former features of the grounds' layout, disturbance has been recorded immediately north of the chapel as far out as the responses at (G), representing the deepest reflectors in this group. However, there is little within this zone, in terms of the distribution and response pattern, to suggest an origin. Whilst it is possible that this is consolidation material dumped at the time of the Cathedral's construction, a more significant archaeological interpretation cannot be entirely ignored.

4.2.7 Linear anomaly (H) presents also something of a quandary; it is flanked on both sides by slightly offset and deeper linear trends and it is difficult to tell whether these all form part of the same feature. Initially it was thought that this may be a large culvert, but the response is nowhere near as strong or extensive as that witnessed over such a feature in Area 4, and anomalies can be seen relatively close below it. Given this and the fact that the cut for the potential service (I) breaks the anomaly, the current tentative interpretation is that this may be a former pathway with a slight camber and drains on either side.

4.2.8 Numerous other trends have been highlighted which may represent further drain or service cuts, and their significance is thought to be minimal. The only exceptions are the faint trends (J) which appear sub-circular. A suggestion was made that these may be the remnants of bell pits, but this seems unlikely given their diameter (2.5m and 3.5m) and they are more likely to be an effect of the disturbance immediately above.

Area 3: Beauchamp Chapel

4.2.9 The intricate stratigraphy uncovered upon excavation of the site of the Beauchamp Chapel explains the difficulty in interpreting this complex dataset. Even the outer walls of the chapel are unclear and have not been recorded as distinctly as those of its northern counterpart. Strong responses towards the north and west appeared to be reflections from adjacent buttress footings. Other anomalies and trends within the northern half of the survey were more difficult to attribute to an exact origin and it must be assumed that, as a whole, they reflect the numerous phases of use.

4.2.10 The southern half of the survey area is perhaps more perplexing as little was assumed to be here, but a rectilinear distribution of reflectors have been recorded, some quite strong. It should be noted, however, that they do not share the depth extent of those anomalies recorded within the chapel and bottom-out at around 1.0m below ground level. Interpretation is not helped by the use of this area as a garden of remembrance and a number of plaques and markers were in place at the time of survey; for now, the origin of these anomalies remains unclear.

Area 4: Bishop's Palace/Cathedral School

4.2.11 This is another area where the shallowest slices show an effect of garden layout by virtue of a broad spread of increased response (not shown on **Figure 2**), the limits of which can be seen on one side to curve in respect of the present trees. Within this area, from the near-surface right through to around 1.8m, a mass of high amplitude anomalies and patches of increased response (M) can be seen to form a largely rectilinear pattern. Whilst the strongest anomalies are likely to be the remnants of small buildings and/or boundary walls, some of the responses could be part of a drainage system, perhaps for a formal garden or similar. Whatever the exact cause, it is

markedly different to the much 'quieter' area in the western third of the survey area.

4.2.12 The line of a former ornamental canal is clearly visible and, by the pattern of response, it seems that sections of the retaining walls may be relatively well-preserved.

4.2.13 Survey towards the vestry was complicated and largely precluded by planting beds and dense vegetation. There also appeared to be a number of linear anomalies assumed to be service routes (potentially of antiquity) all of which served to complicate the interpretation. As such, it is impossible to say what the source of the responses around (O) is, and it must be assumed that they hold some archaeological potential given their proximity to the assumed position of the demolished medieval sub-treasurer's residence.

4.2.14 The deepest time slices show trends and zones of increased response all oriented on a south-west – north-east line; these are assumed to be an effect of the underlying alluvial gravel deposits.

*Magnetic Survey (**Figure 2B**)*

4.2.15 The magnetic survey confirmed the results of the GPR survey for the foundations of the Bell Tower and data correspond to some of the GPR anomalies. Potential further archaeological anomalies have been identified but as the magnetic background levels are quite noisy, the dataset is difficult to interpret. They could, however, be associated with the buildings surrounding the Bell Tower.

4.2.16 A former path as marked on a plan of the church and churchyard from 1786 was identified and a band of ferrous response crossing the data is a service pipe, whilst similar responses in the north and south relate to a metal fence and Heras fencing, respectively.

Resistance Survey

4.2.17 Foundations of the Bell Tower and central pillar were clearly visible within the data as high resistance readings (1). The buttresses are well defined, and as with the GPR data, the south-east corner walls appear to be 'robbed out'.

4.2.18 Towards the west of the data curving bands of high resistance (2) correspond to a former path as marked on a map by William Nash *c*. 1751. A number of trends (3) are also visible within the data; these relate to a path visible in the magnetic data. None of the other trends relate to the map evidence; they may, therefore, be related to the buildings surrounding the Bell Tower.

4.2.19 A high resistance anomaly (4) which appears to be rectangular was revealed at the location of a large tree. However, on the old maps an 'L' shaped building is shown within this vicinity and an archaeological origin is possible.

4.2.20 Two negative responses within the data are likely to be service pipes leading to the cathedral.

4.3 Evaluation Trenches

*Trench 1 – The Beauchamp Chantry Chapel (**Figure 3**)*

4.3.1 Trench 1 was located on the south side of the Holy Trinity and All Saints ('Lady') Chapel at the very east end of the Cathedral and targeted on the site of the Chantry Chapel of Bishop Richard Beauchamp, constructed in the 1460s.

4.3.2 The area had been excavated on two separate occasions (in 1992 and 2000). *In situ* stratified archaeology was revealed following the removal of (101) and (102), the turf and backfill material associated with the earlier excavations. A mix of medieval, post-medieval and modern pottery was recovered from these overlying deposits. Five stratigraphic phases were defined, which have been tied to the framework of the known historical dates for the construction and development of the Cathedral.

Phase 1 (pre-1220)

4.3.3 The stratigraphically earliest archaeological remains comprised a large rammed chalk block structure (126) forming a supporting 'raft' of material with a clear stepped southern edge. This structure was partially revealed by the 2000 excavation (Blockley 2000, 6), and was then tentatively dated to the later 13th century, thus post-dating the buttresses on the south side of the Trinity Chapel. However, there is now good evidence to suggest that this chalk raft pre-dates the construction of the buttresses of the 1220s. The full extent and function of this structure was not ascertained as it had been heavily truncated by later activity, but it was east-west aligned with a clear extension to the south (a possible supporting buttress). This may be evidence of the preparation of the ground prior to the construction of the cathedral. The 'raft' overlay the natural gravel geology (174) and had been cut through by the foundation trenches (143) and (148) for the construction of the southern buttresses on the south wall of the Holy Trinity Chapel, a clear indication that it pre-dated the construction of the east end of the Cathedral.

4.3.4 Stratigraphically later than chalk raft (126), and also apparently pre-dating the buttress foundation trenches was grave (151) containing skeleton (152). The grave had been partially truncated by the buttress foundation (148), and heavily disturbed by later pit (121) (**Figure 3, section**).

Phase 2 (1220-5)

4.3.5 Chalk raft (126) was cut through by (143) and (148). The foundation trenches for buttresses (115) and (116) respectively, on the southern wall of the Trinity Chapel. Foundation trench (148) also apparently cut grave (151). The buttresses were constructed in dressed Chilmark/Tisbury stone on flint and compact lime mortar foundations, with the void between the edge of the foundation trench and the buttresses themselves backfilled with loose chalk rubble derived from (126). Foundation trench (148) was backfilled by a series of deposits (149), (154), (155) and (156) against buttress (116) (**Figure 3, section & Plate 4**).

4.3.6 The two buttress (in particular the foundations and construction cuts) date to the 1220s, but the upper parts were reconstructed *c*.1789-92 during the Wyatt 'restoration'. Buttress (115) is located where the doorway into the chapel from the Trinity Chapel would have been, as can be seen from inside the Cathedral.

Phase 3 (1220-1460s)

4.3.7 A large pit (121) cut through chalk raft (126) and grave (151) (**Figure 3, section**). The function of the pit is unknown; it was backfilled with discarded stone chippings and mortar fragments within deposits (127) and (168) and may have been associated with construction work around the cathedral. It has also been suggested that the pit could be evidence of the removal of a stone-lined grave prior to the construction of the chapel (Blockley 2000, 7). Pottery recovered from (127) comprised post-medieval coarse earthenwares, possibly derived from the 2000 backfill (122). Grave (151) had been severely disturbed by pit (121), but the left foot remained in section (see **Table 3**).

4.3.8 At the eastern end of the trench was a mortar deposit (130), truncated by a series of intercutting graves which were only partially exposed, so as not to disturb the burials, details of which are therefore unknown. The earliest grave was (161). The backfill of (161) was cut by grave (159), which was in turn cut by grave (163), containing skeleton (164), of which only the skull was exposed, of an adult ?female (see **Table 3**).

Phase 4 (1460s-1545/7)

4.3.9 Overlying the backfilled pit (121) and butting the foundations of the buttress (116), were the foundations of the Beauchamp Chantry chapel, recorded as (106) and (117). The southern wall of the chapel (106) had two buttresses (107) and (108) bonded to it, clearly corresponding to existing illustrations. An internal masonry respond (167) for an engaged column is also visible on the illustration of the Beauchamp chapel by Gough in his 1796 volume *Sepulchral Monuments in Great Britain* (Cocke and Kidson 1993, plate 37).

4.3.10 The eastern wall (117) clearly butts, and is partially constructed upon, the 1220s buttress (116). Incorporated into wall (117) was a re-used grave slab (129), which lay upon a levelling layer of tiles (172) and formed part of the Chantry Chapel foundation. This grave slab had been exposed on two previous occasions, during the 1992 and 2000 excavations.

4.3.11 The construction of the chapel is believed to have occurred in the 1460s as it corresponds in position to the Hungerford Chapel on the north side of the Trinity Chapel, which was built *c*. 1464-71. It is, however, possible that the Beauchamp Chapel was built earlier and that the Hungerford Chapel was subsequently built to complement the southern chapel (Cocke and Kidson 1993, plate 36).

4.3.12 Four graves were exposed within the Chantry Chapel, two empty (123, 145) and two containing skeletal remains (103, 140). The grave initially thought to be that of Bishop Beauchamp (Blockley 2000) was re-investigated and recorded as grave (103); it contained coffined skeleton (104) (**Figure 3, Plate 1**). Grave (103) clearly cut deposit (110), which partially overlay the stone lining (124) of empty grave (123). Deposit (110) produced residual medieval (12^{th}/13^{th} century) Laverstock-type coarseware pottery. The identity of skeleton (104), an adult male of 45-55 years, is unknown.

4.3.13 Grave (123) was identified, from the 1770 plan of the Cathedral, as that of John Cheney, Bailiff to Bishop Beauchamp, who died in 1499, and whose remains were removed during the 'restoration' by Wyatt in 1789-92 and moved to the north aisle inside the cathedral (Cocke and Kidson 1993, plate 41). As grave (103) is clearly stratigraphically later than grave (123),

skeleton (104) cannot be Bishop Beauchamp as he died 18 years before John Cheney, in 1481.

4.3.14 Grave (123) cut through (170), the 1220 buttress on the east wall of St. Stephen and Martyrs' chapel, on the western edge of Trench 2. It had been exposed and backfilled again during the 2000 excavation.

4.3.15 Grave (145) was revealed just to the north of grave (103) and cut through buttress (115). The upper part of this buttress had been removed when the chapel was constructed and it became the site of the doorway through from the Trinity chapel to the north. Examination of the 1770 plan of the Cathedral (Cocke and Kidson 1993, plate 41) showed grave (145) to be in the exact position of the tomb of Richard Beauchamp, Bishop of Salisbury. The grave was empty, but had been backfilled during the 1789-92 demolition.

4.3.16 Grave (140) had been partially disturbed by the 1992 evaluation but on re-examination was found to contain skeleton (141); it cut through chalk 'raft' (126). The remains were those of an adult; the legs were exposed, but there had been possible disturbance to the upper part of the body (see **Table 3**). The identity of this individual is unknown, but it may be William, Lord St. Amand, Bishop Beauchamp's elder brother, as indicated from a floor slab referred to by Harris (1825, 112; Brown 1999, 25; Tatton-Brown 1992; Blockley 2000, fig. 2; Winkles 1860, 13).

4.3.17 The Abolition of Chantries Acts of 1545 and 1547, under Henry VIII, would have marked the end of the use of the Beauchamp chapel for burial.

Phase 5 (1789 – present)

4.3.18 Wyatt's 'restoration' of 1789-92 saw the removal of the Beauchamp chapel and the movement of the burials inside the Cathedral. At the same time there would have been a need to restore the buttresses on the southern side of the Trinity Chapel. A series of post-holes, (146), (169), (131) and (133), were observed cutting into the truncated remains of the chapel, and possibly relate to the scaffolding structure used in the 18th century buttress rebuilding programme. At the east end of the trench, a compact post-demolition levelling deposit (119/158) sealed scaffolding post-hole (133).

4.3.19 A modern ceramic drain (114) cut through backfilled pit (121). This drain had been previously observed in 2000, when it was seen to cut the southern chapel wall (106).

*Trench 2 (**Figures 4 & 5**)*

4.3.20 Trench 2 was positioned approximately 60m north of the northern entrance into the Cathedral and was targeted upon the site of the 13th century Bell Tower, which was demolished in 1789-92.

4.3.21 *In situ* stratified archaeology was revealed following the removal of (201), (202) and (203), the turf and post-demolition levelling material associated with the tower's demolition and the landscaping of the graveyard in the late 18th century. These overlying layers contained pottery almost entirely of post-medieval date.

4.3.22 A sondage on the northern edge of the trench cut through a series of waterborne deposits above the natural gravel, including anaerobic gleyed

blue grey clay (256) and non-gleyed alluvium (255), clear evidence that the area had been historically wet.

