

JOHN MOORE HERITAGE SERVICES

**OLD ST MICHAEL'S CATHEDRAL,  
ST MICHAEL'S AVENUE, COVENTRY**

**ARCHAEOLOGICAL MONITORING AND  
INVESTIGATION REPORT**

*On behalf of*

*Dean and Chapter, Coventry Cathedral*

**FEBRUARY 2016**

**REPORT FOR** Dean and Chapter, Coventry Cathedral  
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<b>CONTENTS</b>	<b>Page</b>
<b><i>SUMMARY</i></b>	<b>1</b>
<b>1 INTRODUCTION</b>	<b>3</b>
1.1 Site Location, Geology and Topography	3
1.2 Project Background	3
1.3 Archaeological Background	5
1.4 Historic Background	6
<b>2 AIMS OF THE INVESTIGATION</b>	<b>16</b>
<b>3 STRATEGY</b>	<b>16</b>
<b>4 RESULTS</b>	<b>17</b>
4.1 Phase 1. (1100-1200)	17
4.2 Phase 2. (1250-1270)	21
4.3 Phase 3. (c. 1300)	24
4.4 Phase 3.1 (Post c. 1300 Burials)	28
4.5 Phase 4 (c.1350-1390)	31
4.6 Phase 5 (c. 1390-1450)	36
4.7 Phase 6 (c. 1450-1500)	42
4.8 Phase 7 (17 <sup>th</sup> – 18 <sup>th</sup> Centuries)	42
4.8.1 Memorial Stones ( <i>By Alessandro Guaggenti</i> )	47
4.9 Phase 8 (19 <sup>th</sup> Century)	56
4.10 Phase 9 ( <i>World War Two</i> )	61
4.11 Phase 10 (Post WWII)	65
4.12 Phase 11 (Present)	66
<b>5 FINDS</b>	<b>67</b>
5.1 Medieval Pottery ( <i>By Paul Blinkhorn</i> )	67
5.2 Post Medieval Pottery ( <i>By Simona Denise</i> )	67
5.3 Architectural Stone ( <i>by Stephen Yeates</i> )	68
5.4 Ceramic Building Material	81
4.1 Medieval Tiles ( <i>By Cynthia Pool</i> )	81
5.4.2 Victorian Floor Tiles ( <i>By Simona Denis</i> )	84
5.5 Dressed and Worked Stone ( <i>By Simona Denise</i> )	85
5.6 Ferrous Metal Objects ( <i>By Simona Denise</i> )	85
5.6.1 Other Iron Objects ( <i>By Simona Denise</i> )	86
5.6.2 Copper Alloy Objects ( <i>By Simona Denise</i> )	87
5.6.3 Copper Alloy Decorative Objects ( <i>By Simona Denise</i> )	88
5.6.4 Other Objects ( <i>By Simona Denise</i> )	88
5.6.5 Lead ( <i>By Simona Denise</i> )	89
5.7 Window Glass ( <i>By Simona Denise</i> )	89
5.7.1 Other Glass Objects ( <i>By Simona Denise</i> )	90
5.8 Other Objects ( <i>By Simona Denise</i> )	90
5.9 Coins ( <i>by Andrej Celovsky</i> )	90

<b>6 HUMAN SKELETAL REMAINS</b> ( <i>By Sharon Clough</i> )	<b>92</b>
<b>7 SUMMARY AND DISCUSSION</b>	<b>95</b>
<b>8 BIBLIOGRAPHY</b>	<b>105</b>
<b>APPENDIX A Memorial Stones Tables</b>	<b>111</b>
<b>APPENDIX B Tile Tables</b>	<b>115</b>
<b>APPENDIX C Architectural Stone Profiles</b>	<b>116</b>
<b>APPENDIX D Coin Table</b>	<b>118</b>
<b>APPENDIX E CONTEXT INVENTORY</b>	<b>119</b>
<b>APPENDIX F FIND PHOTOGRAPHS</b>	<b>131</b>

## ILLUSTRATIONS

Figure 1	Site Location	4
Figure 2	Site Plan	19
Figure 3	Sections 16, 18, 22, 23, 24	25
Figure 4	Skeleton 163 and 166	29
Figure 5	Wall 107. East Elevation	35
Figure 6	Sections 3 and 14	40
Figure 7	Memorial Stone Surface	44
Figure 8	Sections 12, 13, 19	61
Figure 9	Deposit 136	63
Figure 10	William Reader's recording route	114
Figure 11	Worked Stone Profiles	116

## PLATES

Plate 1	General View of Excavation	18
Plate 2	Wall 168	20
Plate 3	Wall 171	22
Plate 4	Wall 171 Elevation	22
Plate 5	Wall 171 Detail	23
Plate 6	Walls 171, 172.	26
Plate 7	Wall 238	27
Plate 8	Skeleton 163	30
Plate 9	Skeleton 166	30
Plate 10	Wall 107	32
Plate 11	Wall 107 Butress Detail	34
Plate 12	Wall 235	37
Plate 13	Section 13	38
Plate 14	Pillar 103. Wall 182	39
Plate 15	Memorial Stone Surface	48



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Plate 16	Memorial Stone No 1	49
Plate 17	Walls 106, 139. Air Raid Shelter 138	57
Plate 18	Tile Floor 225	58
Plate 19	Tile Floor 125	59
Plate 20	Deposit 136	64
Plate 21	Deposit 136. Detail of 228	64
Plate 22	Worked Stone No 1	68
Plate 23	Worked Stone No 22	72
Plate 24	Worked Stone No 32	74
Plate 25	Worked Stone No 35	74
Plate 26	Worked Stone No 42	76
Plate 27	Worked Stone No 58	78
Plate 28	Coins. Small Finds Nos 1 and 7	91
Plate 29	Carbonised Bible Pages	131
Plate 30	Cistercian Cup	131
Plate 31	Medieval Floor Tile (No 1)	132
Plate 32	Medieval Floor Tile (No 2)	132
Plate 33	Padlock and Key (226)	133
Plate 34	Victorian Floor Tiles (125)	133
Plate 35	Roof Bolts and Nails (226)	134
Plate 36	Victorian Window Glass	135
Plate 37	Victorian Window Glass	135

## **Summary**

*John Moore Heritage Services were appointed by Acanthus Clews Architects on behalf of the Dean and Chapter of Coventry Cathedral to conduct an archaeological excavation and archaeological monitoring at Old Coventry Cathedral, Coventry. The project was carried out between June and September 2015.*

*There were four main archaeological objectives; monitoring of the excavation of a drainage trench around the perimeter walls of two subterranean crypts, referred to as the Chapel of the Cross (west crypt) and the Wyley Chapel (east crypt), located below the north aisle of St Michael's Cathedral; the excavation of an area to determine whether a third crypt exists to the east of the Wyley Chapel; to record architectural stone recovered from an excavation through the Wyley chapel's east window; to establish whether the c. 1300s Chapel of the Virgin Mary was a standalone building or attached to the 13<sup>th</sup> century church.*

*The archaeological works identified medieval structural remains relating to six phases of St Michael's development from the 11<sup>th</sup> to 15<sup>th</sup> centuries. Two burials were recorded post-dating the 14<sup>th</sup> century phase of the Cathedral's development. A further five phases were recorded from the 17<sup>th</sup> to the 20<sup>th</sup> centuries.*

*Much of the church's development during the medieval period has been correctly conjectured in 'Coventry Old Cathedral, a Conservation Plan' by George Demidowicz in 2013, although the location of the 11<sup>th</sup> century Castle Chapel (or its north aisle) has been identified as being further to the north than has been speculated.*

*The conjectured location of the mid-late 13<sup>th</sup> century north aisle wall has been proved correct. The wall had been constructed in the Gothic style with the use of offset chamfered foundation courses. In c. 1300 the wall was partly dismantled to accommodate the construction of the subterranean Chapel of the Cross and Chapel of the Virgin Mary above. Although not conclusive, the chapels were almost certainly contemporary with the church rather than a standalone building.*

*In the mid-late 14<sup>th</sup> century a further subterranean crypt (Wyley Chapel) with chapel above (Chapel of All saints) was built directly to the east of the Chapel of the Cross and Chapel of the Virgin Mary. The majority of this chapel's eastern elevation was revealed in the works, establishing that the upper chapel had been constructed with two asymmetrical windows apparently divided by a buttress. The north end of the wall was slightly, but significantly, lower than to the south resulting in two substantial cracks in the wall's fabric. The 11<sup>th</sup> century castle ditch, speculatively claimed to be beneath the north wall of the cathedral, is possibly the cause of the wall's subsidence; the walls sinking into the ditch's soft fills, which would have settled over time. This implies that the speculated position of the castle's ditch may be correct.*

*In the late 14<sup>th</sup> – mid 15<sup>th</sup> centuries the cathedral is again expanded to the east. It has been suggested that a third subterranean crypt may have been constructed to the east of the Wyley Chapel at this time. It was conclusively established that this was not the case, rather the area had been substantially made up/terraced with soil into which later graves and vaults had been excavated, often marked with memorial stones.*

*The remains of two inhumations in earth cut graves, without evidence for coffins, were recorded. Although undated, stratigraphically they post-dated the c. 1300 phase of the cathedral's development, therefore, placing them within the north aisle of the 13<sup>th</sup> century church or within the nave of the 15<sup>th</sup> century church.*

*It was also established that in the 17th and 18th centuries the interior of the church was used for the intramural internment of wealthy benefactors and notable lay folk within earth cut graves and brick vaults, marked with memorial stones. Remains relating to this phase include 30 memorial stones, commemorating the death of at least 40 individuals dating from 1622 to the 19<sup>th</sup> century. The location of four brick vaults were also established, one of which was marked by four memorial stones.*

*Deposits and structures relating to two phases of restoration carried out in 1849 and 1851 when, amongst other things, oak seats are installed, the floor of the chancel was raised and gas lighting was installed, were also revealed.*

*On the night of 14<sup>th</sup> October 1940 three groups of incendiary bombs landed on the low pitched roof of the cathedral causing a fire that resulted in the complete destruction of its roof and much of its interior. Deposits of solidified lead were identified in a number of places, frequently pooled beneath memorial stones and tiles, created by lead flashing dripping from the roof as molten liquid during the fire. The in-situ remains of burnt and collapsed misericords on the north of the chancel were also revealed.*

*Remains directly relating to structural alterations made during the Second World War included the construction of an entrance over the Wyley Crypt during its use as an air raid shelter and the laying a substantial concrete surface over the subterranean crypts to strengthen and waterproof them. This allowed for their continued use despite the fact the cathedral was in ruins.*

*An account from the 1960s, when the current floor was being laid, tells of a lorry falling into a brick vault with only the top of the cab visible, although the exact location was unknown. The location of the collapsed vault and its concrete repair were identified.*

### ***Acknowledgements***

Firstly, many thanks to George Demidowicz, who literally wrote the book on Coventry Cathedral, his knowledge, encouragement and enthusiasm, and excavation work was greatly appreciated. Also thanks to Tony Auty, Director of Property and Fabric, whose holistic approach and practical support was of great value. The support from all from Midland Conservation was essential to the success of the project, although special thanks to Brian Furber and Martin Philips is warranted. Christine Doyle (Head of Development) deserves high praise for handling press and media interest and for bringing the archaeology to life for the public on open days. Mention must be given to Michael Clews (Acanthus Clews Architects) for his support throughout. Christopher Patrick, Cathedral Archaeologist, provided invaluable advice and encouragement. Thanks to Simona Denis for the positive attitude. Special appreciation for Alessandro Guaggenti (JMHS) for his assistance with the excavation and contribution to this report.

## 1 INTRODUCTION

### 1.1 Site Location, Geology and Topography (*Fig. 1*)

#### ***Location***

The site is located within the north aisle of Old St Michael's Cathedral (Fig. 1; Plate. 1), on St Michael's Avenue, Coventry (NGR SP 33600 78997), to the south of the modern Coventry Cathedral Church of St Michael's and to the north of Bayley Lane.

#### ***Geology***

British Geological Survey identifies the underlying solid geology as Redbed sequence; mudstone dominated in lower part but becoming increasingly erinaceous towards top, thin Spirorbis limestone beds at some levels, impersistent conglomerates in upper part.

The geological horizon (221) was observed at the base of a sondage placed in the south-west corner of the site at 87.96m AOD (Fig. 3; Sect. 18).

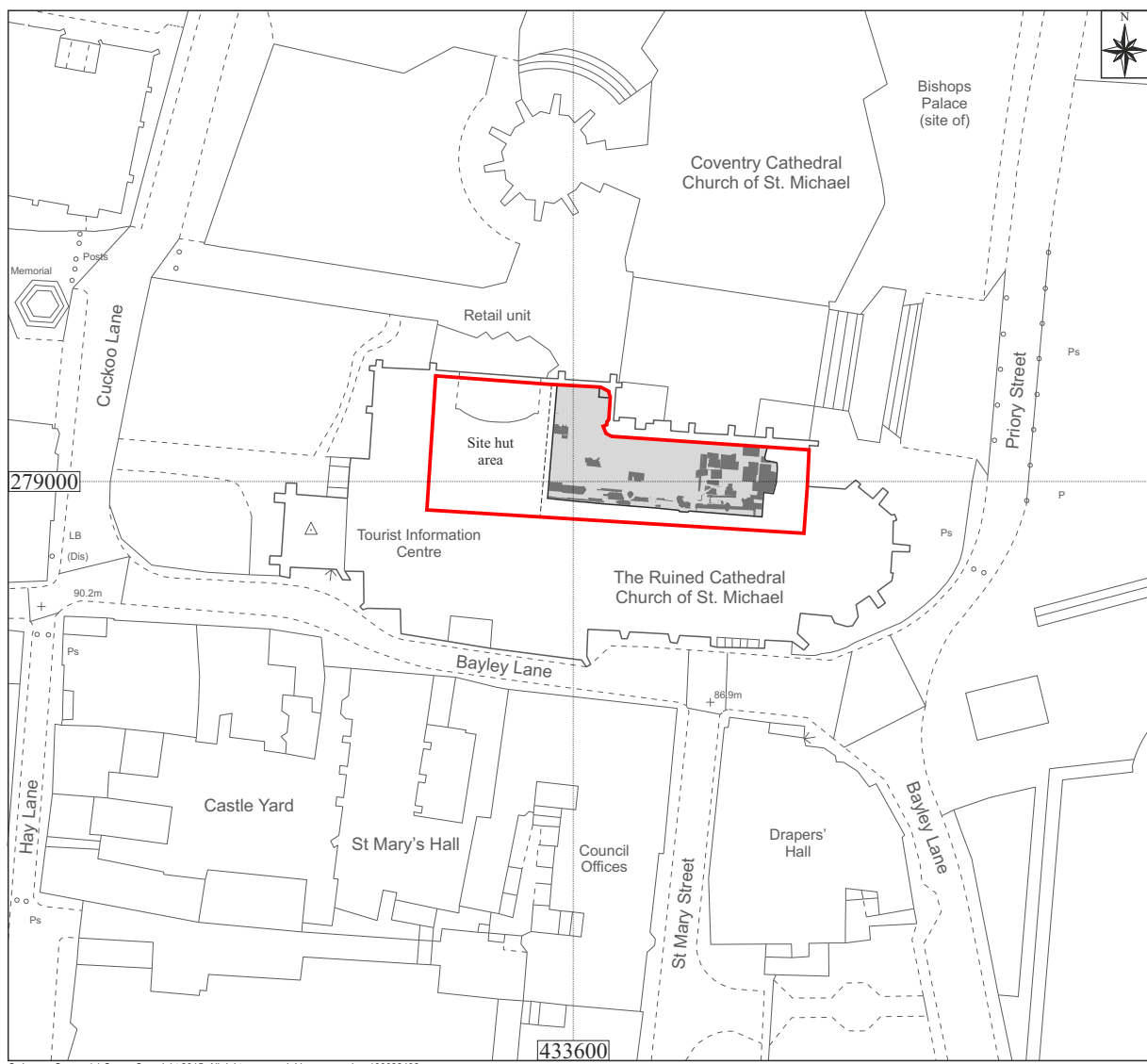
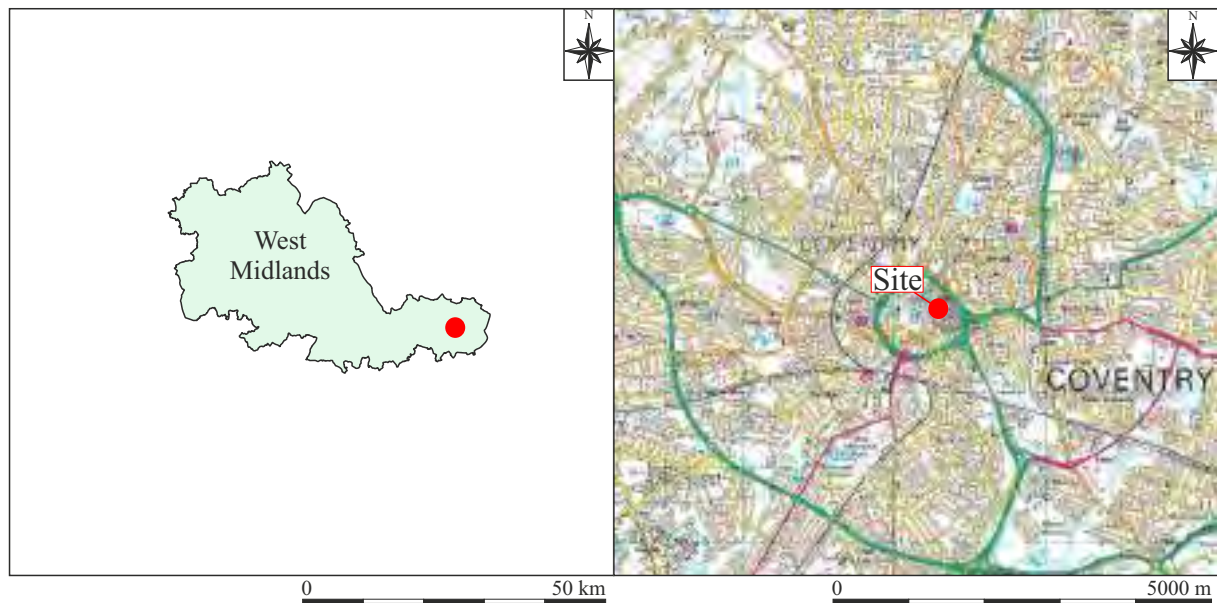
#### ***Topography***

The site is currently paved with York Stone (Plate. 1) and lies on relatively flat ground (c. 90m AOD) within the north aisle of the ruined cathedral.

### 1.2 Project Background

In March 2015 the Chapter of the Cathedral Church of St Michael, Coventry were given approval by the Church Fabric Committee (CFC) for:

- The uncovering of the possible concealed Crypt east of the Wyley chapel from above to be conducted by means of removal of the paving over and concrete slab and excavating the compacted fill within the possible Crypt. The sorting of the material excavated from within the Crypt and the storage of carved stonework sections.
- The removal of the existing paving to the floor of the ruins and the recording and disconnecting of the floodlights, wiring and distribution boards. The recording of the existing column stubs and planters to be set aside for reuse. The excavation of the substrate and the installation of a new waterproof membrane, together with a land drain extending around the perimeter of the Crypts. Waterproofing of the roofs to the existing Wyley Chapel and Chapel of the Cross and possible concealed Crypt. The reinstatement of the floodlights and wiring, together with the column bases following the work. The connection of a land drain to the surface water drainage channel adjacent to the Bookshop building.
- To undertake the excavation of 4No archaeological test pits prior to excavation of the crypts perimeter drain in order to inform on the instillation time of the new drain. And to undertake a watching brief during the excavations of a new drain and aisle floor including undertaking artefact assessment.



**Key**  Site boundary  Excavated area  Archaeological features

Figure 1: Site location

### **1.3 Archaeological Background**

#### ***Introduction***

Three archaeological investigations have been conducted within the cathedral and an investigation of the cathedral's fabric have been carried out. In October 2008 a bore-hole survey was conducted to examine structural problems in the north wall. In April 2009 five test pits were excavated under the supervision of Chris Patrick (Cathedral Archaeologist). In June 2009, Birmingham Archaeology conducted an endoscope survey of an exposed burial vault in the north-east corner of the cathedral.

#### ***Bore Hole Survey***

Two bore holes were drilled in 2008 (HER event record MCT 473) to investigate a bulge in the north wall. One horizontally through the north wall of the cathedral (BH1), the other vertically through the cathedral floor (BH2).

Bore Hole 1 established that the bulge in the wall was caused by ashlar blocks coming away from its rubble core. Bore Hole 2 found a possible brick lined grave or vault.

#### ***Test Pits***

In 2009 five test pits were excavated (HER event record MCT 473) through the cathedral floor, at the east end of the inner aisle, as part of investigations into water ingress into the east and west crypts and a bulge in the exterior wall of the aisle. The results are summarised here.

Test Pit 1 was placed within the south aisle of the cathedral. It was excavated to a depth of 0.41m. The test pit did not identify evidence for a pre-1940 floor. A rubble deposit was recorded at its base which was overlain by 0.02-0.04m of black ash. A further layer of rubble overlaid the ashy deposit which was sealed by a concrete slab, 0.1m – 0.12m thick.

Test Pit 2 was placed in the north-east corner of the cathedral. The test pit identified a 1m thick layer of crushed brick and rubble overlying a rubble layer containing melted lead and floor tiles.

Test Pit 3 was placed within the north aisle of the cathedral. The test pit identified a memorial stone surface at a depth 0.7m, overlain by rubble deposits.

Test Pit 4 was placed within the north aisle of the cathedral. The test pit identified compact sandstone rubble to a depth of 0.94m

Test Pit 5 was placed within the north aisle of the cathedral over the Chapel of the Cross. The test pit revealed the top of an arch forming the roof of the vault at 0.9m. This was overlain by 0.4m of sandstone rubble. The rubble was overlain by a tile floor.

#### ***Endoscope Survey***

In 2009, Birmingham Archaeology carried out an endoscopic survey of an exposed burial vault. The outer surface of the burial vault was uncovered at the east end of the north aisle of the quire as part of works undertaken on the modern floor.

The survey video feed provided limited visibility, although appeared to show three coffins, one with organic (human) remains. The west wall of the vault was also observed

and appeared to have been constructed from wood or concrete, banded with iron straps (Birmingham Archaeology 2009).

### ***Excavation through Wyley Chapel Window***

In December 2014, an excavation was conducted through the east window of the Wyley Chapel under the supervision of George Demidowicz. The excavation penetrated deposits to the east of the chapel by c. 1m.

The excavation recovered a limited quantity of worked stone, largely from mullioned windows, and a quantity of charnel. An ashlar wall (subsequently identified as a buttress, (see 4.5) was identified to the north. The corner of a brick vault and a crushed lead coffin containing human remains were revealed in section (see 4.6).

The report concluded that there was not a stone built vaulted crypt to the east of the Wyley Chapel and that the area was made (terraced) ground with later inserted earth cut burials and brick vaults.

## **1.4 Historic Background (by Kimberly Dowding)**

### ***Introduction***

This summary has been reproduced from the Historic Environmental Record Assessment on Coventry Cathedral (JMHS 2015), which is a summary of the Coventry Old Cathedral, Conservation Plan Report written by George Demidowicz (2013) and is designed to be read in conjunction with that report.

### ***11<sup>th</sup> Century Coventry***

Coventry is first mentioned in early 11<sup>th</sup> century when in the 1020s or 1030s Leofric, the Count of Mercia and his wife, Godiva founded St. Mary's Priory (Demidowicz 2013, 8). Although, Coventry is recorded within the Domesday Book of 1086, it appears as though only Godiva's estate, later known as the Earl's Half is recorded (Demidowicz 2013, 9).

Coventry is next mentioned at the beginning of the 12<sup>th</sup> century when it was divided into two areas, later known as the Earl's Half and the Priory Half (Demidowicz 2013, 9; VCH 1969, 1-23). Shortly after the division, Godiva's estate was granted to the Earl of Chester.

### ***Castle Chapel (12<sup>th</sup> Century)***

Although the full intentions of the Earl regarding Coventry's development are not known, it has been recorded that by 1140 a castle had been built within the Earl's Half (Demidowicz 2013, 10). In 1153, the castle was abandoned, and only a few buildings that have been associated with the castle remain (Demidowicz 2013, 10). Although the records indicate that the castle was within the vicinity of St. Michael's church, the exact location is unknown. Several suggestions and attempts have been made to locate the castle using the location of the associated building and various archaeological features that remain (Demidowicz 2013, 10; MCT232: SP 3355 7894; MCT212: SP 3364 7892; MCT2047: SP 3358 7894; MCT2048: SP 3350 7911; MCT 645: SP 3362 7891). Included within the archaeological evidence is a ditch that was identified under the north-east corner of St. Michael's tower during repairs in 1885 (Demidowicz 2013, 10/48).

The division within Coventry continued until 1250, when a deathbed charter from 1153 by Earl Ranulf II stated that St. Michael's and all other chapels that had or would be established within the Earl's Half of the priory would come under the control of St. Mary's Priory and the controlling power (Demidowicz 2013, 12). It appears to be around this time that St. Michael's Church started to be used to serve the general public in addition to Holy Trinity (Demidowicz 2013, 12). However, each half was preserved as individual parishes with Holy Trinity and St. Michael's serving each parish respectively (Demidowicz 2013, 14).

### ***St Michael's (Mid-12<sup>th</sup> Century)***

St. Michael's church is first recorded in 1144, however, the origins of the church is unclear. Demidowicz's (2013, 10) theory is that St. Michael's church was originally a castle chapel that eventually came to serve as a parish church after the abandonment of the castle. The theory is based on the fact that the ditch identified in 1885 would suggest that at least part of St. Michael's had initially been located inside the castle enclosure (Demidowicz 2013, 10; Fig. 5).

In 1250, St. Mary's Priory gained the lordship of Coventry, as a result of being granted the advowson of St. Michael's and its dependent chapels, which lead to the unifying of Coventry (Demidowicz 2013, 14). However, the priory held the lordship for only a century and in the mid-14<sup>th</sup> century an independent governing body was established in Coventry, but the Priory retained the advowson of St. Michael until 1539 (Demidowicz 2013, 19). The change in governance during the 14<sup>th</sup> century in Coventry was displayed in the construction of several new buildings and the rebuilding of various older buildings, including St. Michael's (Demidowicz 2013, 19).

As Coventry developed, it is recorded that the Guilds and Companies became more influential and responsible for various key changes, especially to St. Michael's church. In 1547 the Chantries Act was published, which resulted in the dissolution of religious guilds and chantries (Demidowicz 2013, 28). This had a large effect on Coventry as it lead to the end of the Trinity Guild based in St. Mary's Hall and the chantries in St. Michael's church (Demidowicz 2013, 28).