4.3.23 Another sondage, in the centre of the trench, revealed the stratigraphically earliest feature - a roughly east-west aligned wall (231) in foundation trench (230), which cut layer (255). Wall (231), although only very partially exposed, was interpreted as part of the cathedral workers' dwellings or workshops, dating to the early 13th century. The wall was built of Chilmark/Tisbury stone brought down from Old Sarum following the demolition of the old cathedral.

4.3.24 Possibly associated with (231) was deposit (240), revealed in the northern sondage, overlying (255) (**Figure 5, section**). Deposit (240) comprised reworked natural, the result of trampling during the construction of the Cathedral. It contained medieval (12th/13th century) Laverstock-type coarseware pottery, and stonework pressed into the deposit was dated to the late Saxon–early Norman period on analysis of the tooling, again probably reused from Old Sarum.

4.3.25 Wall (231) and the trample layer were sealed by a series of levelling deposits associated with the construction of the Bell Tower, which was completed by 1266. The preparation of the site began with the covering of the trample layer and the sealing of the earlier wall by levelling layers (219/252), (218/228) and (214), a mix of stone chippings (Chilmark/Tisbury and Purbeck marble) and waste mortar and gravel from the Cathedral construction (**Figure 5, section**). This created a level working platform which was then cut through by (258), the foundation trench for the main eastern wall (206) of the Bell Tower. Layer (218/228) contained a single sherd of medieval (13th century) Laverstock-type fineware and a single sherd of post-medieval German stoneware. The post-medieval pottery does not fit with the proposed sequence and is possibly intrusive, derived from one of the later levelling layers associated with the use of the Tower as an inn (see below).

4.3.26 Wall (206) was built upon a large, compact mortar foundation deposit (209/246). Lying directly on the foundation deposit were a series of large Chilmark/Tisbury stone blocks (251) and (243) which projected out from the core of the wall to be keyed into the internal ashlar facing stones (now robbed) of the main Bell Tower wall; the proximal ends of the stones formed part of the facing stonework (**Figure 4, Plate 5**). These stones had been broken during the robbing of the facing stones.

4.3.27 Stone blocks (251) and (243) were sealed by wall core material (250), and in turn (208) and (207) at the northern end of the trench, and (241) at the south-east corner. The latter formed the base for the spiral staircase located in the south-east corner of the Bell Tower (**Figure 4, Plate 7**). Associated with the staircase was an alcove (211), set into (250), which led in from the interior of the tower; it was covered with (210), a bedding layer for (robbed) flooring. This led to recess (259), the first step of the staircase. Set into (241) was a Chilmark/Tisbury stone slab (242), inscribed with a series of radiating lines from a central point - a setting-out stone, for the construction of the staircase and the location for the newel post (Price 1753, plate 10, in Videotext Communications, 2008, fig. 6).

4.3.28 The main entrance into the Bell Tower (opposite the northern porch of the cathedral) was identified but had been heavily robbed. The entrance, bounded by (245) on the west side and (244) and (241) on the east, was built directly upon (209/246). Within the entranceway, a bedding layer (247) for a probable tiled or flagged floor overlay (209/246).

4.3.29 Evidence of the robbing of the internal ashlar facing stones of wall (206) was provided by the remains of deposit (261), which lay directly upon (209). This line of mortar adhered to the base of the first course of stones; its width (0.32m) gives the thickness of the ashlar facing stones. Contemporary with wall (206) and the entrance structure was (233/234), the central pier foundation for the Bell Tower, a square-sectioned column with plain chamfered corners, creating an 8-sided structure (**Figure 4, Plate 6**).

4.3.30 Within the interior of the tower was layer (213), a rammed mortar surface, possibly the floor surface - or at least the bedding layer for a tiled or flagged floor - associated with the building's use as a belfry.

4.3.31 From the late 16th century the Bell Tower was used as an inn and housed a number of shops prior to its demolition in the 18th century. Associated with this phase of activity were brick walls (232) and (235), either side of the central pier, which divided the ground floor into separate rooms. A series of occupation layers (212), (215), (216), (217), (236) and (249), some containing post-medieval pottery, was associated with these walls.

4.3.32 The demolition of 1789-92 and the subsequent selling off of material helped to fund the alterations to the main Cathedral building. Robber cut (204) cut through (212) for the removal of the interior ashlar facing stones of the eastern wall (206). Robber cut (248) was dug to remove the central pier structure (233/234), and cut (237) removed part of wall structure (232).

*Trench 3 (**Figure 6**)*

4.3.33 Trench 3 was positioned to the east of the Chapter House in the grounds of Salisbury Cathedral School to investigate geophysical anomaly M (**Figure 2A**).

4.3.34 The natural basal geology (314/315) was sealed by (307/313), possibly natural geology reworked by trample activity. Cutting through the trample deposit was (317), the foundation trench for a north-south wall (308) (**Figure 6, Plate 9**). The wall corresponds to the geophysical results, and lines up with a scar on the east-west wall to the north which separates the grounds of the school from the cemetery area to the north.

4.3.35 To the east of wall (308), a series of floor make-up layers or bedding layers for floor surfaces, (306), (309)-(312), indicate the interior of the structure. On the western side of (308) only natural deposits (305) and (307) were observed.

4.3.36 Cutting (306) was a post-hole (305). It is unclear if this was in place when wall (308) was still standing, although this is possible, as both the wall and the post-hole were sealed by (303), a levelling deposit with a high mortar content, probably derived from the demolition of (308).

5 FINDS

5.1 Introduction

5.1.1 Finds were recovered from all three of the trenches excavated, with most coming from the larger Trenches 1 and 2. The assemblage is all of medieval or post-medieval date, with the exception of some prehistoric worked flint. Much of the medieval material, however, was found residually in post-medieval contexts.

5.1.2 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 (pottery, ceramic building material). All finds data are currently held on an Access database, which forms part of the project archive.

5.1.3 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 chronological sequence for the construction and demolition of the bell tower in Trench 1, and for the burials in Trench 1.

5.1.4 Given that the range of finds essentially replicates other, larger assemblages from Salisbury, and that the quantity of stratified medieval material is very small, a selective discard policy has been agreed with Salisbury and South Wiltshire Museum. The policy follows nationally recommended guidelines (SMA 1993), and has resulted in the retention of selected finds, based on intrinsic interest and/or provenance on the Site.

5.2 Pottery

5.2.1 The pottery assemblage is overwhelmingly of post-medieval date, with just a handful of medieval sherds recovered.

5.2.2 The medieval sherds include three coarsewares and one fine glazed ware, all of which are comparable to the products of the 13th century Laverstock kilns outside the city, although the coarseware sherd from layer (240) is a coarse variant which could be of earlier date, perhaps 12th century. The latter sherd was found at the base of the stratigraphic sequence in Trench 2 (from trampled and reworked natural alluvium (240)) and could, therefore, be *in situ*. The other Laverstock-type sherds came from layer (110) in Trench 1, and from topsoil and levelling/floor make-up layer (218) in Trench 2.

5.2.3 The fifth medieval sherd is a white-slipped Donyatt-type ware, probably from a jug, recovered from topsoil in Trench 1.

5.2.4 The post-medieval assemblage, unsurprisingly, is dominated by Verwood-type earthenwares from east Dorset, which were produced at least from the early 17th century and which were ubiquitous in the region from the 18th century. Vessel forms include the usual range of jars and bowls, but there is

one more unusual form, a divided bowl, or possibly a Dutch oven (vessel for roasting in front of the fire), from demolition deposit (202)

5.2.5 There are a few red-firing earthenwares from other sources, including one trailed and two sgraffito slipwares (Trench 1 topsoil and demolition layer (202) respectively), all probably from West Country sources such as Donyatt; and three whitewares from the Surrey/Hampshire Border industry, one a thin-walled 'Tudor Green' type of 15th/early 16th century date (demolition deposit (202)), and two examples of the later 16th/17th century industry (Trench 2 topsoil).

5.2.6 Alongside the coarse earthenwares, and providing closer dating, are german stonewares, both Raeren (late 15th/16th century) and Cologne/Frechen (late 16th/17th century), tinglazed earthenware (17th/early 18th century), Staffordshire-type slipware (late 17th/18th century), English stoneware (18th century onwards), white salt-glaze (*c*. 1720-80), and the factory-produced finewares of the later 18th century and beyond. These latter wares were restricted to topsoil contexts - late 18th century demolition deposit (202) and 19th century levelling layer (302).

5.3 Ceramic Building Material (CBM)

5.3.1 The CBM consists largely of fragments of flat (peg) roof tiles, virtually all of which can be dated as medieval on the basis of fabric type, which is coarse, irregularly wedged, and generally pale-firing. A small proportion of the tile fragments carry a patchy lead glaze on the upper surface; this would have been applied only to the bottom (visible) third of the tile's surface. Such tiles are found widely across Salisbury and the surrounding area from the 13th century onwards, and are likely to have come from a local source. Medieval tiles were frequently re-used, and as such are an unreliable source of dating. In this instance some of the tiles (in particular from Trench 1 topsoil and from levelling layer (302)) are heavily mortared on all surfaces due to re-use.

5.3.2 More elaborate tiles and other roof furniture is notable by its absence here. There was one hip tile (Trench 2 topsoil), and two possible ridge tiles were identified, one from make-up layer (214) and one from levelling layer (303), both in fabrics comparable to the finewares produced at Laverstock.

5.3.3 Of most interest amongst the CBM is a small collection of decorated floor tiles, although none were found *in situ*. Some of these are too small and/or too worn to discern the motif, but seven different motifs were identified, five of which can be paralleled at Clarendon Palace, approximately 3.5 km to the west (Eames 1988, nos. 52, 65, 71, 81 and 82). Of these one falls within Eames' group I, dated *c*. 1240-4 (no. 52; found here in backfill context (102) and levelling layer (302)); two within group II, *c*. 1250-60 (nos. 65 and 71; grave (104) backfill, and demolition deposit (119)), and two within group III, later 13th century (nos. 81 and 82; grave (104) backfill, fill (146) of grave cut (145), levelling layer (302) and unstratified). Several are also known from the Cathedral itself. Examples of the lion motif (no. 65) is known from the Muniment Room (Brown 1999, figs. 131-3), while the twinned birds (no. 71) and foliate and fleur-de-lys crosses (nos. 81 and 82) can be seen in St Peter's Chapel, resited from the Chapter House (Brown 1999, fig. 129). The Cathedral was tiled between *c*. 1225 and 1266 (Brown 1999, 168). Of the remaining two designs, the star on a small (quartered) tile from levelling (302) is paralleled at the late 13th/early 14th century kiln at Nash Hill, Lacock,

in north Wiltshire (Eames 1974, no. 52); and the very worn mounted archer from backfill context (122) is recorded from Milton Abbey and Shaftesbury Abbey in Dorset, in the latter instance dated to the mid 14th century (Emden 1977, 78-9, no. 181).

5.3.4 There are also plain, glazed floor tiles (including triangular tiles), and post-medieval brick fragments.

5.4 Clay pipes

5.4.1 The pipe fragments consist mainly of plain stems, but there are also a few more diagnostic pieces. These include three bowls, all of mid to late 17th century date - one from demolition deposit (203), dated *c*. 1650-60; one from grave (204) backfill, dated *c*. 1660-80, with a 'monkey's paw' variant of the Gauntlet stamp (Atkinson 1970, fig. 1, no. 12); and one dated *c*. 1670-80 (212). One other bowl heel fragment carries a 'monkey's paw' stamp, from levelling layer (302), and there are four other makers' marks on stems: those of Edward Higgins (*c*.1680-1710; Atkinson 1980, fig. 1h; Trench 2 topsoil), Thomas Smith (*c*. 1690-1720; Atkinson 1980, fig. 1s; demolition deposit (203)), Joel Sanger (*c*. 1710-40; Akinson 1972, fig. 1, 5a; backfill of grave (103) after 2000 excavation); and James Skeaimes (*c*. 1858-67; Atkinson 1970, appendix E; Trench 2 topsoil).

5.5 Stone

5.5.1 The stone consists entirely of building stone, including clearly identifiable fragments of Purbeck Marble, and probable Chilmark/Tisbury limestone, both of which are well in evidence in the Cathedral structure. None of the pieces are complete, and there are several pieces of what may be unfinished pieces or 'roughout' blocks, bearing rough tool marks but lacking final finish; some of these appear to have been re-used, judging by the presence of mortar on broken edges. Amongst the pieces that appear to have been finished are floor slabs in Purbeck Marble (one, possibly two examples from triangular tiles); simple half-round mouldings or column/pilaster fragments; an indented possible spandrel fragment; and some small fragments of decorative detailing (Purbeck Marble) and possible figurative sculpture (Chilmark/Tisbury limestone)

5.6 Glass

5.6.1 The glass includes vessel and window. Predominant amongst the vessel glass are fragments of green wine bottle of later 17th or 18th century date; there are examples here of 'onion' (*c*. 1680-1730), 'mallet' (*c*. 1730-60) and 'cylindrical' forms (*c*. 1760-80). Also present are fragments of phials (all from Trench 2 topsoil), and one flask rim of late 17th century type (Haslam 1993, fig. 68, 642). Modern vessel fragments came from topsoil and from the backfill of grave (103) after the 2000 excavations.

5.6.2 Fragments of window glass were recovered from several contexts; some are heavily oxidised but none could be seen to be painted.

5.7 Slag

5.7.1 Ironworking slag was recovered from three contexts – post-demolition mortar layer (205) and floor surface/bedding layer (213) in Trench 2, and

floor surface/bedding layer (306) in Trench 3. In all cases the slag appears to be representative of ironsmithing, and includes possible hearth bottoms. The slag is of unknown date, either medieval or post-medieval.

5.8 Coins, Jetons and Tokens

5.8.1 Fifteen copper alloy coins, tokens and jetons were recovered. All of these date to the late medieval or post-medieval periods. In general the coins are in poor condition, with many showing signs of both of corrosion and wear.