In 1836 the Archdeaconry of Coventry was absorbed into the Diocese of Worcester (Demidowicz 2013, 52). In 1860, local pressure started to build for a separate Coventry diocese, but it was not until 1908 the Bishop of Worcester constituted St. Michael's as a collegiate church or pro-cathedral (Demidowicz 2013, 52). Due to the First World War, it was not until 1918 that the Bishopric of Coventry was formally created. This lead to St. Michael's Church being elevated to cathedral status, with Bishop Yeatman-Briggs named as Coventry's post-Reformation bishop (Demidowicz 2013, 52).

The second significant mention of St. Michael is in 1153 when the church is part of the "deathbed" charter of Earl Ranulf II, who was in possession of the castle at the time of its abandonment (Demidowicz 2013, 9). As stated above, the deathbed charter from Ranulf transferred the advowson of St. Michael's to St. Mary Priory. This would indicate that St. Michael's was under the control of Ranulf, and likely to have been part of the castle enclosure.



However, it was not until 1249 that St. Mary's Priory gained control of St. Michael's Church as there was conflicting claims from the Earl of Chester and the bishops of Coventry as to the authenticity of the charter (Demidowicz 2013, 10).

Following St. Mary's Priory being assigned the advowson of St. Michael's church, the 12<sup>th</sup> century building was replaced in a demonstration of prestige and power by the Priory (Demidowicz 2013, 14). As a result of the Priory's actions the only way to clearly determine the location, size and additional features of the 12<sup>th</sup> century building would be through excavation work.

However, Phillip Chatwin has speculated the location and size of the 12<sup>th</sup> century building, which is generally the accepted theory (Demidowicz 2013, 14-15). Chatwin's paper that was written in 1928, places the 12<sup>th</sup> century chapel within the current nave in alignment with the two internal projections from the east elevation of the tower. It is also assumed that the projections would also indicate the width of the Romanesque and Early English Gothic naves, of the 13<sup>th</sup> century and later buildings (Demidowicz 2013, 15). Using an east-west axis the chapel would have been located to the west end of the current nave (Demidowicz 2013, 15). Chatwin moves the axis of the chancel to the north by a few degrees in order to conform to the surviving west crypt on the north side (Demidowicz 2013, 15). This misalignment was also visible within the 15<sup>th</sup> century building and has been noted in pre-World War Two photographs (Demidowicz 2013, 15; Figs, 56, 57).

#### ***St. Michel's (mid-13<sup>th</sup> Century)***

It appears as though St. Mary's Priory started to rebuild St. Michael's church from the mid-13<sup>th</sup> century onwards in the (then new) Gothic style (Demidowicz 2013, 16). As part of the work the 12<sup>th</sup> century nave and chancel were demolished to allow for the construction of arcades, connecting the north and south aisles (Demidowicz 2013, 16). However, as with the 12<sup>th</sup> century there are very limited remains of the 13<sup>th</sup> century building, with only the south porch connecting the south aisle to Bayley Lane and possibly a fragment of wall in the north aisle remaining (Demidowicz 2013, 16).

It is assumed that in comparison to the 12<sup>th</sup> century church, the width of the mid-13<sup>th</sup> century building was the same, but extended westwards to connect with the stubs in the east elevation of the tower (Demidowicz 2013, 16). It is unclear as to whether there was a tower during the 13<sup>th</sup> century; however, the position of the mid-late 14<sup>th</sup> century tower would indicate that it was constructed in relation to the narrower nave (Demidowicz 2013, 16).

#### ***14<sup>th</sup> Century***

In the 1370s the construction of the present day tower begun and heralded the complete architectural transformation of the church (Demidowicz 2013, p19: Figs. 7, 8). Documentary evidence shows that the funding for the construction of the tower was provided by Adam and William Botoner during the 1370s (Demidowicz 2013, 20). The design of the tower indicates that it was more a statement of power than an addition to the church and was designed to be associated with the narrower nave (Demidowicz 2013, 20). The tower was also built as a freestanding building with its own buttresses and was connected to the 13<sup>th</sup> century nave with a short section of wall (Demidowicz 2013, 20).

An additional aspect of the 14<sup>th</sup> century construction of the building is the roof. Although there appears to be no documentary evidence to indicate that the roof was replaced during the 14<sup>th</sup> century the low-pitch design was not used until the late 14<sup>th</sup> century (Demidowicz 2013, 20). Stonework within the tower would indicate that the roof was changed at the same time as the construction of the tower (Demidowicz 2013, 20). There are also a few records that indicate that, prior to this substantial rebuild, a small number of chantries were established; however, their locations are unknown (Demidowicz 2013, 19).

### ***15<sup>th</sup> Century***

The majority of the remains of St. Michael's church that are visible are from the rebuilding campaign of the 15<sup>th</sup> century, although the majority of the work is unspecified in the records (Demidowicz 2013, 22). It was during the 15<sup>th</sup> century that the nave and chancel were extended to the north and the new chancel and polygonal apse were constructed in an extension on the east side (Demidowicz 2013, 22). The extensions of the building were carried out to the north and east, as the south and west of the building was surrounded by existing buildings (Demidowicz 2013, 22). However, due to the sloping ground to the east, in order to extend the building the ground needed to be made level. This is made evident by the fact that the polygonal apse stands at a higher level than the surrounding ground (Demidowicz 2013, 23).

The misalignment of the church, previously mentioned, was continued in the 15<sup>th</sup> century building and is likely to have been the result of physical constraints, such as road alignments and property boundaries (Demidowicz 2013, 22; Fig. 8).

Using buildings of similar design it is possible to narrow the date of construction of the chancel and apse to *c.*1390 - *c.*1420, with the construction of the nave and the west porch between the 1430s and the 1440s (Demidowicz 2013, 23). Additional aspects of the building that have been dated to *c.*1430 include the completion of the octagonal belfry on the tower and the first time bells were hung in the steeple. Also the commencement of the spire has been dated to 1444 (Demidowicz 2013, 24).

The aisles which were constructed during the 15<sup>th</sup> century rebuild can only be determined in a limited number of places, including the north aisle which continued westwards to the northeast corner of the tower, as it is today (Demidowicz 2013, 25). In contrast, it is not possible to determine if the inner north aisle was constructed at the same time as the external one, or, as the evidence suggests, at a different time along with a north wall and possible porch (Demidowicz 2013, 25; Figs. 7, 8).

It is likely that at this time the north aisle was being constructed, the south aisle was extended from the vertical joint that is visible in the south wall (Figs. 26, 27) to a new eastern window; this extension is also identified in the changes of plinth in the eastern end of the aisle and by a small drop in roof level (Demidowicz 2013, 25).

### ***16<sup>th</sup> and 17<sup>th</sup> Centuries***

There are conflicting theories as to the date of completion of the 15<sup>th</sup> century phase of work carried out to St. Michael's, one of which is Monckton's theory that it ended with the completion of work to the north and south aisle (Demidowicz 2013, 25). In comparison, Sharp suggests that a separate campaign of work was started at the turn of the 16<sup>th</sup> century, with documentary evidence indicating the hiring of a master mason

(Demidowicz 2013, 25). Evidence of a separate building phases of the outer north aisle and the north chancel aisle is shown within the different style of windows and stonework used (Demidowicz 2013, 26). However, if the outer north aisle was constructed at a later date, the decision is likely to have been based upon the overwhelming demand for extra chapels (Demidowicz 2013, 26).

There is relatively limited information regarding the attitudes of the parishioners of St. Michael's to the reforms of the dissolution (Demidowicz 2013, 29). However, it is possible to assume that during the years following the dissolution the internal appearance of the church began to deteriorate, but it was not until the mid-17<sup>th</sup> century that the old practices ended (Demidowicz 2013, 29). Evidence of the continued practices can be seen within the records of the trading companies, including the Draper's Company, who continued to pay for maintenance and candles until the 1590s, before passing the responsibilities onto a churchwarden (Demidowicz 2013, 29). There are records from several companies indicating their possession of various chapels within St. Michael's, which meant that following the dissolution there was not a complete abandonment of the chapels (Demidowicz 2013, 30).

During the second half of the 16<sup>th</sup> century the interior of St. Michael's had severely changed, but it is unclear if this was due to violent acts of iconoclasm or by gradual deterioration and neglect (Demidowicz 2013, 31). By 1600, the pulpit replaced the altar, with the removal of the rood screen allowing the change and providing new views of the church (Demidowicz 2013, 31). In 1608 it was recorded that all the brasses within St. Michael's was stolen (Demidowicz 2013, 31). During the mid-17<sup>th</sup> century, any vestiges of the old religion left within St. Michael's were removed (Demidowicz 2013, 31). Box pews were also brought into the church, filling up what would have been primarily empty space during the medieval period (Demidowicz 2013, 31). In addition to the pews, galleries were constructed and in 1621 a new gallery was erected on the north side and the one on the south side was enlarged (Demidowicz 2013, 32).

There was a continued effort made by the craft companies during the 17<sup>th</sup> century to maintain and improve the chapels, but they most likely stopped using them at an earlier point (Demidowicz 2013, 32). The abandonment and demolition of the company chapels allowed for greater floor space for burials, and by the mid-17<sup>th</sup> century brick vaults had started to be left within the floor (Demidowicz 2013, 32). In addition to this the east crypt was being used as a place to deposit the bones removed from the floor and in the 17<sup>th</sup> century replaced the west crypt as the charnel house (Demidowicz 2013, 33). This allowed for the west crypt to be let as family vaults from the end of the 17<sup>th</sup> century onwards (Demidowicz 2013, 33).

### ***18<sup>th</sup> Century***

At the beginning of the 18<sup>th</sup> century the fabric of St. Michael's church had deteriorated a great deal and the parishioners were levied for repairs in 1706, 1715 and 1726 (Demidowicz 2013, 34). The majority of the money raised was spent on the interior of the church, including the erection of a gallery on the north side and the extension of the south gallery during the 1720s (Demidowicz 2013, 34). In 1730 it was decided that an additional gallery would be erected on the west side for an organ (Demidowicz 2013, 35: Fig. 54). In 1747 it was decided that the altarpiece would be raised; however

due to the fact that the proposed height would have blocked the doorway into the vestry, the new height of the altarpiece was lowered (Demidowicz 2013, 35).

By the mid-18<sup>th</sup> century, several aspects of the 15<sup>th</sup> century church had undergone several repairs and alterations, including the church spire which had been damaged four times by lightening (Demidowicz 2013, 36). In addition to this, in 1674 the bells were recast into eight and in 1774 the bells were recast into ten (Demidowicz 2013, 36). Due to the increased weight and number of bells it was decided in 1794 that the bells should be taken down and an internal frame constructed at ground level to provide additional support to the tower (Demidowicz 2013, 36).

### ***19<sup>th</sup> Century***

During the 19<sup>th</sup> century there was an increased interest in the church, which resulted in the increase of recorded information, including that of two major schemes of restoration (Demidowicz 2013, 37). The first phase of restoration consisted of the spire being re-pointed and the rebuilding of two corner pinnacles of the tower and the top 32 feet of the spire (Demidowicz 2013, 38).

At the beginning of the 19<sup>th</sup> century Richard Burgh left a legacy that was to be used to re-pew the church, but it was not until 1849 that the Vestry finally acted on this (Demidowicz 2013, 39). In addition to the replacement of the pews, a series of internal alterations and repairs were carried out. The work included the moving of the organ to a low platform and moving the pulpit to the south side of the church from the north (Demidowicz 2013, 40). The work continued in 1851, with the removal of coats of paint, colour washings and any medieval decoration that was not to the Victorian style (Demidowicz 2013, 40). Gas lighting was also introduced in 1851. In 1860, the 18<sup>th</sup> century altarpiece was replaced by a new gothic style altarpiece (Demidowicz 2013, 41-42).

Work on the exterior of St. Michael's was began in 1851 with an inspection of the tower and spire which revealed that it was unsafe to carry out bell ringing as the bell frame was using the tower for support (Demidowicz 2013, 42). Following the assessment, bell ringing was stopped within the tower in 1851 and did not start again until 1853 (Demidowicz 2013, 42). Sketches drawn by John Drayton Wyatt depict the proposed plans for the restoration of the tower, which began in 1853, and of the south side of the church in 1854 (Demidowicz 2013, 42-43). The work on the rest of the exterior of the building continued until 1870. The second phase of restoration work was carried out between 1885 and 1890 and focused primarily on the apse, vestry and the remainder of the exterior that was not dealt with in the first phase of work (Demidowicz 2013, 46). During the restoration work, the painted glass within the windows was replaced, following the alterations carried out after the dissolution (Demidowicz 2013, 45). This meant that the only medieval glass that remained in the church window was within two of the apse windows and a few of the higher windows in the nave clerestory (Demidowicz 2013, 45).

As a result of the two phases of restoration work carried out during the 19<sup>th</sup> century, there is very little of the medieval stonework and windows remaining of the exterior (Demidowicz 2013, 51). Of the medieval interior features, it appears as though only

the interior walls and piers remain; however, any contemporary or later painting or wall wash was probably removed during the restorations (Demidowicz 2013, 51).

During the second phase of restoration work it was revealed that the bedrock dropped off at the northeast corner of the tower and a test pit in the northwest buttress revealed that the ground was entirely made-up (Demidowicz 2013, 48). The exact nature of the drop in the bedrock is unclear; however, it has been suggested that it could be a quarry face or represent the medieval castle ditch (Demidowicz 2013, 48).

In 1926 the bells were removed from the tower and re-cast into 14, following a court case to try to keep the bells as they were (Demidowicz 2013, 53). Apart from the re-casting of the bells there were very few changes carried out to St. Michael's from 1900 to the mid-1930s (Demidowicz 2013, 53). The next significant change that occurred within St. Michael's was carried out in 1936 and consisted of removing the work from the 1860s, re-facing the walls, altering the levels of the sanctuary floor and heightening and lengthening the altar (Demidowicz 2013, 54). During the work, several previous layers of flooring from the Victorian period were revealed and two 18<sup>th</sup> century vaults containing coffins were discovered in the chancel (Demidowicz 2013, 54).

### ***Crypts and Burials***

As St. Michael's Church is likely to have been placed within the castle enclosure, it is assumed that the church did not have a cemetery when it was established. However, it appears as though the church was granted burial rights within the common cemetery and constructed a small dependant chapel called St. Mary for use as a mortuary chapel (Demidowicz 2013, 13).

As stated, the castle was abandoned after 1153 and the land then used for development of the town, which resulted in the area to southeast, south, southwest and west of the church being occupied by buildings. This meant that when the church expanded it had to be to the north (Demidowicz 2013, 13).

In addition to rebuilding St. Michael's church, after 1249 the Priory divided the communal cemetery into two burial grounds with each half attached to either St. Michael's or Holy Trinity. Mapping from 1675 onwards demonstrates that the burial ground immediately north of the church belonged to St. Michael's and was separated from Holy Trinity's burial ground by Cuckoo Lane (MCT2362: SP 3353 7902) (Demidowicz 2013, 16).

On the north side of St. Michael's there are two crypts that have been dated to the 13<sup>th</sup> century (Demidowicz 2013, 16). The general assumption, based on documentary evidence is that the west crypt was added *c.*1300 by the Draper's Company, which was responsible for a chapel associated with the church. The records indicate that the chapel was referred to as the altar of St. Mary or the Lady Chapel (Demidowicz 2013, 17).

A second chapel was recorded within the records of the Trinity Guild, dated to the same period and also referred to as St. Mary (Demidowicz 2013, 17). Due to this, it is not always clear which chapel is being referred to within the records.

The chapel belonging to the Draper's Company is still recorded after the Dissolution of the Guilds in 1547, whereas the chapel belonging to the Trinity Guild is recorded for the last time in 1538-9. Therefore, it is possible to assume that the chapel of the Trinity Guild was demolished prior to the dissolution. However, a second theory is that the Trinity Guild's chapel was converted into one of the crypts below St. Michael's (Demidowicz 2013, 18).

It is also suggested that the western crypt was originally part of the 14<sup>th</sup> century chapel and charnel house in the cemetery, which replaced the 12<sup>th</sup> century St. Mary mortuary chapel (Demidowicz 2013, 18). The records and design of the buildings indicates that it was later incorporated into the north aisle of the church and formed the west crypt. It is possible that the replacement of the 12<sup>th</sup> century chapel was commissioned by the Draper's; therefore the west crypt would have belonged to the Draper's Company.

Records also state that during the 14<sup>th</sup> century an extension on the east side of the chapel of St. Mary on the Hill in the Cemetery, which belonged to the Drapers, was made and was dedicated to the All Saints (Demidowicz 2013, 21). Therefore, it is likely that the west crypt was the charnel house of St. Mary and the east crypt was that of the All Saints (Demidowicz 2013, 21). As stated the west crypt was dated to the beginning of the 14<sup>th</sup> century, whereas the different style and construction of the east crypt would date it to the late 14<sup>th</sup> century. Evidence of the eastern end of the church is visible within the south wall of the south aisle in the form of a vertical joint, which coincides with the eastern end of the eastern crypt (Demidowicz 2013, 21).

During the expansion of the church into the cemetery, the mortuary chapel of St. Mary became incorporated into the north side of St. Michael's in the 15<sup>th</sup> century (Demidowicz 2013, 13). When the chapel was incorporated into the church the upper storey of the two-storeys was demolished and the building became part of the north aisle (Demidowicz 2013, 13). A new chapel was built by the Drapers to the east of the original chapel that had been incorporated into the north aisle of the church (Demidowicz 2013, 24).

It was possible to pay for an intramural internment beneath the church floor, and by the 16<sup>th</sup> century the floor was mostly likely densely covered by the stone slabs indicating the location of the burials (Demidowicz 2013, 27). Due to the high demand for intramural inhumations, burials would normally only remain within the church floor for a century or two, before being moved to the charnel house (Demidowicz 2013, 27-28). There were a number of private burial vaults used by the wealthiest, but their locations are unknown (Demidowicz 2013, 27).

In the late 18<sup>th</sup> century the buildings located to the south and west of the church were demolished and the land was taken into the graveyard and consecrated (Demidowicz 2013, 36). However, by the end of the 18<sup>th</sup> century the graveyard was severely overcrowded and in 1793 the garden of the former bishop's palace was bought to provide an extension (Demidowicz 2013, 37).

As part of the restoration work, parts of the floor within the church were covered over with soil and a new tile floor was laid over, resulting in the preservation of several of the grave slabs (Demidowicz 2013, 41). The covering of the floor meant that the area

of space that could be used for burials was reduced. In addition to this the two crypts on the north side of the church were emptied of the bones that had been placed inside when clearing space within the floor for new burials (Demidowicz 2013, 41).

In 1848, St. Michael's Vestry ordered that the only burials allowed to be conducted within St. Michael's was to be vaults and brick graves, due to the overcrowding of the graveyard (Demidowicz 2013, 44). Due to the passing of the Coventry Corporation Act 1844, a new cemetery was opened on the edge of Coventry and allowed for the enforcement of the closing of St. Michael's and Holy Trinity cemetery (Demidowicz 2013, 43-44).

Little is known about the state of the crypts following the restoration work in the 19<sup>th</sup> century, other than that the west crypt was emptied and restored as a memorial chapel for former churchwarden Sir William Wyley, whose ashes were interred in the chapel (Demidowicz 2013, 53-54).

### ***World War II***

At the beginning of World War Two, precautions were taken to protect the remaining fragments of the medieval glass within the windows by placing them in storage in the cellars of Hampton Lucy (Demidowicz 2013, p55). During the removal of the glass, photographs were taken, which along with photographs from 1933 were the first visual records since a series of engravings from the mid-17<sup>th</sup> century (Demidowicz 2013, 55).

On the night of 14<sup>th</sup> October 1940 an incendiary bomb landed on the roof of the cathedral and having melted the lead started a fire (Demidowicz 2013, 55). Although this fire was extinguished, on the same night the cathedral was hit again by three incendiaries. The result was a rapidly expanding fire that destroyed the roof and caused the collapse of the walls of the nave, chancel, clerestory, arcade and parts of the vestries (Demidowicz 2013, 55, 56). In addition to the structural damage, various fixings, furniture and vestments were destroyed; however, some items were saved, including the parish records from 1820 onwards (Demidowicz 2013, 56).

The crypts suffered little damage during the fire due to their stone vaulted roofs, which remained intact (Demidowicz 2013, 56). However, due to the loss of the main building, the crypts started to leak and eventually had to be covered with a concrete cap (Demidowicz 2013, 56).

### ***Post World War II - Modern***

Following the fire, restoration work started almost immediately, with the Wyley Chapel used as a place of worship until 1958 (Demidowicz 2013, 56). In January 1941, a new altar was commissioned out of the rubble on the site of the destroyed one, in addition to making the remaining masonry safe and waterproof (Demidowicz 2013, pp56-57). In March 1941 during the work, a fragment of wall painting was revealed in a corner of the wall of one of the old chapels and is thought to date from the 1330s in the St. Mary chapel (Demidowicz 2013, 57).

It was decided on 17<sup>th</sup> March 1941 that a new cathedral would be built either on the site or new to the original building (Demidowicz 2013, 57). Following advice from the Central Council for the Care of Churches, it was also decided that repairs and

retention would be carried out on the surviving outer walls and the spire (Demidowicz 2013, p57). On 9<sup>th</sup> March 1942, the decision was made to build on the existing site and incorporate the ruins into the new cathedral (Demidowicz 2013, 57).

However, while decisions and plans were being made, smaller work was continually carried out on the ruins, including converting the south porch into a chapel for visitors (Demidowicz 2013, 58). Additional work included the construction of a small, stone mono-pitch structure over the stairs to Wyley Chapel, providing blast protection and protection from rainwater (Demidowicz 2013, 58). A small timber kiosk was also placed beneath the tower and three paths cleared through the rubble (Demidowicz 2013, 58; Fig 64).

In 1945 the west crypt was converted into a small temporary chapel that could hold up to hundred people, called the Chapel of Unity (Demidowicz 2013, 58). As part of the conversion the floor of the Girdlers' Chapel was excavated in order to unblock the ancient north doorway (Demidowicz 2013, 58). On completion of the excavation a stone porch with a door was built over the staircase in order to protect it from the elements (Demidowicz 2013, 58).

Although an application was made in 1945 to the Ministry of Works to have the rubble removed, the work was not carried out until 1947 as the labour needed was being focused on dealing with the damage caused in London (Demidowicz 2013, 58-59). During the clearing of the rubble some of the stones went to the Parks Department in order to build a rockery for Coventry's Memorial Park (Demidowicz 2013, 59). However, it appears that not all the rubble left the site and some was deposited in the vault immediately east of Wyley Chapel (Demidowicz 2013, 59).

The design of the new cathedral was not agreed upon until 1951 and was designed by Basil Spence. The design consisted of two parts, the first part was the construction of the new building and the second was the preservation of the ruins of St. Michael's (Demidowicz 2013, 59). The new building was set along the north-south axis of the ruins and was originally designed to overlap the ruins; however, this was changed and the new building was set back and connected to the ruins by a canopy (Demidowicz 2013, 59).

In 1948 the floor of the cathedral ruins were covered in ash with some areas covered with topsoil and turf, and the remainder of the floor laid out as gravel pathways, based on advice from the Harlech Commission (Demidowicz 2013, 59-60). Six hallowing places were also established around the perimeter of the outer walls as interpretations of the former guild chapels (Demidowicz 2013, 60).

Between 1948 and 1953 work was carried out of the tower and bells and included the replacement of the electrical chiming mechanism (Demidowicz 2013, 60). During this time several attempts were made to reintroduce a full peal, but were rejected based on concerns for the structural stability of the tower (Demidowicz 2013, 60).

In February 1952, an investigation was carried out by Spence and Philip Chatwin into the condition of the ruins and possible remedial actions (Demidowicz 2013, 60). It



was established that a great deal of work needed to be carried out, which was started on the 26<sup>th</sup> August 1952 (Demidowicz 2013, 61).

Construction of the new cathedral started in June 1954 and included the removal of trees from the mid-1850s and the exhumation and burial of human remains in other parts of the cemetery (Demidowicz 2013, 61). The construction of the new cathedral was completed in 1962, with the consecration of the new cathedral on 25<sup>th</sup> May. However, the majority of the work within the ruins continued until 1963, with very little changes occurring after this date (Demidowicz 2013, 64).

A few of the changes that took place after 1963 included that 12 of the bells from 1927 were moved to a lower part of the tower; this allowed them to peal (Demidowicz 2013, 64). In addition to this, the vestry, which had been restored during the 1950s, was re-roofed and the ventilation within the crypts increased (Demidowicz 2013, 64).

In 2008 English Heritage funded the removal of the slabs over the crypts and the drilling of a series of holes to investigate the damp penetration, which was followed by an endoscope survey in 2009 (Demidowicz 2013, 64-65). The survey from 2009 revealed that there was a burial in the Lady/Draper's Chapel (Demidowicz 2013, 65). Additional repair work was carried out to the ruins from 2000 to 2013.

## **2 AIMS OF THE INVESTIGATION**

The aims of the investigation as stated in the Brief for a Programme of Archaeological Works at Old St. Michael's Cathedral, St. Michael's Avenue, Coventry (Patrick 2014) were to:

- Retrieve information on the development of the medieval church, particularly whether the Chapel of the Virgin Mary was a standalone building or an attached part of the 13<sup>th</sup> century church
- To identify any concealed crypts and investigate their location, extent and condition
- If further crypts are identified, to investigate those buried within them and the potential for the remains to inform on Coventry's past populations
- To retrieve information on undocumented changes made to the ruined cathedral after the bombing of 1940.

## **3 STRATEGY**

### ***Introduction***

A Written Scheme of Investigation (WSI) was produced for the archaeological works and approved by Chris Patrick (Cathedral Archaeologist). Site procedures followed CIfA guidelines.

The excavation of 4No test pits against the external perimeter walls of the Chapel of the Cross and the Wyley Chapel to test the postulated phasing of the development of St Michael's.

A watching brief to be carried out during the excavation of a trench prior to the insertion of a drain. The lifting of the current aisle surface and associated (post WWII) make up layers, and other intrusive works with the potential to disturb archaeological remains or deposits.

To establish the presence, or absence, of a third subterranean crypt to the east of the Wyley Chapel. The emptying of the concealed crypt (if required) with the aid of a suitable machine under the supervision of an archaeologist.

All archaeological features and deposits were recorded by written, drawn, stratigraphic and photographic record. All significant artefacts were collected and retained. Deposits, structures or features to be left in situ were recorded as found.

A full photographic record of the trenches was completed using 35mm format black and white film, and digitally.

Items of gold or silver found during the excavation may be subject to the Treasure Act 1996 and subsequent revisions, and the client and the relevant Portable Antiquities Officer will be informed immediately of their discovery.

Prior to the works commencing an OASIS record of the work was initiated.

### ***Notes on the Report***

Four test pits were excavated (see above) to test the postulated phasing of the development of St Michael's and to provide information relevant to the drainage works. The test pits were subsequently, and entirely, incorporated in the drainage works and removal of the concrete layers. In affect the test pits were re-recorded using the excavation recording system. Where relevant context numbers assigned in the test pits were re-assigned contexts using the excavation numbering system. As such the results from the excavation become redundant and are not included in the report.