5.8.2 The earliest coin from the site is a small 15th century copper alloy *quattrino* of Ancona in the papal territories of central Italy. There is no other known find of a coin of Ancona from England. Such coins were struck to provide small change. This example is badly corroded, but dates to the 15th century (M. Allen, pers. comm.). It was recovered from the fill of post-medieval pit (121), from a layer containing debris suggestive of a contemporaneous phase of construction or restoration.

5.8.3 Two copper alloy jetons were both struck by Guild masters in Nuremberg – one (from Trench 1 topsoil) by Hans Schultes between AD 1586 and 1603 and the second (from robber cut 204) by Hanns Krauwinckel II between 1586 and 1635. Jetons were reckoning counters used in medieval accounting and mathematical calculations. They were used in conjunction with checkerboards or cloths in order to record values and sums of money. Specialist tokens for this purpose were produced from the late 13th century onwards, and they were in widespread use from the 14th century until the late 17th century, when they were made redundant by the increasing spread of Arabic numerals. Nuremberg took over from Tournai as the main European centre for jeton manufacture in the 16th century. The presence of jetons on the site may indicate that some form of accounting or book-keeping was taking place.

5.8.4 Only one other coin was recovered from Trench 1 – a farthing of Charles I, found in topsoil.

5.8.5 Ten coins and a token were recovered from Trench 2, in addition to the jeton described above. The majority of these comprise low denomination copper alloy coins of the late 17th and 18th centuries. The earliest of these is a half penny of William III, struck in 1699 (Trench 2 topsoil). A half penny of George II, minted in 1735 was recovered from the same context. A further five half pennies of George III were also recovered from Trench 2; these were minted between AD 1772 and 1807. Only one (minted in 1772) was recovered from a stratified context – from the fill of robber cut (204). Many of these coins of George III may well have been lost during the demolition of the bell tower in 1790. Two further coins from Trench 2 are heavily worn and corroded, but their form suggests half pennies of the 18th century.

5.8.6 The remaining coin from Trench 2 is a penny of Queen Victoria, struck in 1882 (from topsoil). The only other object of note is a fine copper alloy token from the same context, struck by the Bristol Bronze and Copper Company in 1811. Tokens such as these were struck as small change to compensate for shortages caused by the lack of silver coinage in circulation during the Napoleonic Wars. There was a brief *floruit* of token manufacture beginning in 1811, although these were rendered obsolete with the introduction of the

new coinage of George III in 1816, and they were declared illegal by an Act of Parliament in 1817

5.9 Metalwork

Copper alloy

5.9.1 Apart from the coins, 28 other copper alloy objects were recovered. These are all of post-medieval or modern date, and some can be dated more closely. They include a modern gilt finger ring, three small dressmakers' pins; a rectangular shoe buckle of 18th century date (Whitehead 1996, 107, no. 685); a rectangular strapend; a two-pronged fork of 17th/18th century date (Moore 2006, 23-4); two buttons; a long pin or needle shank; wire fragments; and a toy gun. Other miscellaneous fragments were recovered from topsoil contexts.

5.9.2 Of particular interest, however, is a possible monumental brass, recovered from topsoil in Trench 1. The object is apparently complete, and comprises a flat plate, approximately 70mm in length, expanded laterally at both top and bottom, with incised decoration. No published parallels are known, but the object is assumed to be of medieval date (H. Geake pers. comm.).

Iron

5.9.3 The ironwork consists largely of nails and other structural items (staples, joiners' dogs, *etc*). The nails include a group of coffin nails from grave (103), which were recorded on site and reburied with the human remains, and other coffin nails are likely to be present, particularly amongst the objects from Trench 1.

5.9.4 Other identifiable objects include a knife, a small casket key, and a bladed tool, probably a sickle; none of these are closely datable, and all came from topsoil contexts.

Lead

5.9.5 The lead consists largely of waste/offcuts (68 pieces). There are also nine window came fragments. The four pieces from Trench 1 topsoil are of hand-made cast type (Knight 1985, type B/C), while the five pieces from demolition deposit (202) are milled, at least one in a toothed mill (Knight 1985, type F). Cast cames are the earliest technologically, and these examples are likely to belong to the medieval construction of the cathedral. Milled cames are unlikely to be earlier than mid 16th century (the earliest documentary reference to the lead mill).

5.9.6 Other identifiable objects include two 17th century musket balls and a smaller shot, and a disc, possible a cloth seal, all from topsoil contexts.

5.9.7 Of particular interest here, however, is the presence of at least two possible writing leads from Trench 2 (both from topsoil). These implements were used for writing during the medieval period, and were *'used chiefly for note-taking, line-drawing and sketching'* (Biddle 1990, 735). Both the examples here fall into Biddle's class III writing leads, which are pointed at one end and flattened at the other, the flattened end generally splayed into a triangle. Only the flattened, splayed ends survive here; these were designed for ruling lines. Most of the examples from Winchester and elsewhere come from 13th and 14th century contexts, and just under half of the Winchester leads came from church or church-related sites, where, it is speculated, they

may have been used primarily by carpenters (Biddle 1990, 736-7, fig. 212, no. 2307).

5.10 Human Bone

Introduction

5.10.1 The remains of four *in situ* inhumation burials were revealed in Trench 1 which was situated adjacent to the south-east corner of the cathedral within the area formerly occupied by Bishop Beauchamp's chapel. Burials (104) (grave 103) and (141) (grave 140) had been made within the extant chapel, probably in the mid 16th century. The other two graves, (151) and (163), the latter of which lay just to the east, outside the chapel foundations, pre-dated the construction of the chapel in the mid 15th century.

5.10.2 Ten contexts within Trench 1 contained all or parts of a minimum of 90 disarticulated skeletal elements. The largest proportion were recovered from two contexts comprising the backfill of the 2000 evaluation trench. Others were from contexts associated with the construction of the chapel or subsequent activity within it (as, indeed, was the bone recovered from the 2000 evaluation backfill). All the bone from these contexts probably derived from graves in the area which pre-dated construction of the chapel. The only possible, and very tenuous exceptions, are the two elements recovered from contexts (145) and (147), the backfills of what is believed to be the former grave of Bishop Beauchamp, whose remains were relocated to the interior of the cathedral on the demolition of his chapel in 1789 (see above).

5.10.3 A single skeletal element was also recovered from one context in Trench 2 believed to be associated with the construction of the Bell Tower in the 1220s.

Methods

5.10.4 None of the *in situ* bone was lifted and the remains of only one of the burials – (104), grave (103) - were fully exposed. Only a small proportion of each of the other three burials was uncovered (**Table 3**) severely limiting osteological comment. The *in situ* remains were examined on site by the writer and assessed for basic demographic data with a note on condition and any readily observable pathological lesions. The disarticulated material was subject to a rapid scan to assess minimum numbers of individuals (MNI), some detail of age/sex and readily observable pathology before being reburied in the upper fill of grave (103).

5.10.5 The minimum number of individuals was assessed from counts of the most commonly occurring skeletal elements in association with contextual information and distribution (McKinley 2004). Age and sex were assessed from the stage of skeletal development (Scheuer and Black 2000) and the sexually dimorphic traits of the skeleton (Buikstra and Ubelaker 1994). The degree of erosion to the bone was recorded using the writer's system of grading (McKinley 2004, fig. 7.1-7). No measurements were taken and consequently no skeletal indices were calculated.

Results

5.10.6 The bone, both *in situ* and redeposited, was in good condition (Grade 0-1), with no weathering/erosion and limited abrasion to the disarticulated material. The latter comprised both complete skeletal elements and, more frequently, fragments of bone, though fragmentation was not extensive. The

bone did not appear to have been subject to repeated episodes of disturbance or any prolonged exposure and is likely to have derived from graves in the immediate vicinity.

5.10.7 A minimum of seven individuals was identified from the remains in Trench 1; one from each of the extant graves (**Table 3**) and at least three from amongst the disarticulated bone. The latter assemblage included parts of a minimum of four individuals, the most frequently recovered elements comprising the left distal and right proximal femora; since there had been extensive disturbance to the remains in grave (151) (see above and **Table 3**) some of these femoral fragments could have originated from that grave. All the disarticulated bone derived from adult individuals, at least one of whom was over 30 years of age and one (possibly the same individual) less than 50 years; most are likely to have been between 20-40 years. All four individuals appear to have been male, with large robust skeletal morphology.

5.10.8 The one individual from Trench 2 was represented by a single, adult skeletal element.

5.10.9 Pathological lesions were observed in some of the bones from grave (103) (**Table 3**) and some of the redeposited bone. Lesions in the latter included enthopathies (new bone formation related to physical stresses to the musculature) on some femoral shafts, osteophytes (generally age-related new bone formation on articular surface margins) and degenerative disc disease in a few thoracic and lumbar vertebrae, and osteoarthritis in one right elbow joint. None of the lesions were extensive or severe and the general impression is of a relatively (physically) stress-free lifestyle – although the latter should be viewed in the light of the limited nature of the assemblage and the observations it was possible to make.

Discussion

5.10.10 The construction of the chapel obviously disturbed the remains of at least five individuals buried in the area sometime in the 13th – early 15th centuries. With one possible exception these individuals all appear to have been adult males, with some evidence to suggest they had lifestyles involving limited physical stress (e.g. they were not low-status labourers). The evidence suggests some possible zoning of burials within the cemetery, this area to the south-east of the cathedral being largely occupied by adult males. Comparative data indicative of zoning within medieval churchyards is limited; it has been suggested that the south side of the cemetery was generally seen as more desirable than the north (Daniell 1997, 99), and some zoning of burials by age and/or sex was indicated at St.-Helen-on-the-Walls, York, though in the area to the south-east of the church males were slightly outnumbered by females (Gilchrist and Sloane 2005, 70). This suggests that any such zoning may have varied between cemeteries.

5.10.11 The two small bones – a right malar (cheek bone) and a metacarpal - recovered from the backfill of the emptied grave (147), believed to have been that of Bishop Beauchamp could, plausibly, represent fragments overlooked/dropped during removal and repositioning of his remains prior to demolition of his chapel in the 18th century. Given the relatively large amounts of redeposited bone disturbed and redeposited from pre-chapel graves in the area, however, this represents a highly speculative proposition.

5.10.12 Insufficient of the remains within grave (140) were exposed to allow assessment of the sex of the individual. Although clearly an adult, it was not possible to ascertain a closer age range. The location of this grave corresponds with that of a grave slab shown in the floor of the chapel in an 18th century engraving and believed possibly to represent that of William, Lord St. Amand, the older brother of Bishop Beauchamp, who died in 1457. The identity of this grave is the subject of some dispute (see **Section 6.3.3**) but the meagre osteological evidence available will not help to resolve the issue.

5.11 Animal Bone

Introduction

5.11.1 A total of 246 bones of mammals and birds was hand-recovered from the site. On the basis of associated finds, the material dates mainly to the post-medieval period with a small proportion of medieval material. Conjoining fragments that were demonstrably from the same bone were counted as one bone in order to minimise distortion, so the totals do not tally with the fragment count in **Table 1**. No bones were recorded as 'medium mammal' or 'large mammal'; these were instead consigned to the unidentified category.

Results

5.11.2 Most bone fragments were in fair or good condition, which resulted in 77% bones identified to species. At 1%, the number of loose teeth is low and this seems to be related to the absence of jaws in the assemblage and can thus not be used to assess the level of re-working. Re-working can, however, be assumed as many of the contexts contained redeposited human bone material. Gnawing marks made by dogs were seen on 2% of the bones and thus some scavenger bias can be assumed. Only one bone showed signs of contact with fire and the burning of bone waste or their use as fuel can largely be excluded.

Animal husbandry

5.11.3 The material included cattle (33%), sheep/goat (49%), pig (7%), deer (n=2; post-cranial and antler) and bird (8%). The bird bones consisted mainly of domestic fowl and goose. Rabbit bones were seen in contexts (102), (203) and (212). Some of them were probably intrusive as their colour and preservation differed from the other bones.

5.11.4 In total, 40 bones could be aged to provide insight in the population structure of the animals. Juvenile chicken bones were encountered in trench 1 topsoil and demolition deposits (202) and (203), indicating local keeping and/or a taste for young birds. A total of ten bones could be measured to provide insight into the phenotype of the Salisbury animals during the post-medieval period. Trench 2 topsoil contained a complete cattle metacarpus with a GL of 204 mm, resulting in a height at the withers of 125 cm (von den Driesch and Boessneck 1974). This is a normal value for the post-medieval period.

Consumption and deposition

5.11.5 Although the assemblage is only small, the absence of certain elements such as the head indicates that this is not the primary butchery site. Most animal bones probably represent kitchen waste. Butchery marks were seen on 5% of the bones and were made by knives, cleavers and saws.

5.11.6 Of particular interest are the bones from Trench 2 topsoil, as they include nine metacarpals and seven metatarsals of cattle of which all but one are lacking their distal parts. The latter might have been completely destroyed by dog gnawing, but as the metapodials are not very well preserved, this is difficult to ascertain. This is clearly a dump of primary butchery waste generated elsewhere off-site.

Worked Bone

5.11.7 The assemblage also contained two pieces of worked bone: the proximal parts of two bone parchment prickers or styli, both recovered from Trench 1 topsoil. They were probably made out of the long bone shafts of large mammals. Both were probably made by lathe-turning. Originally these objects would have iron points inserted into their distal ends.

5.11.8 Parchment prickers were used to indicate the outer points of the vertical lines on parchments. The use of prickers had the advantage that several pages could be line-spaced at once. Alternatively these objects could have been styli, but in both cases they would have been associated with writing. They are typically found in medieval contexts of clerical or domestic character (MacGregor 1985, 124-125). Examples from Norwich, however, have been found in domestic contexts, leading to the suggestion that they could have been used to transfer embroidery patterns onto the fabric (Margeson 1993, 69). Two comparable examples from Norwich both came from post-medieval contexts but were almost certainly residual (Margeson 1993, fig. 38, nos. 437, 438).