The report has been written stratigraphically and in defined historic phases as detailed in Coventry Old Cathedral, A Conservation Plan by George Demidowicz (2013). This report draws heavily on the Conservation Plan and it may be helpful if read in conjunction with it.

## **4 RESULTS**

### **4.1 PHASE 1. (c. 1100-1200)**

#### ***Introduction***

The north face of a wall (168), aligned E-W, was exposed within the south drainage excavation, at its west end. A sondage was excavated to fully expose the face and establish its depth. The sondage also exposed the geological horizon, which was the only place the geology was identified during the works, and established to be 1.4m below the current ground surface at 87.58m AOD.



*Plate 1. General view of excavation area within the eastern end of the north aisle (over the crypt of St Laurence and in the area of Draper's or Lady Chapel) Girdler's Chapel is far left. View to east.*

### ***Wall Foundation 168***

Wall foundation 168 was revealed on the south-west side of the drainage trench excavation (Figs 2, 3; Sects. 16, 18; Plate. 2), aligned east-west. It was visible for a length of 7.5m and survived to a maximum height of 1.18m (88.72m - 87.58m AOD). The southern side of the foundation extended beyond the excavation and only 0.28m of its width was visible in plan. It survives at 0.3m (88.72m AOD) below the current ground level.

The geological horizon (221) was identified within a sondage place to investigate construction cuts of Wall 168 and Wall 171 (Fig. 3; Sect. 18). Cutting the geological horizon (221) to the south was the construction cut (189) for wall foundation 168. Only 0.1m of the cut was visible as it had been truncated to the north by the construction cut for Wall 171 (Phase 2 below).

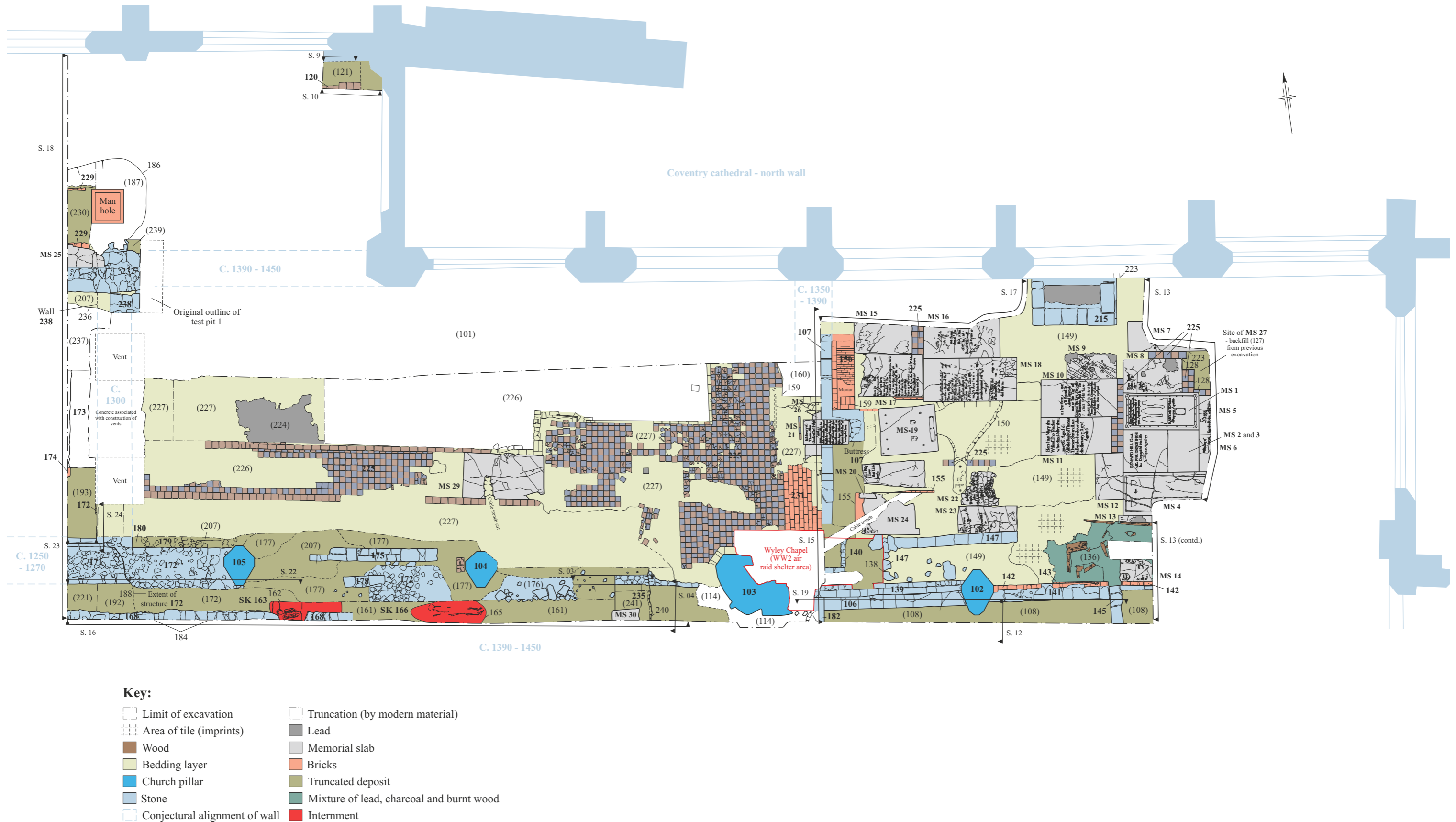


Figure 2: Plan of excavated areas



The foundation wall was constructed from very roughly hewn, reddish brown sandstone (average dimensions 0.38m x 0.2m x 0.2m - maximum 0.54 x 0.22m x 0.18m), laid in random courses and earth bonded with a reddish brown sandy silt (Fig. 3; Sect. 16).

The eastern extent of the wall had been truncated by Grave 162. A homogenous deposit (161), in which Grave 162 is cut, was identified to the east and almost certainly represented the backfills of numerous intercutting graves that have truncated the wall to below the depth of the drainage trench. Both graves cut wall/foundation 172, and therefore, stratigraphically have been assigned to Phase 3 (see 4.2).

### ***Feature 184***

Wall 168 had also been truncated by a shallow feature (184) which may have represented a shallow grave. This was aligned east-west (Fig. 3; Sect. 16) and measured 1.3m in length and was 0.4m in depth. The observed width was just 0.28m, the southern extent of the feature was beyond the southern limit of the investigation. The feature was filled with soft, mid reddish brown sandy silt (185), containing frequent fragments of slate from a broken memorial stone, and moderate quantities of tile and charnel (including a fragment of skull).



**Plate 2.** Wall 168. Note: Grave cut 162 (upper left) and probable Grave 184 (centre). Wall 171 (bottom centre) and Wall 172 (left) are also visible. Deposits over the roof of the West Crypt (far left middle) are also visible. View to south-east.

### ***Summary***

Wall foundation 168 almost certainly represents an element of the 12<sup>th</sup> century Castle Chapel, or the chapel itself. The precise location of the chapel is unknown, although logically speculated to be within the nave, in alignment with two internal projections in the east elevation of the cathedral tower (Domidowicz 2013, 15; Fig. 8). If the speculated location of the Castle Chapel is correct, logically, the foundations are likely to represent an aisle on the north side of the chapel's nave, estimated to be c. 3.5m in width. Aisles were commonly added to naves, providing more congregational space, facilitate procession and provide a setting for side chapels (Rodwell 2012, 76). Some

aisles in the 12<sup>th</sup> and early 13<sup>th</sup> centuries were little more than 1.5m wide, in contrast to aisles in the later Middle Ages which could be as wide as the nave (Rodwell 2012, 76). Other, perhaps less likely, interpretations for the foundations should be considered. It is possible the wall represents a side chapel. It is also possible that the foundations represent the north wall of the Castle Chapel itself, and its speculated position is incorrect.

Whilst no dating evidence was recovered directly relating to Wall 168, three sherds of pottery dating to the 12<sup>th</sup>-14<sup>th</sup> centuries was recovered from the backfill (190) of the construction cut (191) for Wall 171, immediately to the north. The backfill (190) comprised soft/loose, mid grey brown silty sand with 2-4% fragmented charnel inclusions; interpreted as representing a re-deposited grave yard soil accumulated against the north face of Wall 168, therefore, providing an associated date for Wall 168.

The morphology of Feature 184 certainly suggests it represents a grave cut. The backfill of the feature contained charnel and fragmented remains of a (slate) memorial stone, which support this interpretation. It is likely that the grave was disturbed and any memorial stone relocated during the laying of a new floor in 1849 (see 4.10), when an account by Poole (Poole B. 1870), 'questions the extensive pulling down and removal of monument and tombstone, and changing their places entirely'.

## **4.2 PHASE 2. (c. 1250-1270)**

### ***Introduction***

Truncating the construction cut (189) for foundation wall 168 to the south, and the geological horizon 221, was construction cut (191) for wall 171 (Fig. 3; Sects. 18, 23; Plates. 3, 4). Construction cut 191 was vertical, gently breaking to a base sloping to the north. The construction cut had been excavated flush with the north face of Wall 168, and almost certainly respected it (Fig. 3; Sect. 18). Wall 171 survives at 0.48m (88.54m AOD) below the current ground level.

### ***Wall 171***

Wall 171 was aligned east-west, parallel to, and c. 0.72m to the north of Wall 168. The wall survives to a maximum height of 1.2m, and 1.74m of its length was observed. The base of the wall was established within a sondage to the south, although due to health and safety constraints it was not possible to investigate the full depth of the wall to the north.

Wall 171 is estimated to be 1.3m wide at the base, although not fully revealed. It was 1.08m wide at its highest point. The south face of the wall was constructed from roughly hewn, reddish brown sandstone (average dimensions 0.38m x 0.26m x 0.12m), with two small foundation steps; each measuring 0.28m in height, with 0.04m stepped offsets (Fig. 3; Sect. 18; Plate. 2). The north face was constructed from four courses of sandstone 0.68m in height (as seen). The lower two courses were constructed from roughly hewn sandstone, whilst the upper two courses have been constructed from dressed stones with 45° bevel chamfers, 0.42m in height. The height of the two chamfer courses differ; the top course was 0.24m high, the lower 0.18m high (Fig. 3; Sects. 23, 24; Plates. 3, 4).





*Plate 3. Walls 171 (left) and 172. The truncation of Wall 171 to the east by Wall 172 is clearly visible.*



*Plate 4. North face of wall 171 with chamfer courses. View to south.*





**Plate 5.** Detail of buttress scar (arrow) on north face of Wall 171, cut to east and abutted to north by Wall 172.

A slight bulge on the otherwise flat chamfer of the upper course (Plate. 5) almost certainly represent the scar of a buttress, removed to accommodate the construction of wall 172. Interestingly, the buttress would have aligned with an extant buttress in the 15<sup>th</sup> century north porch wall, and a possible buttress in Wall 232 (see Phase 5).

The wall's construction cut was backfilled with three distinct deposits (190, 192 and 222; Fig. 3, Sect 18), all tipping from the south. The lowest (222) comprised moderately compact, mid reddish brown silty sand, 0.32m thick, clearly representing re-deposited geology. This was overlain by a soft/loose, mid grey brown silty sand (190), 0.24m thick, and containing 2-4% small and fragmented charnel. The character of this deposit, especially the fragmented human remains and loamy nature, strongly suggest it represented a re-deposited graveyard soil (or disturbed grave fill) that had accumulated on the north side of Wall 168 between the 12<sup>th</sup> and mid-13<sup>th</sup> centuries. This deposit produced four sherds of pottery, representing two vessels, dated between the 12<sup>th</sup> – 14<sup>th</sup> centuries. The final deposit (192) comprised moderately compact, mid reddish brown sandy silt, 0.92m thick. This deposit contained up to 15% sandstone rubble (average dimensions 0.2m x 0.2m), and is likely to represent rejected material from the dismantling of the 12<sup>th</sup> century wall (168). To the north, the wall is partly abutted by the north-south alignment of Wall 172, whilst cut (188) to the east by its east-west alignment (Figs. 2, 3; Sect 22; Plates, 2, 4; see Phase 3 below).

### **Summary**

The location of Wall 171 has been correctly surmised in the conservation plan (Demidowicz 2013, Fig 8) and almost certainly represents the c. 1250-1270 north aisle wall of St Michael's church, although, the excavation has revealed that the wall was truncated, probably around 1300, by the construction of the Chapel of the Virgin Mary



(west crypt). The wall relates to a phase of re-building, in the new Gothic style, soon after the middle of the 13<sup>th</sup> century (Demidowicz 2013, 16).

The wall was built free standing with a chamfered offset on the north side and small stepped foundations on the south. The north face of the wall would have been visible, whilst the south face was built within a construction trench that has been partly terraced into the geology, and deposits accumulated to the north of wall 168. In this particular case, space for construction is more limited than would be typical for a free standing wall as the construction cut almost certainly respects the earlier 12<sup>th</sup> century wall (168), leaving just 0.7m of building space between them.

Chamfer plinths generally replace the square projecting basements of the Romanesque style in the 12<sup>th</sup> century. Chamfer courses have two functions, aesthetic and practical: aesthetically the chamfer softens the break between horizontal ground and the vertical wall. The practical aspect of the chamfer was to prevent water collecting at the base of the wall and entering the joints (Bond, 1905, 403).

The scar identified on the north face of the wall, whilst very slight, almost certainly represents a buttress that has been removed to accommodate the construction of the West Crypt in the 1300s. Small, narrow buttresses are a recognised feature of Gothic architecture, enabling taller buildings with thinner walls, although in this case the width of the buttress was not defined.

Four sherds of pottery were recovered from the wall's construction cut backfill (190), broadly dating from the 12<sup>th</sup> – 14<sup>th</sup> centuries. It is highly likely that the construction cut truncated deposits accumulated on the north side of the 12<sup>th</sup> century wall (168). Deposit 190 was characteristic of an accumulated graveyard soil or grave fill, loose and grey with fragmented charnel inclusions. The sherds are from a jug and an unglazed jar which were all in good condition, with no evidence of abrasion. The sherds were entirely of Coventry 'A' Ware, fabric Sq202, commonly recovered from sites in and around Coventry. The unglazed jar has extensive external sooting.

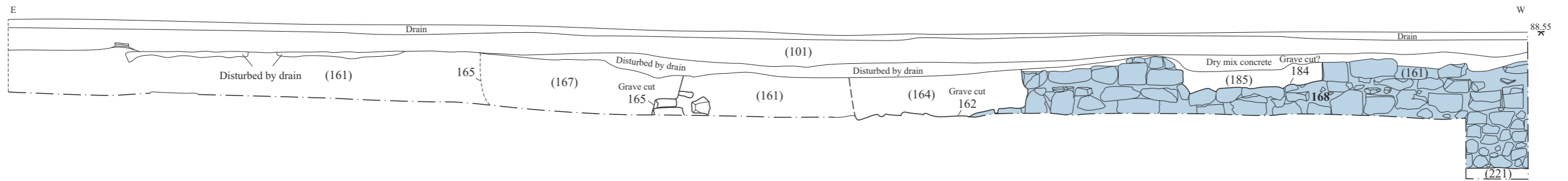
### **4.3 PHASE 3. (c. 1300)**

#### ***Introduction***

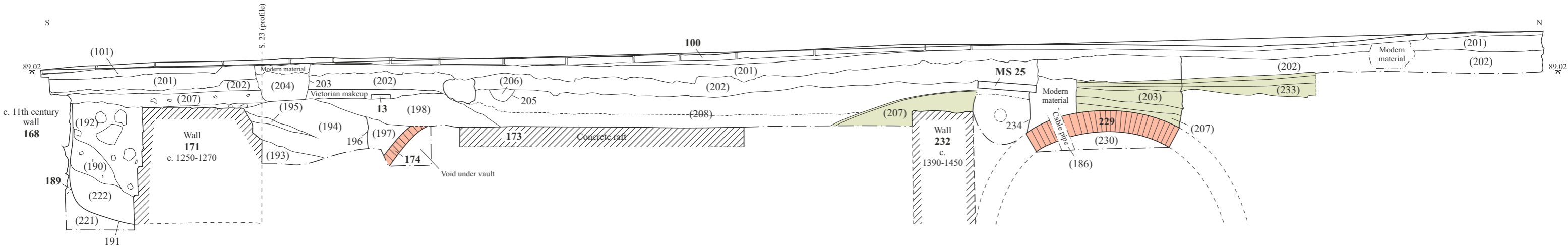
Two walls were identified forming the internal southwest corner (172) and the western wall (238) of the West Chapel (Chapel of Unity) within the southern and western alignments of the drainage excavation. The wall also probably formed a levelling deposit for a contemporary floor, and subsequently the foundation for the 15<sup>th</sup> century supporting pillars (102-105). Two graves (165, 162) were identified as cutting the foundation structure (172) to the east.

Construction cut 188 for Wall 171 truncated the eastern extent of Wall 171. The construction cut was irregular, cutting wall 171 on a northeast alignment in plan (Fig. 2; Plates. 2, 4), and was near vertical in section (Fig. 3; Sect. 22).

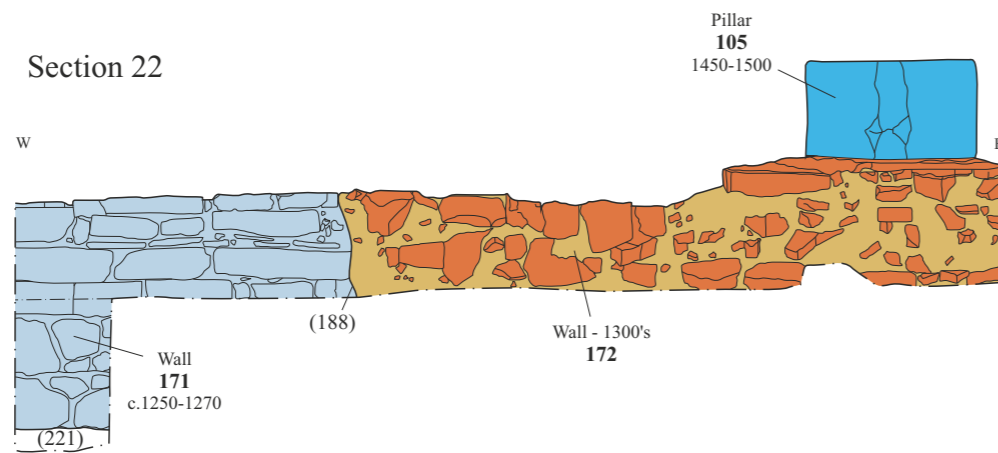
Section 16



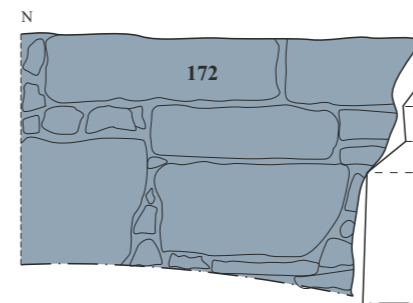
Section 18



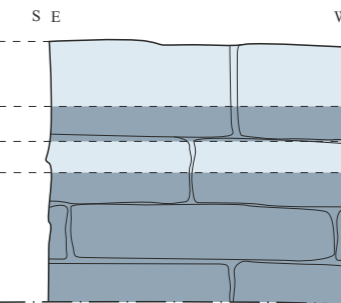
Section 22



Section 24



Section 23



Key:

- Limit of excavation
- ▨ Chamfer face
- Stone wall
- Church pillar
- Brick
- Mortar
- Sandstone
- Floor bedding

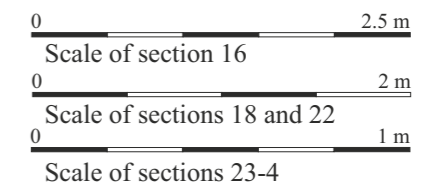


Figure 3: Sections

**Wall 172**

The east-west alignment of Wall 172 was 1.8m wide and revealed at a depth of 0.6m (88.76m AOD) below the current ground level. It was constructed from un-hewn sandstone blocks (average dimensions 0.35m x 0.35m x 0.35m). The wall (as seen) was un-coursed and earth bonded with reddish brown sandy silt. The internal southwest corner of the West Chapel was visible on the north side of the wall (Fig. 2; Plate 5). The north face of the wall was only revealed to a depth of 0.16m, although clearly constructed from dressed sandstone. Two deposits (179, 180), representing levelling layers over the vaulted roof of the West Crypt, were confined by Wall 172 (Fig. 2; Plate 5). Deposit 179 comprised small sandstone fragments (average dimensions 0.12m x 0.1m x 0.1m) in a matrix of mid reddish brown sandy silt with occasional mortar particles. The deposit was likely to have derived from rejected material during the construction of the crypt. Deposit 180 appeared to overlie 179, and was localised within the corner formed by the wall. This deposit comprised soft, mid reddish brown clay that may have been deliberately laid in an attempt to water seal the crypt.

On the north-south alignment of Wall 172 a small section of the west face of the wall was revealed, to a depth of 0.7m. Here the wall abutted the north, chamfered, face of wall 171 (Fig. 3, Sect. 24).



**Plate 6.** Walls 171 and 172. Note the SW corner (mid left) of the West Crypt formed by wall 172, contains deposits (179, 180) overlying the crypt roof. Wall 171 in foreground. The division between Walls 171 and 172 is clearly visible.



The west face of Wall 172 was constructed from roughly hewn reddish brown sandstone blocks, varying in size from 0.1m x 0.12m – 0.5m x 0.28m, laid in random courses and earth bonded.

### **Wall 238**

The continuation of the north-south alignment of wall 238 (=172) was identified *c.* 7m to the north (Fig. 2), within the drainage trench. The wall survives at 0.75m (88.47m AOD) below the current ground level. Wall 238 was only revealed in plan and had been disturbed by the construction of an air vent (236) for the West Chapel.

The northern extent of the wall appears to have been truncated by the construction of Wall 232 (see Phase 5 below). Its visible dimensions were, 0.6m (N-S) x 0.8m (E-W), although a large rectangular sandstone block (Plate 7. visible on left) almost certainly represented part of the wall disturbed during construction of an air vent, making the wall originally 1.2m wide, and in alignment with the west face of Wall 172. It was constructed from roughly hewn sandstone (average dimensions 0.3m x 0.3m) laid in random courses (as seen), and bonded with a pale yellow/brown sandy mortar.



**Plate 7.** N-S Wall 238 (Test Pit No 1/12) to left, truncated (?) by E-W Wall 232 (Test Pit No 1/10) centre. Possible buttress to north of Wall 232 is just visible. Note modern disturbances- West crypt's air vent to south, man-hole (186) to north. View to west.

### **Summary**

Walls 238 and 172 represent the south and west walls of the subterranean west crypt, considered to have been constructed around *c.* 1300 (Demidowicz 2013). The eastern extent of the mid-late 13<sup>th</sup> century north aisle wall (171) was dismantled to accommodate the construction of the crypt. It appears that the crypt and chapel above were a northern extension to the 13<sup>th</sup> century church, rather than a standalone building, although this is only suggested in the relationship between the late 13<sup>th</sup> century and south crypt walls. The abutment of the two walls is flush and it appeared that some effort had been made to bond them together. It also appears that when the church was

expanded north in the late 14<sup>th</sup>-mid 15<sup>th</sup> centuries the northern end of the west crypt was removed to accommodate its construction, although not clearly established in the excavation.

#### **4.4 PHASE 3.1** (*Post c. 1300 Burials*)

##### ***Introduction***

A substantial deposit (161) was identified in the south run of the drainage trench (Figs. 2, 3; Sect. 16). The deposit was moderately compact, although with frequent loose voids, mid reddish brown sandy silt with 35% mixed sandstone rubble and up to 15% small fragmented charnel. The deposit was up to 0.50m in depth and revealed for 14m east-west within the sections of the drainage cut (Fig. 3. Sect. 16). The deposit appeared to represent homogenised intercutting grave fills, although only two graves (162 and 165) were identified within it, although their cuts could not be clearly defined. The deposit corresponds with truncation to the western extent of the 12<sup>th</sup> century wall (168).

Two inhumations (163, 166) were revealed in the south drainage trench. Both graves had been cut into the southern extent of wall foundation 172, although must have respected the above ground wall built on the foundations that would have formed the south side of the upper, Chapel of the Virgin Mary.

As can be seen in Plates 8 and 9, the burials were in a narrow trench (0.9m) at a depth of c. 1m, which hampered excavation somewhat.

##### ***Grave Cut 162, Skeleton 163***

Grave cut 162 was revealed at a depth of 0.92m below ground level (88.32m AOD). Only part of the western end of the cut was visible, with the northern and southern extents extending beyond the limit of excavation (Fig. 4). The eastern end of the cut had been truncated, probably by a later, deeper grave, although this was not confirmed. The northern end of the cut truncated Wall 168, which was also visible at its base. A large stone (0.54m x 0.18m, as seen) appeared to have been placed at the western end of the grave, perhaps as a pillow stone, although possibly random.

Skeleton 163 (Figs. 3, 4; Sect. 16; Plate. 7) comprised the upper left torso, with the lower torso being truncated, probably by a later, deeper, undefined grave. The remains were likely to be of a male, with a number of factors indicating it was in the older age range (see 6; Human Skeletal Remains). The bone was in a very poor and soft condition, with longitudinal cracking on some of the bones, indicative of wet/dry conditions and the weight of overlying rubbly soils.

There was no evidence for a coffin, in the form of wood stains or iron nails, and no shroud pins were recovered. This almost certainly indicates this was an earth cut grave and the remains were wrapped in an unfastened shroud. The damage and condition of the remains are probably a result of the relatively rubbly backfill (from truncation of Wall 172?) of the grave settling and crushing the remains and periodic water infiltration.