5.12 Marine Shell

5.12.1 Oyster makes up the bulk of the small amount of marine shell recovered. Both left and right valves are present, in other words representing both preparation and consumption waste. Also recovered was a single scallop shell, possibly just from domestic refuse but possibly of other significance here given its links with pilgrim symbology.

5.13 Other Finds

5.13.1 Other finds comprise three pieces of worked flint, presumed to be prehistoric, all with significant edge damage; and one piece of burnt, un-worked flint of unknown date.

5.14 Potential and Recommendations

5.14.1 The evaluation produced a relatively small assemblage, largely of post-medieval date; medieval finds are present in small quantities, but were found mainly as residual finds in later contexts. There are a few objects of intrinsic interest, e.g. decorated floor tiles, Italian coin, parchment prickers, possible writers' leads, but overall the range of material is repetitive of that already well documented from elsewhere in the city.

5.14.2 The finds have already been recorded to minimum archive level, and no further analysis is therefore proposed. The human bone, and some coffin fittings, have already been reburied on the Site. A discard policy has been agreed with the receiving Museum (Salisbury and South Wiltshire), targeting material of limited archaeological interest such as ceramic peg tile, iron nails

and unidentifiable objects, post-medieval bottle glass, plain clay pipe stems and marine shell; this policy will be fully documented in the project archive.

6 DISCUSSION

6.1 Introduction

6.1.1 The evaluation achieved its stated research aims in providing evidence of the construction methods of both the Bell Tower and the Beauchamp Chapel, but also of the main body of the earliest part of the Cathedral building. The evaluation was also able to identify that the burial revealed in the 2000 evaluation and believed to be that of Bishop Beauchamp himself belonged to an unknown individual. Bishop Beauchamp's grave was identified; while two small bones recovered from the backfill just might have belonged to him, overlooked when the bones were moved inside the Cathedral in the 18th century. The grave was confirmed as empty.

6.2 The Cathedral

6.2.1 The history of the construction of Salisbury Cathedral has been well documented, from initial plans to move from Old Sarum in the 1190s to the formal laying of foundation stones in April 1220. Cocke and Kidson consider that as the plans had been under consideration since the 1190s, *'thus long before the appointment* (to Bishop) *of Richard Poore)…the site must have been prepared, the layout of the principle buildings determined and the approximate dimensions of the Cathedral decided.'* (Cocke and Kidson 1993, 3).

6.2.2 Possible evidence of the preparation of the ground was identified in the form of the chalk raft exposed in Trench 1. The precise relationship between the raft and the construction of the Cathedral remains ambiguous, but there is a strong argument to suggest that the raft pre-dates the buttresses. There was some rebuilding of the buttresses following the Wyatt 'restoration' and as the eastern buttress (116) is demonstrably overlain by the wall of the chapel (117), it is reasonable to conclude that they were only rebuilt above foundation level.

6.2.3 The chalk raft is enigmatic; nothing like it has been observed on Site before, not in the Plumbery, the Bell Tower, the geophysical survey over the Hungerford Chapel, nor within the Cathedral itself. Interpretation is hampered by the fact that the relationship between the raft and the walls of the Trinity Chapel and St Stephen's Chapel could not be seen due to truncation by (121) and graves (123) and (140). Nor was it possible to trace the raft beyond the line of the east end of the Cathedral - assuming that the stratigraphic evidence is correct, it could be a foundation raft constructed due to localised ground conditions.

6.2.4 The preparation of the Site was of paramount importance to the survival of the cathedral and it is possible that problems faced by other cathedral builders working at a similar time influenced the builders of Salisbury. The rivalry with the diocese of Winchester has already been viewed as part of the possible impetus for the movement of the cathedral from Old Sarum (see **Section 1.3.2**) and during the planning stages of the move, remedial work was already underway at Winchester to repair the east end of the Cathedral.

6.2.5 Repair work began in 1202 at Winchester, including the construction of a new Lady Chapel. The Lady Chapel can be seen as a response to the liturgical and architectural fashions of the day, but also as a response to the failings of the Anglo-Norman foundations due to their construction over soft peat beds. The Cathedral extension saw further construction over the soft ground and in order to counteract this, the masons laid down a double layer of massive beech logs packed with chalk to create a platform on which to build.

6.2.6 It has been suggested (T. Tatton-Brown *pers comm*.) that the chalk raft formed part of the foundations for a *'more worthy place'* for the tomb of St. Osmond built by Beauchamp following his canonisation in 1457, but as the Beauchamp Chapel was constructed only a few years later from entirely re-used material, it seems unusual that the raft is almost entirely chalk-built. The 2000 excavation identified the chalk raft as possibly later 13th century in date and unconnected with Beauchamp (Blockley 2000, 6).

6.2.7 The use of chalk as a foundation material was more prevalent in the 14th century (T. Tatton-Brown *pers comm*.), buts its earlier use for wall construction in the Cathedral was established during investigations in the Plumbery (Wessex Archaeology 2000; Butterworth 2005). The work revealed a number of chalk block walls bonded in lime mortar, associated with 13th century Laverstock-type pottery. The walls were interpreted as part of the workshops of the medieval workforce and pre-dated the construction of the Cloister in the late 13th century.

6.2.8 A single grave (151) was revealed which potentially pre-dates the construction of the buttresses in the 1220s, possibly part of the cemetery consecrated in 1219 by Bishop Poore. It had been heavily disturbed but did appear to be cut by the buttress foundation trench (148) for buttress (116).

6.2.9 Activity following the building of the eastern end of the Cathedral, prior to the construction of the Beauchamp Chapel, included the digging of a number of graves for the placing of individuals not eligible to buried within the cathedral as close to the High Altar as possible.

6.3 The Beauchamp Chapel

6.3.1 The remains of the Beauchamp Chapel clearly corresponded to the existing illustrations of the structure; with the external buttresses visible on Hearne's illustration of 1798, and the internal respond on Gough's illustration of 1796 (Cocke and Kidson 1993, plates 36 & 37).

6.3.2 The empty graves (145) and (123) were interpreted as those belonging to Bishop Beauchamp (d. 1481) and John Cheney (d. 1509) respectively, when compared to the Gough illustration which shows the layout of the burials within the chapel, and the 18th century plan of the Cathedral (Cocke and Kidson 1993, plate 41).

6.3.3 The grave recorded as (140) is also shown on Gough's illustration as a floor slab, to the north of John Cheney's tomb. Although the identity of the individual is not stated on the 18h century cathedral plan, Harris identifies it as the grave of William, Lord St. Amand, Bishop Beauchamp's elder brother as indicated on the brass plaque of the slab (Harris 1825, 112; Brown, 1999, 25). He is recorded as dying in 1457. If this is William, it may provide

the date for the construction of the Chantry Chapel, making it several years earlier than assumed. William's will, however, states he was to be buried in Steeple Lavington (now Market Lavington), about 30km to the north-west of Salisbury, and it would be unusual to ignore the testator's will with regard to burial (R. Griffiths, *pers comm*.). The identity of the individual in grave (140) remains uncertain.

6.3.4 The grave recorded as (103), partially excavated in 2000 and initially thought to contain Bishop Beauchamp, clearly post-dated John Cheney's grave and therefore could not be the Bishop. The identity of the skeleton is unknown.

6.4 The Bell Tower

6.4.1 The earliest (natural) deposits encountered in Trench 2 confirm that the area was historically; tradition states the Cathedral was constructed upon a gravel island.

6.4.2 Investigation of the Bell Tower identified the remains of earlier structures on the site in the form of a short length of wall incorporating re-used stone from Old Sarum, interpreted as part of the workshops or dwellings of the Cathedral builders. Similar workshops were observed during the excavations within the Plumbery on the south side of the nave, which pre-dated the Cloister (Wessex Archaeology 2000; Butterworth 2005). This early building indicates the high potential for further early 13th century structures associated with the initial construction of the Cathedral, and shows how the Cathedral Close would have been filled with activity during the construction period.

6.4.3 Further evidence of this activity was seen in a trample layer overlying natural deposits, containing a pottery sherd of possble 12th century date and more re-used late Saxon–early Norman stonework. Another small hint of the presence of the Cathedral builders came in the form of two possible writing leads from the Bell Tower trench, perhaps used by carpenters.

6.4.4 Following the demolition of the earlier buildings, the ground was levelled and prepared for further construction by the deposition of series of levelling/make-up layers of waste material derived from the construction of the Cathedral. The walls of the Bell Tower were built upon a compact mortar footing. To ensure the strength of the structure a series of large Chilmark/Tisbury stone blocks were laid upon the foundation, which were keyed into the internal facing stones. Once overlain by a series of rubble wall core layers the stability of the structure was ensured. The upper levels of the Tower were supported by a large, central, free-standing column. Access to the upper levels was via the spiral staircase in the south-east corner.

6.5 The Bishop's Palace/Cathedral School

6.5.1 Work within the grounds of the Cathedral School revealed a possible medieval wall with associated flooring layers. This is likely to part of a boundary wall associated with stables shown on an 18th century map.

7 RECOMMENDATIONS

7.1.1 An article discussing the results of the Time Team evaluation within the context of ongoing research into the fabric and history of the Cathedral will be prepared by Tim Tatton-Brown. No further analysis is proposed, although some modification of site graphics for publication will be necessary, as well as liaison with Dr Tatton-Brown over incorporation of the information presented in this report into the publication article. The place of publication is to be confirmed.

8 ARCHIVE

8.1.1 The excavated material and archive, including plans, photographs, written records and digital data, are currently held at the Wessex Archaeology offices under the project code 68741 and site code SAL 08. It is intended that the archive should ultimately be deposited with the Salisbury and South Wiltshire Museum, The Close, Salisbury. A discard policy for some finds categories (e.g. ceramic building material, ironwork) has been agreed with the Museum, and will be fully documented in the project archive.

9 REFERENCES

Atkinson, D.R., 1970, 'Clay tobacco pipes and pipemakers of Salisbury, Wiltshire', *Wilts. Archaeol. Natur. Hist. Mag.* 65, 177-89

Atkinson, D.R., 1972, 'Further notes on clay tobacco pipes and pipemakers from the Marlborough and Salisbury districts', *Wilts. Archaeol. Natur. Hist. Mag.* 67, 149-56

Atkinson, D.R., 1980, 'More Wiltshire clay tobacco pipe varieties', *Wilts. Archaeol. Natur. Hist. Mag.* 72/73, 67-74

Biddle, M., 1990, *Object and Economy in Medieval Winchester*, Winchester Studies vol. 7,ii

Blockley, K., 2000, Interim Report on the Excavation of Bishop Beauchamp's Chantry Chapel, Salisbury Cathedral, unpub. Cambrian Archaeol. Projects Rep. 142

Blockley, K., 2008, Salisbury Cathedral Font: Archaeological Excavations, unpub. Cambrian Archaeol. Projects Rep.

Blum. P.Z., 1991, 'The Sequence of the Building Campaigns at Salisbury', *The Art Bulletin* 1, 6-38

Brown, S., 1999, *Sumptuous and Richly Adorn'd – The Decoration of Salisbury Cathedral*, RCHME

Buikstra, J.E. and Ubelaker, D.H., 1994, *Standards for data collection from human skeletal remains*, Arkansas Archaeol. Survey Res. Series 44

Butterworth, C., 2005, 'Archaeological Recording at The Plumbery, Salisbury Cathedral', *Wiltshire Archaeol. Natur. Hist. Mag.* 98, 281-4

Cocke, T. & Kidson, P., 1993, *Salisbury Cathedral, perspectives on Architectural History*, RCHME

Daniell, C., 1997, *Death and Burial in Medieval England 1066-1550*, London: Routledge

Driesch, A. von den, & Boessneck, J., 1974, 'Kritische Anmerkungen zur Widerristhöhenberechnung aus Längenmaßen vor- und frühgeschichtlicher Tierknochen', *Säugetierkundliche Mitteilungen* 22, 325-48

Eames, E.S., 1974, 'The tiles' in McCarthy, M.R., 1974, 'The medieval kilns on Nash Hill, Lacock, Wiltshire', *Wiltshire Archaeol. Natur. Hist. Mag.* 69, 131-45

Eames, E.S., 1988, 'The tile kiln and floor tiles' in T.B. James and A.M. Robinson, *Clarendon palace*, Rep. Res. Comm. Soc. Antiq. London 45, 127-67

Emden., A.B., 1977, *Medieval Decorated Tiles in Dorset*, Chichester: Phillimore

Frew, J.M, 1979, 'Richard Gough, James Wyatt, and late 18th-century preservation', *J. Soc. Architect. Historians,* 38, 366-74

Gilchrist, R. and Sloane, B., 2005, *Requiem: The medieval monastic cemetery in Britain*, Museum of London Archaeol. Service

GSB Prospection Ltd., 2008, Geophysical Survey Report Salisbury Cathedral, unpub. rep. for Videotext Communications, ref. 2008/60

Harris, J., 1825, *Copies of the Epitaphs in Salisbury Cathedral Cloisters and Cemetery*, Salisbury

Haslam, J., 1993, 'Glass vessels' in Margeson 1993, 97-117

Keen, L. and Cocke, T., 1996, *Medieval Art and Architecture at Salisbury Cathedral*

Knight, B., 1985, 'Cames' in Hare, J.N., *Battle Abbey: The Eastern Range and the excavations of 1978-80*, HBMCE Archaeol. Rep. 2, 154-6

MacGregor, A., 1985, *Bone, Antler, Ivory & Horn. The technology of skeletal materials since the Roman period*, London: Croom Helm

McKinley, J.I., 2004, 'Compiling a skeletal inventory: disarticulated and co-mingled remains', in M. Brickley and J.I. McKinley (eds.), *Guidelines to the Standards for Recording Human Remains*, British Association for Biological Anthropology and Osteoarchaeology & Institute for Field Archaeology, 13-16

Margeson, S., 1993, *Norwich Households: Medieval and Post-Medieval finds from Norwich survey excavations 1971-1978*, East Anglian Archaeology 58

Moore, S., 2006, *Table Knives and Forks*, Princes Risborough: Shire Publications

Price. F., 1753, *A Series of Particular and Useful Observations, made with Great Diligence and Care, upon that Admirable Structure, the Cathedral Church of Salisbury*

RCHME, 1980, *Ancient and Historical Monuments in the City of Salisbury, Vol I*

RCHME, 1993, *Salisbury, The Houses of the Close*

Scheuer, L. and Black, S., 2000, *Developmental Juvenile Osteology*, London: Academic Press

Tatton-Brown, T., 1991, 'Building the tower and spire of Salisbury Cathedral', *Antiquity* 65, 74-96

Tatton-Brown, T., 1992, Eastern Garth Cemetery – Archaeological Remains, unpub. rep.

Videotext Communications, 2008, Proposed Archaeological Evaluation Salisbury Cathedral, Wiltshire NGR SU 143 295, unpub. project design

Wessex Archaeology, 2000, The Plumbery, Salisbury Cathedral, Wiltshire, unpub. client rep., ref. 47451.02

Whitehead, R., 1996, *Buckle 1250-1800*, Chelmsford: Greenlight Publishing

Winkles, B. 1860, *Winkles's Architectural and Picturesque Illustrations of the Cathedral Churches of England and Wales: The Drawings Made from Sketches Taken Expressly for this Work, with Historical and Descriptive Accounts*

Table 1: All finds by material type and by trench (number / weight in grammes)

Material	Tr 1	Tr 2	Tr 3	TOTAL
Pottery	40/664	230/6403	33/594	303/7661
Medieval	*2/8*	*3/32*	*-*	*5/40*
Post-Medieval	*38/656*	*227/6371*	*33/594*	*298/7621*
Ceramic Building Material	291/23346	102/12,733	27/2962	420/39041
Clay Pipe	25/73	75/259	5/13	105/345
Stone	17/6729	29/13,736		46/20465
Burnt Flint		1/51	1/12	2/63
Flint		3/35		3/35
Glass	26/136	78/1313	2/74	106/1523
Slag		3/719	2/1176	5/1895
Metalwork	148	156	11	315
Coins/Tokens	*3*	*12*	*-*	*15*
Copper Alloy	*19*	*7*	*2*	*28*
Iron	*70*	*112*	*4*	*186*
Lead	*56*	*25*	*5*	*86*
Worked Bone	*2/2*			*2/2*
Human Bone*	39/169	1/1		40/188
Animal Bone	143/1353	133/3398	1/5	277/4756
Shell	10/224	28/639	2/55	40/918

* disarticulated bone, all reburied

Table 2: Breakdown of pottery assemblage by ware type

Date	Ware Type	No. sherds	Weight (g)
MEDIEVAL	Laverstock-type coarseware	3	29
	Laverstock-type fineware	1	7
	Donyatt-type ware	1	4
	sub-total medieval	*5*	*40*
POST-MEDIEVAL	Bone china	1	38
	Border ware	2	23
	Creamware	13	112
	English stoneware	10	156
	German stoneware	6	58
	Modern stoneware	4	157
	Redware	4	33
	Refined redware	2	30
	Refined whiteware	55	346
	Slipware	3	58
	Staffs-type slipware	1	10
	Tinglazed earthenware	9	95
	Tudor Green	1	4
	Verwood-type earthenware	177	6336
	White salt glaze	4	95
	Yellow ware	6	70
	sub-total post-medieval	*298*	*7621*
	OVERALL TOTAL	**303**	**7661**

Table 3: Summary of *in situ* burial remains

context	cut	burial data	age/sex	pathology
104	103	fully exposed, undisturbed	adult c. 45-55 yr. male	*ante mortem* tooth loss; dental caries; calculus; osteophytes – thoracic, lumbar, distal ulna
141	140	legs exposed, possible disturbance to upper body	adult >18 yr.	
152	151	left foot in section, ?rest removed by pit 121	adult >18 yr.	
164	163	skull exposed, undisturbed	adult >18 yr. ?female	

APPENDIX 1: Trench Descriptions

bgl = below ground level
CBM = ceramic building material (brick and tile)
Contexts within Trench 1 relate to contexts assigned by Cambrian Archaeological Projects Ltd from the 2000 excavation (Blockley 2000; here abbreviated as CAP 2000)

TRENCH 1			Type: Hand Excavated	
Dimensions: 10.3m x 4m		**Max. depth: 1m**	**Ground level:**	
context	**description**			**depth**
101	*Topsoil*	Current topsoil and turf re-laid over the site following its excavation in 2000 by Cambrian Archaeological Projects, and also includes a large amount of the material backfilled over the trench following the end of the excavation. Mid grey-brown silty loam with common fragments of flint and chalk blocks, with CBM and pottery sherds.		0-0.23
102	*Fill*	Mid grey brown silty loam deliberate backfill of partially excavated grave (**103**) following 2000 excavation. (102) overlies (105) the deliberate infilling material within (103) sealing coffined burial (104). Equal to (101).		0.40m thick
103	***Grave***	**Cut of inhumation grave, aligned east west and recorded as 2.11m long by 0.80m wide and 0.41m deep with vertical slightly under-cut sides in part and a flat base. Grave contains coffined inhumation burial (104) overlain by (105) and cuts (110). (Grave recorded as 5 in CAP 2000).**		**0.80m deep**
104	*Skeleton*	Supine, extended adult male coffined inhumation burial with hands together over the pelvis. Aged 45 to 55 years with some gracile skull traits (Recorded as 6C Burial with coffin and nails in CAP 2000).		
105	*Fill*	Deliberate backfill of grave following burial of (104). Mixed and mottled yellow-brown and greyish-brown with grey-yellow banding silty clay with clayey blobs, with common small to medium limestone and chalk fragments and CBM and building debris. Coffin stain evidence as a 5-8cm wide mid brown band observed at *c*. 0.30m down from the top of the grave cut (**103**). Coffin covered area 1.82m by 0.58, with skeleton (104) covered by the backfill filling the collapse of the coffin. 0.60m segment of grave and coffin fill had been removed in the 2000 excavation, leaving the skeleton and coffin nails *in situ*. Black fungal stain observed over parts of the previously exposed bone and the base of the grave, but was not observed elsewhere following the excavation of the rest of (105) - must have developed following exposure of the remains in 2000. (Recorded as 6A and 6B in CAP 2000).		0.41m thick
106	*Structure*	Wall foundation 4.60m long by 1.26m wide, maximum height of 0.32m. Mix of Chilmark/Tisbury stone rubble with flint and chalk in a pale yellow compact limestone mortar. Southern wall of Beauchamp's chantry chapel. Bonded to and contemporary with (107) and (108), two buttresses on the southern side. At its eastern end the wall returns to the north, forming the eastern end of the chapel (recorded as (117)). Wall (106) is butted by (167), a respond on the northern side. Within foundation trench (**111**). (Recorded as 8 in CAP 2000).		0.32m high
107	*Structure*	Stone buttress on the south side of southern chapel wall, 1.20m long by 0.20+m wide; constructed of mix of Chilmark/Tisbury stone rubble with flint and chalk in pale yellow compact limestone mortar. Buttress is bonded to and contemporary with (106), and contemporary with (108) and (117). Only partially observed in plan.		-
108	*Structure*	Stone buttress on the south side of southern chapel wall, 0.80m long by 0.20+m wide; constructed of mix of Chilmark/Tisbury stone rubble with flint and chalk in a pale yellow compact limestone mortar. Buttress bonded to and contemporary with (106), and contemporary with (107) and (117). Only partially observed in plan.		-
109	*VOID*	VOID		VOID

110	*Layer*	Dark brown-black with mixed grey patches, silty clay with common small flint and chalk inclusions and CBM fragments. Isolated spread of material partially overlying (124), the stone lining of grave (**123**) and is cut through by (**103**). Deposit is either a levelling layer within the chapel laid down following the cutting and lining of grave (**123**), or post-dates the chapel and is associated with later burial and levelling following the removal of the chapel.	0.16m thick
111	***Cut***	**Foundation trench for the southern and eastern walls (106) and (117) of Beauchamp's chapel. Cuts through (168), the upper fill of pit (121). 4.60m long by 0.80m wide and 0.32m deep.**	**0.32m deep**
112	*Layer*	Dark grey-brown silty loam deposit located outside the southern wall of Beauchamp's chapel and associated buttresses (106), (107) and (108). Deposit not investigated though interpreted as levelling following the demolition of the chapel.	-
113	***Cut***	**Cut of modern ceramic drain trench aligned roughly NNW - SSE.**	**0.22m deep**
114	*Drain*	Modern ceramic drain and backfill material within (**113**).	0.22m thick
115	*Structure*	Dressed Chilmark/Tisbury stone buttress, 1.90m long by 0.12m wide and 0.30m high. (115) is the western of two buttresses extending south from southern wall of Holy Trinity and All Saints or 'Lady Chapel'. Upper portion of buttress (visible above ground) is 18th century in date, following the demolition of Beauchamp's chapel and the subsequent rebuilding of the buttress. Below ground the structure is also faced with dressed Chilmark/Tisbury ashlar stones (two courses) with light yellow limestone mortar within foundation trench (**143**). Lower portion of buttress dated to the earliest phase of the Cathedral construction. Buttress only partially observed; physically cut by (**145**), Beauchamp's grave.	0.30m thick
116	*Structure*	Dressed Chilmark/Tisbury stone buttress, 2.10m long by 0.40m wide and 1m+ high. (116) is the eastern of two buttresses extending south from southern wall of Holy Trinity and All Saints or 'Lady Chapel'. Upper portion of buttress (visible above ground) is 18th century in date following the demolition of Beauchamp's chapel and the subsequent rebuilding of the buttress. Below ground the structure was recorded as two courses of ashlar stone with light yellow limestone mortar, sat upon a foundation of unworked flint nodules in light yellow compact limestone mortar within foundation trench (**148**). Lower portion of buttress dated to the earliest phase of the Cathedral construction. Buttress only partially observed but was clearly butted and overlain by the eastern wall of Beauchamp's chapel (117).	1m + high
117	*Structure*	Wall foundation, 2.50m long by 1.60m wide and a maximum height of 0.20m; constructed of mix of Chilmark/Tisbury stone rubble with flint and chalk in a pale yellow compact limestone mortar. Eastern wall of Beauchamp's chapel; bonded to and contemporary with (106) and the two buttresses (107) and (108). Within foundation trench (**111**), physically overlies (116), is cut by (**169**) and possibly associated with reused slab (129). (Recorded as 8 in CAP 2000).	0.20m high
118	*Layer*	Mid grey-brown silty loam spread of post-demolition levelling material directly below the topsoil and turf (101) to the east of wall (117) and sealing *in situ* archaeology. Not removed in 2000 excavation. 18th/19th century levelling. Sealed by (101); overlies (119).	0.18m thick
119	*Layer*	Loose mid brown loam post-demolition accumulation deposit sealed beneath (118) and (120). Overlies compact levelling layer (135). Equal to (158).	0.08m thick
120	*Layer*	Dark grey-brown silty loam with organic components directly below (101) at the very east end of the trench. Seals (119) and associated with the laying of turf and topsoil following the removal of the chapel.	0.05m thick
121	***Cut***	**Cut of large sub-rounded pit with steep concave sides and a concave base, 2.80m long by 2.20 (1.04m wide in excavation) and 0.70m deep. Cuts through (153), the backfill of grave (151).**	0.70m deep

		Feature partially excavated in 2000; excavated part backfilled with (122). Pit originally backfilled with (127) and (168). Function unknown. (Recorded as 15 in CAP 2000).	
122	*Fill*	Backfill material within pit (**121**), deposited during the backfilling of the 2000 CAP excavation. Equal to (101).	0.42m thick
123	***Grave***	**Grave cut for burial of John Cheney, Bailiff to Bishop Beauchamp (d. 1499). 1m long by 1.05m wide and 0.42m deep. Burial moved to current position during Wyatt's 'restoration' between 1789 and 1792. Grave clearly cut through (170), buttress on eastern side of eastern wall of St. Stephen's and Martyrs' chapel, and was lined with Chilmark/Tisbury stone slabs (124). The empty grave was excavated in 2000 and backfilled with (125). (Recorded as 9 in CAP 2000).**	**0.42m deep**
124	*Structure*	Combination of Chilmark/Tisbury and Purbeck marble stone lining of grave (**123**) in a pale white-buff limestone mortar. The lining was partially overlain by deposit (110).	0.42m high.
125	*Fill*	Backfill material within grave cut (**123**) deposited during the backfilling of the 2000 CAP excavation. Equal to (101).	0.42m thick
126	*Structure*	Roughly rectangular rammed chalk block structure with stepped sides, 6.20m long by 2.20m wide and 0.45m thick. Roughly shaped chalk blocks in a pale yellow-white mortar with three stepped footings to the south. Appears to be stratigraphically earliest structure within Trench 1. Cut by (**143**) and (**148**), the foundation trenches for 1220 buttresses (115) and (116). Probably cut by (**151**), though this not proved as relationship removed by later pit (**121**) and (**148**). But as (**148**) is contemporary with (**143**) and (**143**) cut (126), the chalk block structure must pre-date the construction of the east end of the Cathedral. Function of (126) is unclear, but clearly structural and substantial as indicated by its size. Possibly associated with the preparation of the ground prior to building. Extension on the southern side, but interpretation is difficult as truncated by (**121**) and obscured by (106). Suggested (Tatton-Brown) that it is potentially as late as the 15th century (but stratigraphically appears earlier than the 1220s buttresses). (Recorded as 11 in CAP 2000).	0.45m high
127	*Fill*	Light yellow-brown loose mortar rich silty clay lower fill of (**121**). Function of (**121**) unclear, but backfilling indicates a use associated with construction or alterations to Cathedral east end. Material potentially derived from the cleaning of mortar off stonework for recycling. Sealed beneath (168).	0.40m thick
128	*VOID*	VOID	VOID
129	*Structure*	Re-used, broken Purbeck Marble upper grave slab, set onto (172), a layer of tiles above (126), with a mid to light yellow-buff limestone mortar. Probably associated with (117) though set onto (172) and (126). The slab has cavetto (hollow) moulding on the south side but is heavily worn on the north. (Recorded as 19 in CAP 2000).	-
130	*Layer*	Compact pale yellow-white mortar layer to the east of (117), cut by a number of features, the earliest being ?grave (**161**). Appears to be waste material at the east end of the Cathedral.	-
131	***Cut***	**Cut of sub-square post-hole for scaffolding, 0.38m long by 0.24m wide and 0.15m deep and filled with (132). Cuts (130) and associated with James Wyatt's alterations in the 18th century.**	**0.15m deep**
132	*Fill*	Mid grey brown silty clay single fill of scaffolding post-hole (**131**)	0.15m thick
133	***Cut***	**Cut of sub-square post-hole for scaffolding, 0.44m long by 0.30m wide and 0.17m deep and filled with (134). Cuts (135) and associated with James Wyatt's alterations in the 18th century.**	**0.17m deep**
134	*Fill*	Mid grey brown silty clay single fill of scaffolding post-hole (**133**)	0.17m thick
135	*Layer*	Compact dark yellow-green gravelly silty clay layer, interpreted as associated with James Wyatt's alterations in the 18th century. Cut by scaffolding hole (**133**).	-