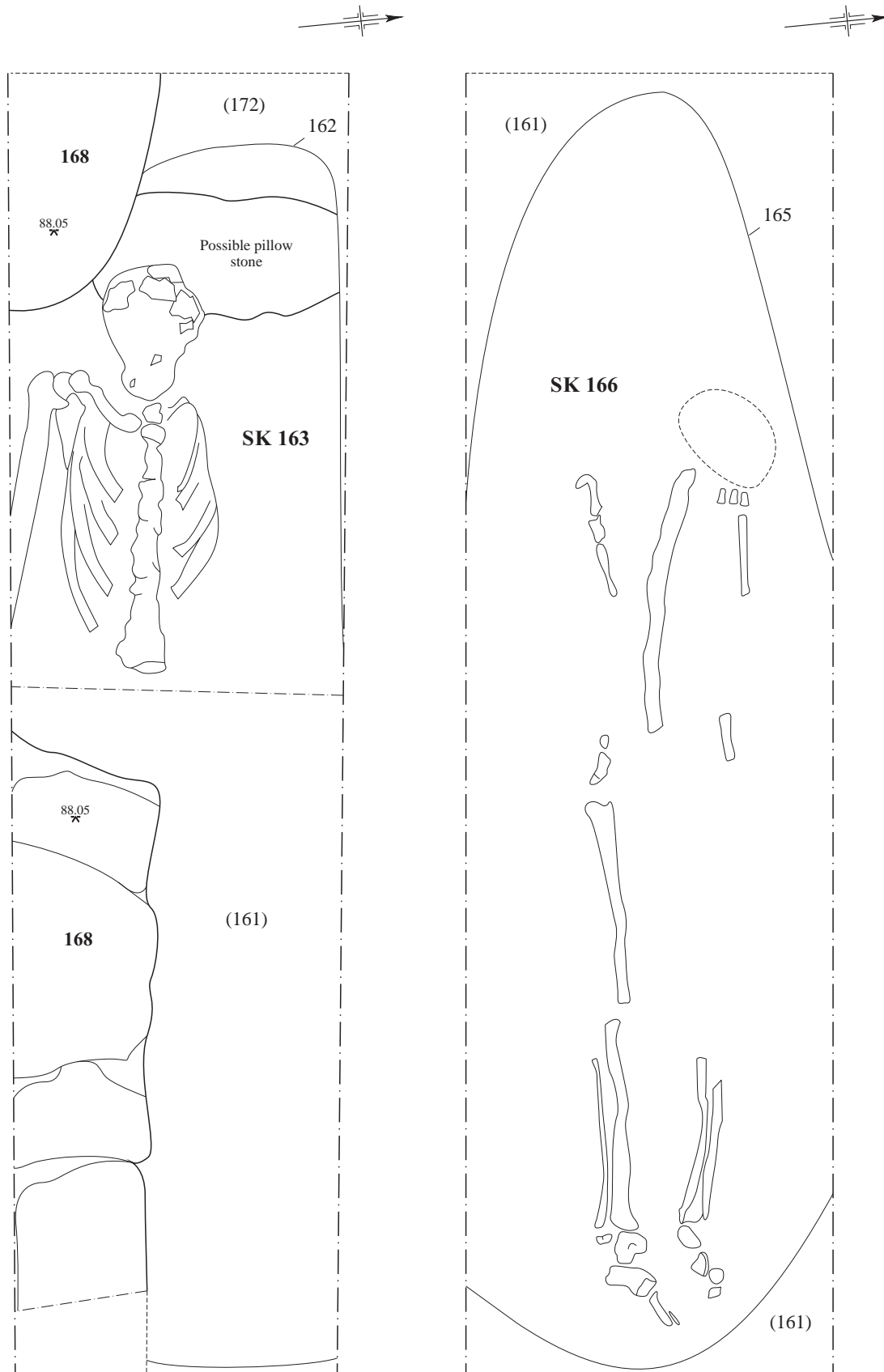


Figure 4: Burials



**Plate 8 (left).** Skeleton 163. Pillow stone just visible below skull. Wall 168 is visible top left. Wall 172 to right. View to west. **Plate 9 (right).** Skeleton 166. Wall 172 to right. View to west

#### **Grave Cut 165, Skeleton 166**

Grave cut 165 (Figs. 3, 4; Sect. 16; Plate. 8) was revealed at 1m below the current ground level (88.29m AOD). Only the northern extent of the grave cut was identified (Fig. 4), which appeared to be sub-rounded. The cut appeared to truncate wall 172 to the north, although not clearly defined within the confines of the excavation.

Skeleton 166 was 25-50% complete, although most parts of the skeleton were represented. The remains were identified as a female aged between 42 and 87. Nine teeth were recovered and the low dental attrition on the maxilla molars possibly indicates a diet low in refined sugars. As with skeleton 162, the bones displayed longitudinal cracks indicative of wet/dry conditions. The cranium had a 'tide' line of calcified product. This is commonly seen where the body has lain in a water-tight environment during the process of decomposition. Again, there was no evidence for a coffin or shroud.

#### **Summary**

Walls 172 and 232 clearly formed the south and west walls of the West Crypt. The location of the walls forming the West Chapel have been correctly surmised in the Coventry Cathedral Conservation Plan (Demidowicz 2013), which attributes a *c.* 1300 date to its construction. Logically, and almost certainly, the north-west corner of the West Crypt would have been buttressed. It appears that this buttress has been removed to accommodate construction of a north aisle wall between *c.* 1390-1450 (see Phase 5). There was no evidence to suggest the north wall of the West Chapel was replaced, therefore, the *c.* 1390-1450 wall must key into the north wall of the West Chapel, probably immediately to the east of the excavation.



Evidence from the Drapers' company records published in 1818 (No 238), reveal that: 700 indulgencies for 720 days, for the building the Chapel and Charnel house of St Michael, Coventry, dated at Rome, the 8 year of Pope Boniface (Anno 1300), (Sharp, T, 1818).

The human remains have been stratigraphically assigned to Phase 3 (*c.* 1300) as they clearly cut the southern extent of wall foundations 172 (and wall 168 in the case of cut 162). In addition, they would have respected the south wall of the Chapel of the Virgin Mary (if they predate its demolition in the 14<sup>th</sup> century), whilst also cutting into the stepped foundations of the chapel's south wall. Obviously, the burials could belong to any post *c.* 1300 phase of the cathedral's medieval development. They have certainly been buried either within the north aisle of the post *c.* 1300 church or the nave of the post *c.* 1390 church. Despite the limited survival and poor condition of the remains it was possible to identify them as a female aged between 42 and 87 years old, and a mature male. The teeth recovered from both sets of remains suggest a diet of soft food, low in refined sugars. In conclusion, the individuals have been buried within the body of the church and appear to have had a basic diet, perhaps indicating they had a religious function of some standing or were wealthy or notable individuals.

#### **4.5 PHASE 4. (*c.* 1350-1390)**

##### ***Introduction***

During the removal of the post war and modern concrete layers at the eastern area of the excavation, the void created during excavations through the south-east window of the East Crypt (Demidowicz 2015) was revealed. This exposed most of the eastern elevation of Wall 107 (Fig. 5, Sect. 15, Plates. 10, 11). A west facing section was also exposed (Fig. 6. Sect. 14. Plate. 13; see Phase 5). The crypt's south window, with small recessed niche above, and buttress were exposed. In addition, the lower cill and two pedestals for jamb columns for the east window of the (above) Chapel of All saints were also revealed (Fig. 5; Sect. 15; Plates. 9, 10).

##### ***Wall 107***

Wall 107 survived at *c.* 0.6m (88.83m AOD) below the current ground level. The wall was exposed to a depth of 1.6m (86.51m AOD), the base of the wall was not reached. It was 0.9m thick and constructed from reddish brown, ashlar sandstone (average dimensions 0.7m x 0.24m), laid in dry parallel courses. The buttress (Plate. 10) was 0.8m wide and extended east by a maximum of 0.74m. The east face of the buttress had been completely removed, leaving a rough broken surface, presumably between 1390 and 1450 when the cathedral was expanded to the east, and the ground to the east of the crypt was raised (see Phase 5 below). It was noted that the wall was not exactly horizontal. The cill at the northern end of the wall was at 88.61m AOD, 0.22m lower than to the south (88.83 AOD). The cause of the walls slumping was not evident during the investigation, although the Coventry Cathedral Conservation Plan (Demidowicz 2013, Figs. 5, 7) logically speculates that the northern extent of the mid-12<sup>th</sup> century, castle ditch runs in a broadly east-west curve beneath the current cathedral's north wall, close to the northern end of Wall 107. If the position of the ditch has been correctly speculated then the settling of the ditch fills over time is very possibly the cause of the wall's slumping. Two irregular, but generally vertical cracks through the wall (Fig. 3, Sect. 15) were almost certainly a result of the wall's slumping. The cracks were up to 0.11m wide and mostly followed vertical joints in the ashlar coursing, although one of



the ashlar blocks face had broken. Also, on the eastern side of the window, the surface of three to four courses of the ashlar stonework had been damaged, although the cause of this was not evident.



**Plate 10.** Wall 107. East elevation of the East Crypt. Crypt window, statue niche, buttress and bottom of the window cill for upper structure (chapel of All Saints) are visible. Pillar 103 in background, steps into crypt are just visible. View to SW.

The southern extent of the wall had been modified for the construction of an entrance and steps into the Wyley crypt for its use in WWII as an air raid shelter (see Phase 10).

A cut (159) was identified in section, just above the wall to the north (Fig. 5, Sect. 15). This clearly related to repair/waterproofing of the crypts, and two of the joints in the upper cill have been filled with a bituminous seal. Cut 159 truncates deposits dating to the Victorian period and two memorial stones (Nos 15 and 17). The cut relates to a phase of waterproofing carried out in the mid-20<sup>th</sup> century (see Phase 11).

### ***Wyley Crypt Window***

The window was 0.6m wide, 1.2m high. The northern and upper edges of the window were chamfered, although the chamfered edge on the south side had broken away (see below). A niche in a trefoil shape was situated centrally above the window, measuring 0.32m high and 0.18m wide, and recessed by 0.5m. The carving of the niche crossed lateral and horizontal joints in the ashlar, indicating the wall niche was a later addition. At some point the window has been blocked with bricks and sandstone blocks, although only the lower courses remain (the blocking was largely removed in 2014 during the excavation through the window, (Demidowicz 2015).

### ***Upper Windows***

The cill and two pedestals for jamb columns relating to the east windows of the contemporary upper chapel of the Virgin Mary were recorded (Figs. 5, 7).

The two windows (apparently) divided by the buttress to form windows of differing widths. The north window was 2.46m wide, the south 1.8m wide. The reason for the windows being asymmetrical is unclear.

### ***Summary***

The Coventry Cathedral Conservation Plan (Demidowicz, G, 2013) correctly surmises the location of Wall 107, which attributes a mid-late 14<sup>th</sup> century date to its construction. The cill and two pedestals for jamb columns conclusively establishes that there was a contemporary upper structure with asymmetrical windows, (apparently) divided by a buttress. The north end of the wall was established as being 0.22m lower than its south end.

It has been suggested that the 12<sup>th</sup> century castle ditch was almost directly beneath the north wall of the current church, c. 3m to the north (Demidowicz 2013, Fig. 8). Logically the construction of the structure's foundations would have been constructed onto solid geological deposits to provide a solid base, countering any subsidence, although evidently not the case here. It can be speculated that the slight but significant subsidence is due to it being constructed over the relatively soft fills of the castle ditch which would have probably settled over time.

It can be speculated that the asymmetrical windows were mirrored on the south side of the church. If the speculated apse (Demidowicz 2013, Fig 8) is relocated to a more central position (in relation to the current cathedral) the overall eastern elevation of the mid-late 14<sup>th</sup> century church may have been symmetrical. Although, without further intrusive archaeological investigation this remains purely speculative.





*Plate 11. Wall 107 buttress. Vault 156 visible behind buttress. Memorial stone No 21 above. View to north.*



Figure 5: Wyley Chapel east elevation

#### **4.6 PHASE 5. (c. 1390-1450)**

##### ***Introduction***

Immediately to the north of, and abutted by, Wall 238 (see Phase 5), at the northern end of the west drainage trench, a wall (232) aligned east-west and forming the northern aisle wall of the church in the late 14<sup>th</sup> early 15<sup>th</sup> centuries, was recorded (Figs. 2, 3; Sect. 18; Plate 7). The wall survives at 0.75m (88.47m AOD) below the current ground level. A putlog hole (223) was partially revealed on the inside of the extant north wall of the current, c. 1390-1450, cathedral. A further wall (235) was identified towards the east end of the south drainage trench excavation at c. 0.4m (88.77m AOD) below the current ground level, and to a depth of 0.9m (the base of the wall was not established) relating to the construction of an access into the East Chapel and to steps within Pillar 103.

During the removal of the post-war and modern concrete layers at the eastern area of the excavation, the void created during excavations through the south-east window of the East Crypt (Demidowicz 2015) was revealed. This exposed a west facing section (Fig. 6; Sect. 14; Plate. 13), revealing a deposit (169) relating to the terracing of the topography when the church was expanded east in the late 14<sup>th</sup> – early 15<sup>th</sup> centuries. In addition two brick vaults and an earth cut grave was exposed (see Phase 7).

##### ***Wall 232***

Wall 232 (Figs. 2, 3; Sect. 18; Plate. 7) was constructed from roughly hewn, reddish brown sandstone (average dimensions 0.3m x 0.25m), and earth bonded with a reddish brown silty sand. The wall appeared to be faced to the south, although only 0.15m of the face was exposed. Its construction also appeared to have truncated the northern extent of Wall 238, (which abuts it to the south) forming the west wall of the West Crypt.

The wall extended beyond the excavation to the east and west. It had been truncated to the north by a modern man-hole (186) and a cable trench. A 17<sup>th</sup> - 18<sup>th</sup> century brick vault (229) abutted the north side of the wall (Fig. 3; Sect. 18; see Phase 7).

##### ***Wall 235***

Wall 235 (Fig. 6; Sect. 3; Plate. 12) was 0.28m wide, as seen (the north face was not revealed). It was generally constructed from roughly hewn, reddish brown sandstone, although a single dressed stone was used (Plate 12), and earth bonded with a sandy silt. The western extent of the wall had been truncated by a cut (240) which represented at least two graves (see Phase 6).

##### ***Pillar 102***

A small sondage was excavated adjacent to Pillar 102 (Fig. 8, Sects. 12 and 19), beyond the impact of the drainage works, to establish its depth and record the associated stratigraphy. The sondage established the base of the pillar to be 0.52m (88.12m AOD) below the general excavation horizon. The pillar was sat on a foundation stone 0.12m thick and stepped by 0.1m. Two layers of soil and rubble (108, 124) had been deposited against the south face of the pillar, and against Wall 141, relate to the raising of the floor in the 19<sup>th</sup> century (see Phase 8).