136	*VOID*	VOID	VOID
137	*Layer*	Mix of mid to dark grey-brown gravelly silty clay with common to abundant small flint fragments which is banked up against the southern side of (126). Identical to (171).	0.27m thick
138	*Layer*	Equal to (139).	-
139	*Layer*	Light grey silty loam with common flints <0.06m in size. Flint and gravel rich layer banked up against the south side of (126) above (137), cut by (111), the foundation trench for (106) and (117).	0.17m thick
140	***Cut***	**Partially excavated grave, 1.20m long by 0.50m wide and 0.35m deep. Only feet observed; remainder outside trench. Grave had been disturbed by excavations undertaken by Chapter workmen in 1992. Contains skeleton (141) and backfill (142). The plan of the 1992 excavations identified the grave as the remains of William, Lord St. Amand, Bishop Beauchamp's elder brother from the floor slab.**	**0.35m deep**
141	*Skeleton*	Remains of partially revealed coffined supine and extended burial within grave cut (**140**); only legs and feet observed, and identified as an adult aligned east west.	-
142	*Fill*	Mixed mid brown and light yellow-white silty loam disturbed backfill of grave (140).	0.35m thick
143	***Cut***	**Roughly square construction cut for buttress (115), 1.40m long by 0.22m wide and 0.40m deep with near vertical sides. Cut rammed chalk structure (126); void between (115) and the edge of the cut (143) filled with (144) loose chalk deposit derived from (126), an indication that the chalk had been cut through by (143).**	**0.40m deep**
144	*Fill*	Very light grey-white chalk deposit. Very loose chalk rubble in fill against buttress (115) within foundation trench (143). Material derived from (126) through which (143) is cut. The backfill material was cut through by (145), Beauchamp's grave.	0.40m thick
145	*Grave*	**Grave cut for the burial of Bishop Richard Beauchamp (d. 1481). 2.40m long by 1m wide and 0.42m deep. Burial was moved to Bay 17 on the south side of the nave during Wyatt's 'restoration' between 1789 and 1792. Grave clearly cut buttress (115), and therefore would have cut through (144). Grave would have been situated centrally within the chapel (see Gough's 1796 illustration). The empty grave was filled with (146) and (147). (Recorded as 16 in CAP 2000).**	0.42m deep.
146	*Fill*	Mix of light grey and mid brown silty loam backfill material within the now empty grave of Beauchamp following its removal late 18th century. Sealed by (147).	0.16m thick
147	*Fill*	Mid yellow-brown silty loam upper fill of empty grave (**145**), seals (146).	0.26m thick
148	***Cut***	**Roughly square construction cut for buttress (116), 1.40m long by 0.36m wide and 0.62m deep with near vertical sides. (148) cut through (153), the backfill of grave (151), and also chalk structure (126). Backfilled following the building of (116) by a series of layers (149), (154), (155) and (156).**	**0.62m deep**
149	*Fill*	Light grey-brown silty sandy backfill deposit against (116) in (**148**).	0.18m thick
150	*Layer*	Compact mid yellow-green mortar layer that overlies modern ceramic pipe (114). Sealed by (101) and overlies (114).	0.10m thick
151	***Cut***	**Cut of partially exposed grave visible in the south-facing section of trench, disturbed by later pit (121) and buttress foundation (148). 0.35m wide and 0.53m deep. Contains skeletal remains (152), backfilled with (153).**	**0.53m deep**
152	*Skeletal remains*	Partially exposed left foot within grave (**151**) visible in the south-facing section of the trench. Sealed by (153). Only left foot present, a clear indication that the right side of the burial had been truncated by the (121).	-
153	*Fill*	Deliberate backfill of grave (**151**) over human remains (152). Medium	0.53m thick

		grey-brown silty sand, cut by (**121**) and (**148**).	
154	*Fill*	Dark reddish-brown silty clay fill of (**148**) overlies (149). Deliberate backfill.	0.29m thick
155	*Fill*	Light grey-white sand fill of (**148**), overlies (154) deliberate backfill.	0.21m thick
156	*Fill*	Dark red-brown silty clay fill of (**148**), overlies (155), deliberate backfill.	0.11m thick
157	*Layer*	Light yellow-green spread of silty sand which overlies (156) and (168). Possible levelling layer over disturbed ground.	0.25m thick
158	*Layer*	Equivalent to 119.	-
159	***Grave***	**Cut of possible grave, filled with (160); cuts (162), the backfill of possible grave (161). Not excavated.**	**-**
160	*Fill*	Loose mid grey-brown silty loam fill of (**159**)	-
161	***Grave***	**Cut of possible grave, filled with (162); cut (130). Not excavated.**	
162	*Fill*	Loose mid grey-brown silty loam fill of (**161**)	-
163	***Grave***	**Cut of grave filled with (164) and (165); cut (162). Not fully excavated.**	**-**
164	*Skeleton*	Partially exposed skeleton within (163) and sealed by (165).	-
165	*Fill*	Deliberate backfill deposit which sealed (164) in (**163**).	-
166	*Structure*	Only partially exposed in plan. Structure of mixed flint rubble, Chilmark/Tisbury stone and CBM in a compact mid yellow mortar. This is a possible buttress associated with (117).	-
167	*Structure*	Flint and limestone rubble within a compact light yellow mortar, 0.96m long by 0.40m wide and 0.37m high, butted on to the northern side of wall (106) and sits upon (139). Structure represents the remains of a respond for a half pier attached to a wall to support an arch. The related arch is visible on Gough's illustration of 1796.	0.37m high
168	*Fill*	Mid to light yellow-grey upper fill of (**121**), overlies (127) and is cut by (**111**). Deliberately dumped mortar-rich layer, partially removed in the 2000 excavation.	0.37m thick
169	***Cut***	**Cut of sub-circular post-hole for scaffolding, 0.42m in diameter and 0.18m deep and filled with (101). Cut (117) and (129) and associated with James Wyatt's alterations of the 18th century. (Recorded as 20 in CAP 2000).**	
170	*Structure*	Dressed Chilmark/Tisbury stone buttress, 0.62m long by 0.60m wide and 0.42m+ high. Remains of buttress extending east from the eastern wall of St. Stephen's and Martyrs' chapel. Upper portion (visible above ground) is 18th century, following the demolition of Beauchamp's chapel and the subsequent rebuilding of the buttress. Below ground the structure is ashlar stone with light yellow limestone mortar. Lower portion dated to the earliest phase of the Cathedral construction begun in 1220. Clearly cut by grave (123) (John Cheney). The buttress was not fully exposed.	0.42m high +
171	*Layer*	Equivalent to (137).	0.32m + thick
172	*Layer*	Layer of broken peg tiles laid directly upon chalk structure (126) and overlain by re-used grave slab (129); this is likely to be related to the eastern wall of the chapel (117).	0.03m thick
173	***Cut***	**Cut of sub-square post-hole for scaffolding, 0.64m long by 0.58m wide and 0.20m deep and filled with (101). Cut (117) and (129) and associated with James Wyatt's alterations in the 18th century. Initially cut (146), the backfill of Beauchamp's empty grave. (Recorded as 23 in CAP 2000).**	**0.20m deep**
174	*Natural*	Natural basal gravel geology. Overlain by (126) as revealed in the base of large pit (121).	-

TRENCH 2			Type:	Machine and Hand Excavated
Dimensions: 10.2 x 9.9m		**Max. depth:**	**Ground level:**	
context	**description**			**depth**
201	*Topsoil*	Current topsoil and turf, mid grey-brown silty loam with common chalk and flint inclusions <0.02m.		0-0.18m
202	*Layer*	Mid grey-brown silty loam, post-demolition accumulation deposit laid down *c*. 1789-1792 following the James Wyatt alterations and the demolition of the Bell Tower. Acts a levelling layer.		0.35m thick
203	*Layer*	Very light grey-white silty loam with abundant limestone fragments and pea grit. Concentration of re-worked mortar discarded following the demolition of the Bell Tower *c*. 1789. Sealed by (202) and overlies (205) and physically seals wall (206).		0.05m thick
204	***Cut***	**Cut of robber trench for removal of facing stones from interior face of eastern Bell Tower wall (206). 9.90m long by 1m wide and 0.45m deep. Cut (212), later floor/occupation surface associated with the later use of the Bell Tower as an inn. Infilled with (205) and (226).**		**0.45m deep**
205	*Fill*	Loose mid grey pea grit-rich, mortar-rich silty loam fill of robber trench (**204**).		0.45m thick
206	*Group*	Group number for eastern wall of the Bell Tower. Full width not exposed; recorded as 9.9m long by 1.95m+ wide by 1.40m high. Composed of mortar slurry foundation deposit (109), large Chilmark/Tisbury stone blocks (251) and (243), flint core deposits (250), (208) and (209), setting-out stone (242), alcove (211) leading to spiral stairs, (241) base of the spiral stairs, and (259) entrance to spiral stairs.		1.95m high
207	*Structure*	Upper surviving wall core material of the eastern wall (206), formed of unworked flint nodules with compact very light grey-white limestone mortar; survives for 0.26m in height and overlies (208).		0.26m high
208	*Structure*	Wall core material of (206), formed of unworked flint nodules with a compact very light grey-white limestone mortar; survives for 0.30m in height. (208) is sealed by (207) and overlies (250).		0.30m high
209	*Structure*	Lowest foundation deposit of the eastern Bell Tower wall (206). Solid foundation of limestone mortar. No stonework observed though probably formed by pouring mortar slurry into foundation trench (258), reinforced by the addition of flint and other stones work to create a solid base. 0.80m high and overlain by keying-in stones (251) and (243).		0.80m high
210	*Layer*	Very thin layer of dark brown-black compact silty loam within alcove (**211**), set into (250) and part of (206). Possible bedding layer for steps or flooring leading to the spiral staircase of the Bell Tower, in the south-east corner.		0.02m thick
211	***Cut***	**Arbitrary 'cut' for formation of alcove set into (250) for the entrance leading from the centre of the Bell Tower to (259) the first steps of the spiral staircase, in the south-east corner. The alcove is visible on a 1746 plan of the Bell Tower.**		**-**
212	*Surface*	Light to mid grey with dark brown patches of rammed chalk with silty clay. Common chalk fragments and blocks rammed to create floor surface overlain by the remains of occupation activity. This surface probably associated with later (17^{th}/18^{th} century) activity within the Bell Tower. Sealed by (217) and overlies (249).		0.22m thick
213	*layer*	Compact light grey limestone mortar layer; unclear if actual surface or remains of a bedding layer for a tiled or flagged floor, within the interior of the Bell Tower. Sealed by (215) and overlies (214)		0.09m thick
214	*Layer*	Compact light green limestone mortar, make-up deposit within the interior of the Bell Tower. The clean nature of the deposit may indicate it was associated with the use of the Bell Tower as a belfry		0.34m thick.

		and not as an inn. (214) is sealed by (213) and overlies (218) and (227).	
215	*Layer*	Dark grey-brown-black silty clay layer, possible occupation layer; sealed by (212) and overlies (213).	0.06m thick
216	*Layer*	Light grey limestone mortar layer. An isolated patch of mortar floor or bedding material for tiles or flags which overlies (217) and is sealed by (203).	0.05m thick
217	*Layer*	Very dark brown-black silty clay occupation layer; overlies rammed surface (212) and is sealed by (216).	0.05m thick
218	*Layer*	Mixed and mottled light yellow and mid brownish-red layer derived from crushed limestone chippings. Discarded waste Purbeck Marble chippings from the working of the stone for the Cathedral in this area; material utilised as a make-up / levelling deposit for the later floor surfaces. Sealed by (214), overlies (219) and identical to (228).	0.32m thick
219	*Layer*	Pale yellow mortar deposit with crushed Chilmark/Tisbury stone. Discarded waste stone chippings from the working of the stone for the Cathedral in this area; material utilised as make-up / levelling deposit for the later floor surfaces. Sealed by (218), overlies (239) and is identical to (252).	0.12m thick
220	*Fill*	Dark brown silty loam fill of feature (**221**), possibly associated with 19th or 20th century activity, perhaps tree- planting.	0.29m thick
221	***Cut***	**Cut of feature only observed in north-facing section of trench, irregular in shape, 0.87m long by 0.29m deep, filled with (220). Possibly associated with tree planting in the 19th or 20th century. Cuts (253).**	**0.29m deep.**
222	*Fill*	Very dark brown silty loam fill of (**223**). Material very similar to the topsoil (201); potentially derived from the same place and associated with tree-planting.	0.28m thick
223	***Cut***	**Cut of feature only observed in the north-facing section of trench; irregular in shape, 1.10m long by 0.28m deep, filled with (222). Possibly associated with tree planting in the 19th or 20th century. Cuts (220).**	**0.28m deep**
224	*VOID*	VOID	VOID
225	*VOID*	VOID	VOID
226	*Fill*	Loose mid grey mortar layer which overlies (205) within large robber cut (204); only visible in the north-facing section of the trench.	0.10m thick
227	*Layer*	Compact very pale yellow/white mortar spread, overlies earlier wall (231). Unclear if an actual floor surface or just spread of mortar.	0.06m thick
228	*Layer*	Identical to (218).	-
229	*Fill*	Mid grey-brown mortar rich silty clay fill of wall foundation trench (**230**), against wall (231). Only revealed in plan.	-
230	***Cut***	**Unexcavated foundation trench for wall (231), which predates the Bell Tower construction. Filled with wall (231) and backfill material (229); cuts (255).**	**-**
231	*Structure*	Wall foundation, aligned roughly east-west; constructed of roughly shaped limestone blocks bonded in lime mortar. 1.40m long by 0.50m wide and 0.40m high. Part of a building that predates the construction of the Bell Tower; perhaps part of workshops or dwellings of workmen associated with the building of the Cathedral. Constructed within (230) with (229) infilling the trench.	0.40m high
232	*Structure*	Roughly east-west aligned, brick-built (Flemish Bond) wall only revealed in plan; 2.40m long by 0.22m wide and a maximum of 0.10m high. Wall turns to south and returns back to west. Function unknown but probably associated with the use of the Bell Tower as an inn in the 17th and 18th century. It appears to have divided the ground floor into separate rooms, in association with wall (235).	0.10m high
233	*Structure*	Remains of the central pier foundation for the Bell Tower. Not fully exposed in plan, but recorded as 2.50m long by 2.52m wide and visible as a roughly square block of flint and stone rubble bonded in	-

		compact lime mortar. Constructed in the same manner as (109): mortar slurry poured into a foundation trench. The pier is visible on 1746 plan and elevation as square-sectioned column with plain chamfered corners, creating an 8-sided column. Overlain by (234), the mortar spread to bond the base of the column to the foundation.	
234	*Layer*	Spread of light yellow/white mortar, overlies (233) and visible in plan as a square with chamfered corners (as 233). At the centre is the possible remains of the a setting-out stone similar to (242).	-
235	*Structure*	Continuation of wall (232) on the western side of (233) and (234); see also (232).	-
236	*Layer*	Light grey lime mortar spread similar if not identical to (216), which overlies (212).	0.05m thick
237	***Cut***	**Irregular shaped robber cut for the removal of brick work associated with (232) and (235), 0.90m long by 0.80m wide and 0.20m deep.**	**0.20m deep**
238	*Fill*	Mid brown silty loam backfill of (237).	0.20m thick
239	*Layer*	Mid brown and light yellow sandy silt loam, mortar-rich levelling layer, sealed by (219) and overlies (240). Only revealed in sondage section but not drawn.	0.14m thick
240	*Layer*	Mid yellow/orange-brown silty clay, trampled natural alluvium layer reworked by trample activity. Sealed by (239) and overlies natural alluvium (255).	0.10m thick
241	*Structure*	Upper foundation of spiral staircase in south-east corner of the Bell Tower. Roughly sub-circular in shape with irregular vertical sides and constructed of flint and stone rubble in compact lime mortar. 3m long by 3m wide and 0.22m high. Any facing stones removed to leave just the foundation. (242), initial setting out stone for the staircase, set into (241), and also (259), the entrance to the stairs leading from (211). Foundation sits upon (250), earlier foundation layer.	0.22m high
242	*Structure*	Chilmark/Tisbury stone slab inscribed with radiating lines from a central point, for the setting out of the spiral staircase and the location of the newel post. Set into (241); sealed by (203)	-
243	*Structure*	Chilmark/Tisbury stone block located on the eastern side of the entrance into the Bell Tower. Laid directly upon (209) and would have projected out so that it could be keyed into the facing ashlar stone work of the interior face of (206). Sealed beneath (250); the ashlar facing stones and internal rubble core were keyed together for strength. The proximal end of the stone is likely to have formed part of the facing stonework and has been clearly broken off. Same function as (251).	0.20m high
244	*Structure*	Remains of a wall stub projecting to the east from western side of (206) and forming part of the entrance into the Bell Tower. 0.64m long by 0.58m wide and 0.22m high; constructed of flint and stone rubble in compact lime mortar, with the facing stones removed.	0.22m high
245	*Structure*	Rubble core structure of the western side of the entrance way in the Bell Tower, visible as three distinct layers of flint and stone rubble in a compact lime mortar. Only partially exposed in plan; recorded as 0.69m high. Sits on (247).	0.69m high
246	*Structure*	Identical to (209), a compact mortar slurry and stone rubble foundation for the southern wall of the Bell Tower, overlain by (247). Only visible in plan.	-
247	*Layer*	Light yellow-white compact mortar layer, probable bedding layer for a tile or flagged floor (now robbed) in the entrance into the Bell Tower from the south.	-
248	***Cut***	**Robber cut for the removal of material associated with the central column of the Bell Tower, removing the structure which would have sat on (234) and (233). 2.50m long by 2.52 and 0.20m deep and backfilled with (260).**	**0.20m deep**

249	*Layer*	Pale yellow-white, mortar-rich deposit; floor repair sealed by (212) and overlies (215).	0.26m thick
250	*Structure*	Core material of the eastern wall (206), formed of compact lime mortar with stone and flint rubble. Overlies series of large stone blocks (251) and (243) which sit directly upon (209). Overlain by (241) and (208).	0.30m thick
251	*Structure*	Series of large Chilmark/Tisbury stone blocks which lie directly upon (209) and would have projected out for keying into the facing ashlar stone work of the interior of (206). Sealed beneath (250); ashlar facing stones and the internal rubble core were keyed together for strength. The proximal end of the stones is likely to have formed part of the facing stonework and have been clearly broken off. Same function as (243).	0.30m high
252	*Layer*	Identical to (219)	-
253	*Layer*	Mixed mid brown and light yellow mix of topsoil material and mortar rich loam, demolition accumulation material within the interior of the Bell Tower which overlies (247) and is cut by (**204**)	-
254	*Layer*	Identical to (240).	-
255	*Natural*	Natural alluvium. Iron-stained, mid orange-brown silty clay, cut by (**231**) and sealed by (240). Overlies (256)	
256	*Natural*	Natural, same as (255) but anaerobic, gleyed, waterborne, blue-grey clay, sealed by (255) and overlies (257)	
257	*Natural*	Natural river-borne gravels.	
258	***Cut***	**Construction cut for eastern wall of the Bell Tower Group (206).**	
259	*Structure*	Entrance leading from alcove (211) to the spiral staircase.	
260	*Fill*	Fill of robber cut (**248**).	0.20m thick
261	*Layer*	Mid grey mortar spread which adhered to the base of the facing stones of wall (206), all facing stones removed but the line of the stones is still visible. 0.32m wide. Sits directly upon (209).	0.02m thick

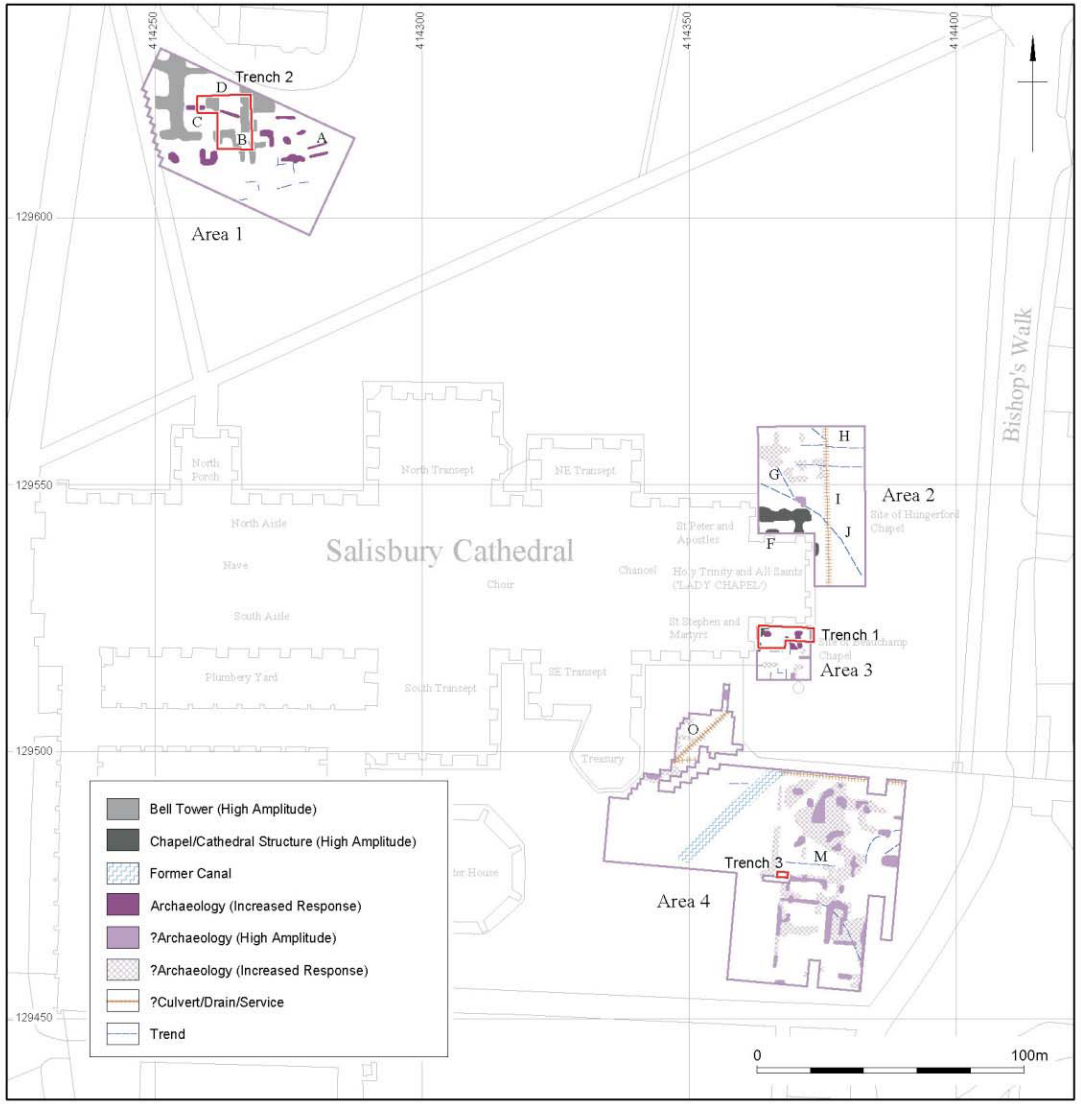
TRENCH 3			Type:	Hand Excavated
Dimensions: 2m by 1m		**Max. depth: 0.80**	**Ground level:**	
context	**description**			**depth**
301	*Topsoil*	Current topsoil and turf; dark brown silty loam		0-0.11m
302	*Layer*	Deliberate levelling layer of moderately compact dark grey brown silty loam with abundant mortar flecks and CBM. Demolition rubble from stable blocks, laid down to level area prior to establishment of park in the middle of the 1800s. Overlain by (301) and seals (303).		0.11-0.48m
303	*Layer*	Deliberate levelling layer of mid grey, gravel-rich silty clay with high mortar content, probably derived from demolition of the stable block. Possible derived from wall (308). Overlain by (302); seals (304).		0.08m thick
304	*Fill*	Fill of post-hole (**305**), of mid grey, gravel-rich silty clay with high mortar content, potentially the same material as (303).		0.36m thick
305	***Cut***	**Cut of post-hole which cuts through (306), filled with (304). Sub-square with rounded corners, 0.43m in diameter and 0.36m deep. Post-hole of unknown function, possibly a boundary fence, as cut through surfaces to the east of wall (308).**		**0.36m deep**
306	*Layer*	Mid greenish-grey crushed Chilmark/Tisbury stone layer, upper of series of possible floor surfaces or bedding layers for floors to the east of wall (308). Cut by (**305**) and seals (309).		0.06m thick
307	*Layer*	Mid yellow-brown silty clay layer. Potentially natural clay, a slightly darker yellow than the greyish-yellow clean clay below. Cut by (317) and identical to (313).		0.14m thick
308	*Structure*	North-south stone wall faced with roughly worked Chilmark/Tisbury stone with a light yellow-grey buff mortar. Wall is potentially medieval in date and re-used in later periods. Appears to be part of a series of rectangular and square buildings observed in the geophysics and is aligned with a scar on the wall to the north of the trench which forms		0.26m high

		the boundary of Salisbury Cathedral School with land at the east end of the Cathedral. A boundary wall is shown in this position from a map of the stables from the 18th century, and therefore is likely to have been a reused medieval wall. Wall has cut through by later robbing event (**318**).	
309	*Layer*	Dark grey compact silt, a thin layer of trample below crushed stone layer (306) and seals surface (310).	0.06m thick
310	*Surface*	Pale buff/yellow/grey/white, very compact mortar surface with rounded flint pebbles, forming a cemented floor on the east side of wall (308). Overlies (311) and sealed by (309)	0.03m thick
311	*Layer*	Mid yellow-brown mortar rich silty clay, probable bedding layer for surface (310) on the east side of wall (308). Sealed by (310) and overlies (312).	0.03m thick
312	*Layer*	Pale buff/yellow/grey/white compact mortar, first in a sequence of bedding layers to the east of wall (308), physically overlies (313) through which wall foundation trench (**317**) for (308) has been cut, and butts (308). Stratigraphically later than (308); sealed by (311).	0.05m thick
313	*Layer*	Identical to (307) cut by (**317**) and overlies (314)	-
314	*Natural*	Natural alluvial clay observed sealed beneath (313), yellow blue grey compact plastic clay.	0.08m +
315	*Natural*	Identical to (314) on west side of (308).	-
316	*Structure*	Pale buff mortar spread with abundant small stone chippings, foundation deposit for wall (308) within foundation trench (**317**).	0.10m thick
317	***Cut***	**Foundation trench for wall (308), cuts (313/307), infilled with (316) and then (308) constructed on top and overlain by associated floor layers.**	**0.10m deep**
318	***Cut***	**Cut of robber trench for the partially removal of (308), infilled with (303).**	**0.34m deep.**

Date:	06/02/09	Revision Number:	0
Scale:	1:40000 & 1:1000	Illustrator:	KL
Path:	Y:\PROJECTS\68741TT\Drawing Office\Report Figures\eval\09_02\68741_eval_f1.dwg		

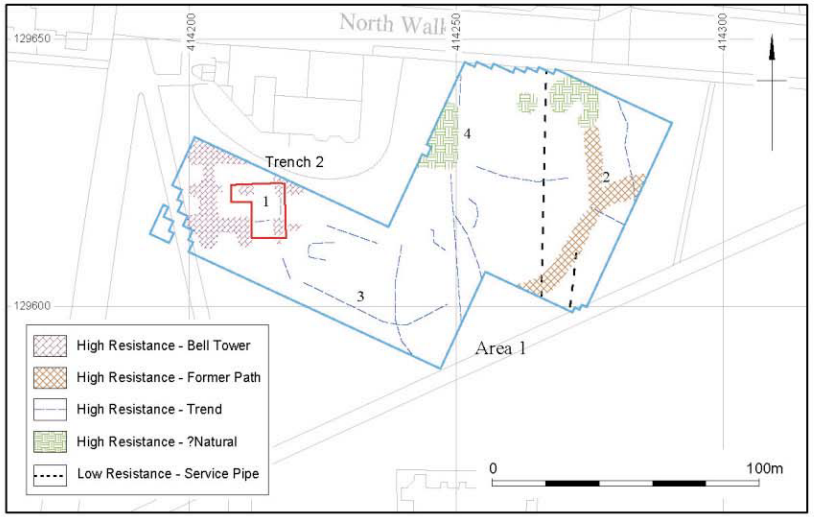
Site, trench location and geophysical survey area

Figure 1



A. GPR Survey

B. Gradiometer survey



C. Resistance survey

Evaluation Trench
Area of Gradiometer Survey
Area of Resistance Survey
Area of GPR Survey

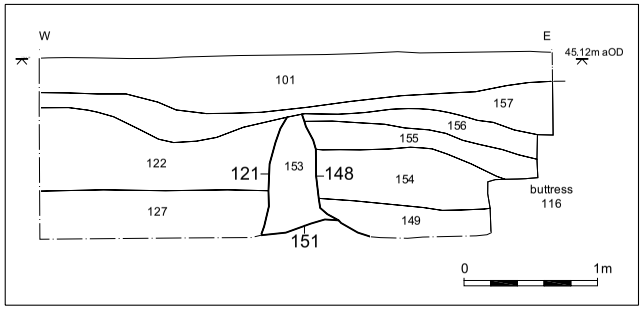
Geophysical data courtesy of GSB Prospection Ltd

Date:	25/02/09	Revision Number:	0
Scale:	1:1000	Illustrator:	KL
Path:	Y:\PROJECTS\68741TT\Drawing Office\Report Figures\eval\09_02\68741_eval_f2.dwg		

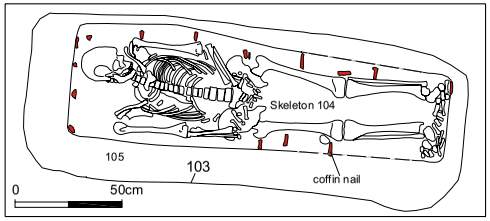
Wessex Archaeology

Interpretation of geophysical survey data

Figure 2



Trench 1 section



Grave 103 plan

Plate 1: Grave 103 and skeleton 104

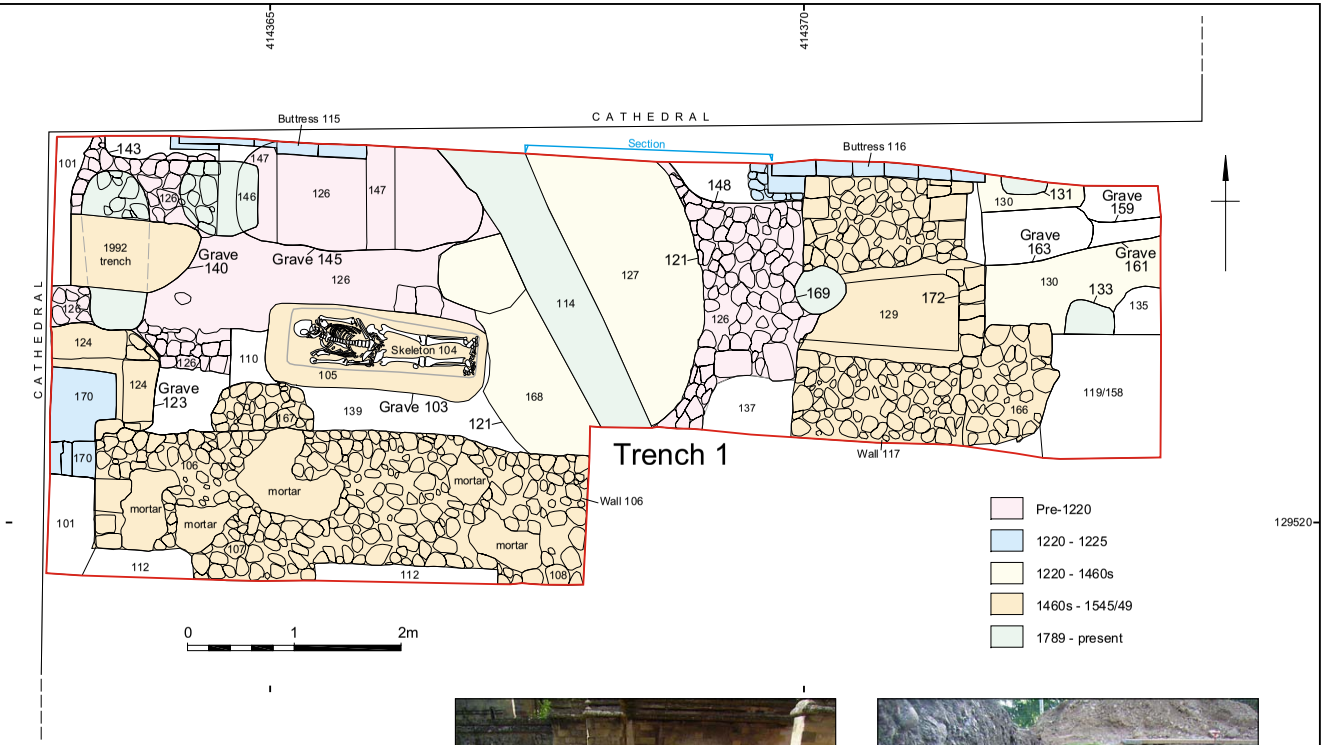


Plate 2: Trench 1 from the west

Plate 3: Trench 1 from the east

Plate 4: West-facing elevation buttress 116 in 148

Wessex Archaeology

Evaluation Trench

Date:	25/02/08	Revision Number:	0
Scale:	Plan 1:50, Section 1:40 & Skeleton 1:25	Illustrator:	ST/KL
Path:	Y:\PROJECTS\68741TT\Drawing Office\Report Figures\eval\09_02\68741_eval_f3.dwg		

Plate 5: Wall 206 from north showing broken keying-in stones 251 and base mortar spread 261

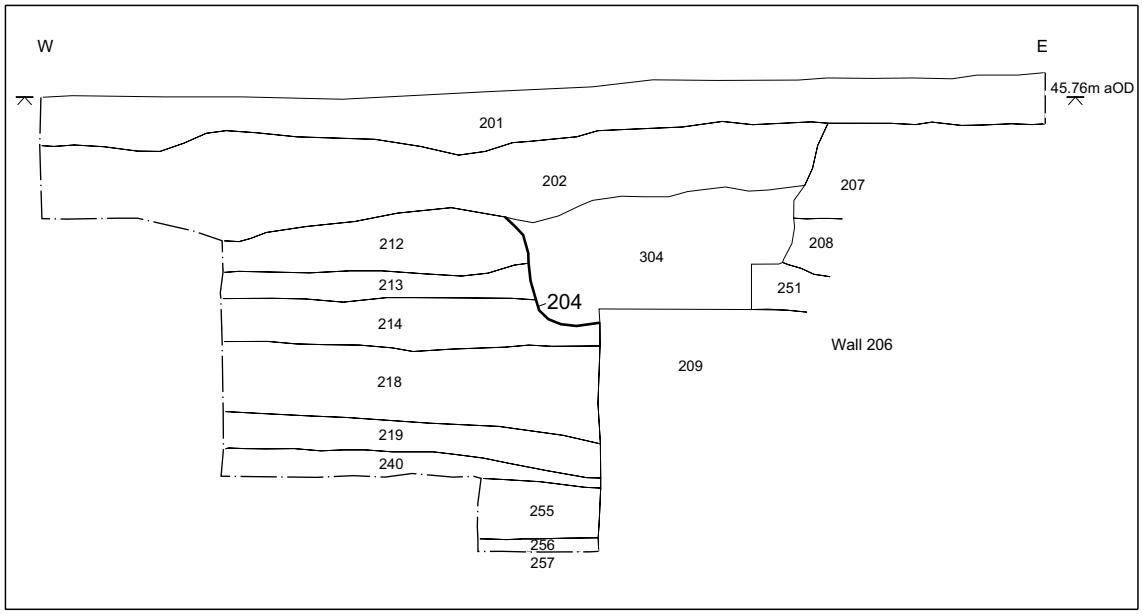
Plate 6: Trench 2 from the west showing the entrance and spiral staircase foundation 241

Plate 7: Trench 2 from the west showing remains of central pier base 234 and 233

Wessex Archaeology

Evaluation Trench

Date:	25/02/09	Revision Number:	0
Scale:	Plan 1:50	Illustrator:	ST/KL
Path:	Y:\PROJECTS\68741TT\Drawing Office\Report Figures\eval\09_02\68741_eval_f3.dwg		

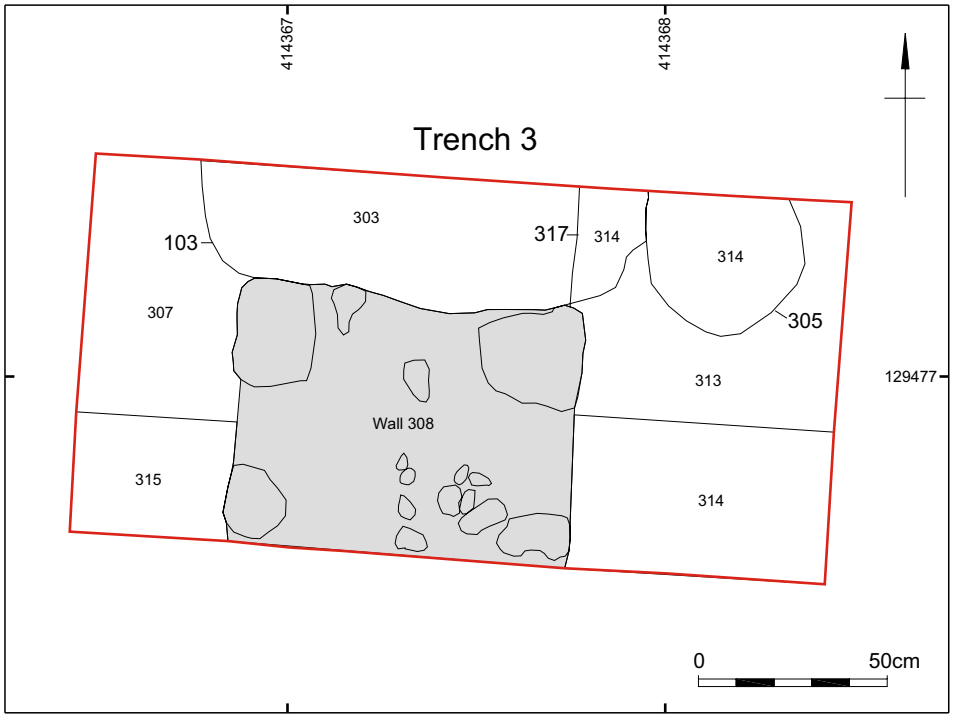


Trench 2 section

Plate 8: South-facing section showing bell tower make-up layers, wall 206 and robber cut 204

Date:	25/02/09	Revision Number:	0
Scale:	Section 1:25	Illustrator:	ST/KL
Path:	Y:\PROJECTS\68741TT\Drawing Office\Report Figures\eval\09_02\68741_eval_f3.dwg		

Wessex Archaeology



Trench 3 plan

Plate 9: Trench 3 from the north

Evaluation Trench

Date:	25/02/09	Revision Number:	0
Scale:	Plan 1:20	Illustrator:	ST/KL
Path:	Y:\PROJECTS\68741TT\Drawing Office\Report Figures\eval\09_02\68741_eval_f3.dwg		

Wessex Archaeology

WESSEX ARCHAEOLOGY LTD.
Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk
London Office: Unit 113, The Chandlery, 50 Westminster Bridge Road, London SE1 7QY.
Tel: 020 7953 7494 Fax: 020 7953 7499 london-info@wessexarch.co.uk www.wessexarch.co.uk