***Deposit 244***

A deposit (244) accumulated against the south face of Wall 235 appeared to represent a backfill associated with the construction of steps into the Wyley Crypt, although not confirmed within the confines of the excavation. Deposit 244 comprised moderately compact, dark reddish brown sandy silt with up to 35% sandstone rubble and 5% fragmented charnel, 0.9m in depth (as seen).



*Plate 12. Wall 235 (centre) cut by grave(s) 240 to west. Base of Pillar 103 (upper right) View to NE.*

***Terracing Deposit 169***

The void created during excavations through the south-east window of the East Crypt (Demidowicz 2015) roughly measured 1.2m x 1.2m, and 2m in depth. It was exposed during the removal of concrete layers 100 and 101. The west facing section created by the excavation was also revealed (Fig. 6; Sect. 14; Plate 13). The section revealed a deposit (169) relating to the terracing of the topography when the church was expanded east in the late 14<sup>th</sup> – early 15<sup>th</sup> centuries. The original excavation void was expanded to the north to fully define a buttress in Wall 107 (see Phase 4). This also partly exposed the south side of a brick vault (156), and a further brick vault (155) was partly exposed to the south. A grave (151) containing a lead coffin (170) and capped with Memorial Stone No 20 was also visible (see Phase 7, 17<sup>th</sup> – 18<sup>th</sup> Century Vaults and Memorial Stones).

Deposit 169 was revealed to a depth of 2m (85.95m AOD) from the current ground surface. The deposit comprised moderately compact, mid reddish brown silty sand, with frequent inclusions of charnel, which was predominantly undamaged and comprised mostly long bones (as opposed to fragmented), and a moderate amount of sandstone rubble. The exposed area of the deposit was relatively limited, measuring 1.3m in width, 1m in depth, having been truncated by a later earth cut grave and two brick vaults. The depth of the deposit was not established, although likely to correspond to the base of the East Chapel, calculated to be c. 3.88m (85.73 AOD) below the current ground level.

The deposit was sealed by a make-up and bedding layer (149) for Victorian tile surface 125, and at least some of the memorial stones (MS Nos.17, 19, 20).



**Plate 13.** Section 15. Deposit 169 cut by Brick Vaults 155 (right) and 156 (just visible to left), and earth cut grave (151), containing lead coffin (170) and Memorial Stone No 20 (top).

### ***Put-Log Hole 223***

A rectangular hole (223) was partially revealed in the extant north wall of the cathedral ruins, where the 18<sup>th</sup> century surface (149) had slumped/settled by *c.* 0.15m (see Phase 7, *Topography*). The hole appeared to have been roughly chiselled into the wall, measuring 0.18m x 0.1m (as seen). The hole extended into the wall by *c.* 0.22m (as probed with a pin). The hole was filled with a loose soil containing 3% of relatively large pieces (0.06m) of carbonised wood. The west side of the hole was partly obscured by grave 215, which is probably of 17<sup>th</sup>-18<sup>th</sup> century date.

### ***Deposit 114***

A deposit (114) forming the foundation for Pillar 103 was recorded in the south drainage excavation (Fig. 8; Sect. 19). The deposit comprised compact, mid reddish brown sandy silt with up to 80% sandstone rubble. To the east the deposit appeared to be retained by Wall 182 (see below), although this relationship was only partially revealed and not conclusively established.

### ***Wall 182 and Pillar Steps 103***

Wall 182 was only partially revealed within the drainage excavation (Fig. 8, Sect 19). The wall was observed at a depth of 0.52m, and was 0.66m wide (as seen). The wall was formed from dressed, reddish brown sandstones laid in random parallel courses (three courses), bonded with a pale brown lime mortar. A single tile had been utilised in the construction of the wall, possibly to fill a small gap. To the north the wall appeared to be either abutted by, or perhaps truncated by Wall 139 (Fig. 2), the relation could not be established, although, it was clearly abutted by Wall 106 to the east. To the west a substantial foundation deposit (114) for steps in Pillar 103 was recorded,



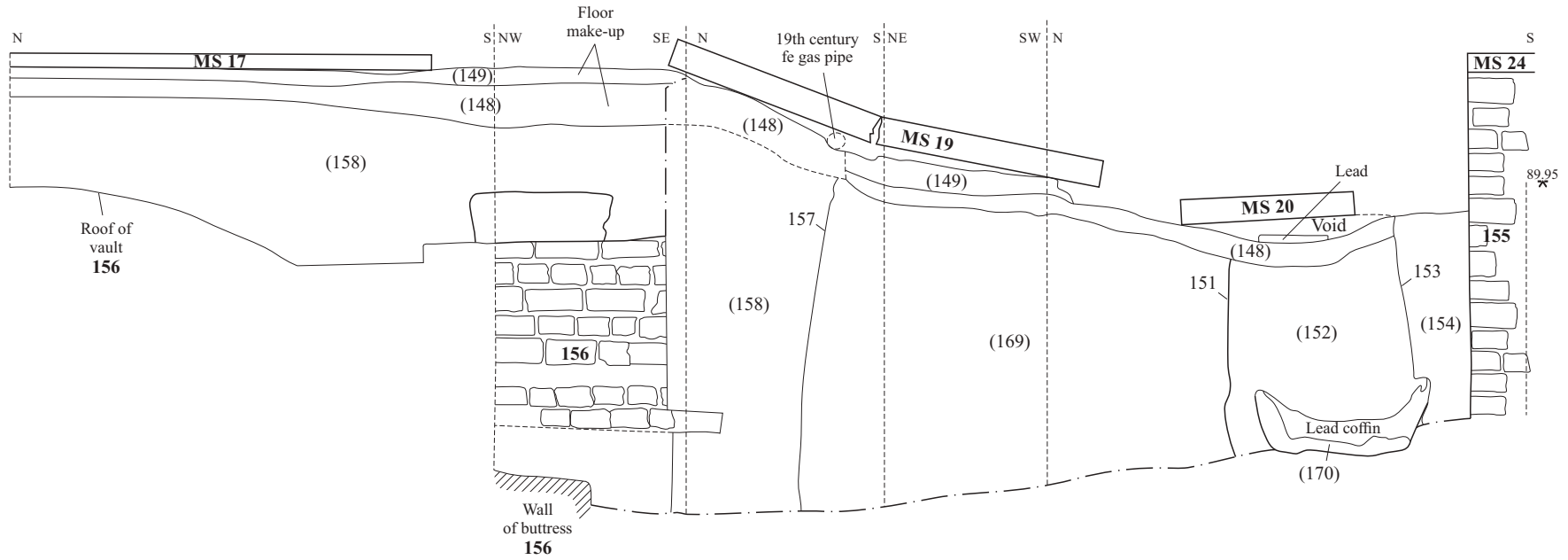
which appeared to be retained to the east by Wall 182, therefore contemporary with the foundation deposit.



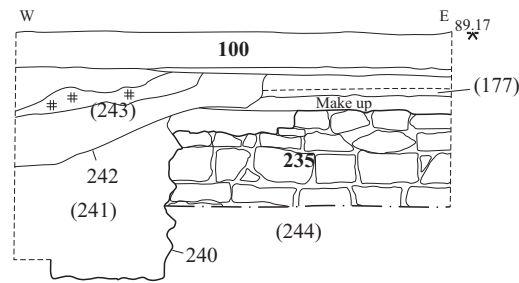
**Plate 14.** Steps/Pillar 103 (top middle) over foundation deposit 114. Boarded entrance to the East Crypt is visible on right side of pillar. Wall 182 abutted to east by Wall 106 (bottom middle) and retaining deposit 114. Concrete 101 to right. View to west.



Section 14



Section 3



Key

# Charcoal



Scale of section 3



Scale of section 14

Figure 6: Sections

### **Summary**

Structural remains relating to the *c.* 1390-1450 phase of the cathedral's development was exposed in three places. The north wall (232) of the north aisle and the wall (235) forming the south side of steps down into the East Chapel were identified. The base of Pillar 102 was also established. Wall 232's location has been correctly surmised in the Coventry Cathedral Conservation Plan (Demidowicz 2013), which dates this phase to the late-14<sup>th</sup> - mid-15<sup>th</sup> centuries.

Very little of Wall 232 was exposed and there was not an opportunity to investigate it in detail, although it did appear to truncate the north end of Wall 238 (west wall of West Crypt), opposed to being keyed into it. It is probable that Wall 238 was buttressed, in line with the buttress in Wall 171, and a buttress in the extant late 15<sup>th</sup> century north porch wall (Fig. 2), which would require dismantling to accommodate the construction of the north aisle wall (238). There was slight but convincing evidence that Wall 232 was buttressed, again in line with buttresses in the *c.* 1250-1270 and the *c.* 1450-1500 walls, and probably the *c.* 1300 wall (238). The evidence implies the north wall of the West Crypt was removed to accommodate the construction of the north aisle wall during the church's expansion in the late 14<sup>th</sup>– mid 15<sup>th</sup> centuries.

Wall 235 undoubtedly forms the south wall to steps into the East Chapel and is clearly seen in a measured plan and cross-sections produced by J Oldrid Scott in 1885 (Demidowicz 2013; Fig. 36). The staircase was probably constructed following the demolition of the Chapel of All saints, as a papal petition from 1449 – 1450 relate to work already carried out, providing a '*terminus ante quem*' for construction of the main body of the church (Demidowicz, 2013, 24).

Deposit 169 conclusively confirms the results of the excavation through the East Crypt window carried out by George Demidowicz in 2014. The report concludes that the area to the east of the East Chapel did not contain a stone vault (Demidowicz 2015) but was built up, terraced ground, which has been cut by later burials and 17<sup>th</sup> – 18<sup>th</sup> century brick vaults; and supporting a grave slab pavement representing the church's original floor level, in use from the 14<sup>th</sup> to the early 19<sup>th</sup> centuries (see Phase 7).

The put-log (223) hole is probably related to the construction of the *c.* 1390-1450 phase of the cathedral's development. It clearly pre-dates stone grave 215, which is undated, although likely to be 17<sup>th</sup> or 18<sup>th</sup> century in date. The possibility that the put-log hole represents a structural element to the small subterranean vault identified in the endoscope survey (Birmingham Archaeology, 2009) in the northeast corner of the aisle, that has clearly suffered some collapse, should be considered.

Wall 182 and the foundation deposit 114 for Pillar 103 appear to be contemporary. The possibility that the wall forms the eastern end of the *c.* 1350-1390 phase of the churches development is a possibility, although it does not exactly align with Wall 107, rather it is offset to the west by 0.3m. In addition, the east face of the wall was roughly hewn opposed to the well-dressed ashlar stones forming Wall 107. It is also possible that the wall relates to the rising of the chancel floor in the 19<sup>th</sup> century (see 4.9), although unlikely.

#### **4.7 PHASE 6. (c. 1450-1500)**

##### ***Introduction***

No structural remains were identified during archaeological monitoring relating to this phase of the cathedral's development. At least two burials (not numbered) were identified which clearly truncate the wall (235) related to steps into the East Crypt (see Phase 5) constructed in the late 14<sup>th</sup> – mid 15<sup>th</sup> centuries and, therefore, stratigraphically have been assigned a post 1390-1450 phase.

##### ***Post c. 1390-1450 Burials***

Both deposit 244 and Wall 235 were cut to the west by at least two graves (Fig. 6, Sect. 3). Cut 240 was partly excavated within a narrow (0.5m) slot on the north side of Test Pit 4, although stopped in agreement with the Cathedral Archaeologist when the articulated remains of a hand(s) and feet, belonging to separate individuals were exposed in section, at the base of cut 240 (1.3m BGL, 87.87m AOD). The human remains clearly extended beyond the limit of excavation to the south and west, and were below the impact level of the drainage excavation. The grave cut was backfilled with a moderately compact (with loose voids), mid reddish brown sandy silt (241), with 20% - 30% charnel and 5% sandstone rubble. Six floor tiles, or fragments of, were recovered from the backfill (see 5.4.1); all dated to the mid-13<sup>th</sup> and 14<sup>th</sup> centuries, three of which were decorated and three plain. This deposit was undifferentiated from deposit 161 (see Phase 3 above) and probably represents the same phase of activity. The human remains were left *in-situ*, protected and the excavation backfilled.

Although the full depth of Cut 235 was only investigated within a narrow slot it was evident from the surface of the excavation. Here the cut was 1.4m wide and aligned north-south. This would almost certainly indicate a row of graves within the nave of the post mid-15<sup>th</sup> century church.

##### ***Summary***

The burials were identified in a narrow, deep slot and could not be investigated in any detail, although clearly related to at least two individuals, with phalange bones relating to feet and hands identified in close proximity. The proximity of phalange bones from both hands and feet almost certainly indicates the disturbance of an earlier inhumation by at least one later grave, although probably within an established row of burials within the nave of the c. 1450-1500 church.

The floor tiles, which must have been disturbed during burial, provide good evidence that the mid-13<sup>th</sup> and 14<sup>th</sup> century church floor comprised decorated and plain tiles.

This phase of the churches development relate to the construction of the north and south porches in the mid-15<sup>th</sup> early 16<sup>th</sup> century (Demidowicz 2013, Fig 8).

#### **4.8 PHASE 7. (17<sup>th</sup> – 18<sup>th</sup> Century Vaults, Memorial Stones and Structures)**

##### ***Introduction***

An excavation was carried out at the east end of the cathedral to establish whether a third sub subterranean crypt exists to the east of the East Crypt. The excavation comprised the mechanical excavation of deposit relating to levelling the floor in the 19<sup>th</sup> century and following the World War II bombing. The excavation revealed a surface

measuring *c.* 11m (N-S) x *c.* 8m (E-W). The surface sloped distinctly to the east and was exposed at 0.2m (88.92m AOD) below the current ground level on the western side of the excavation and *c.* 0.95m (88.43m AOD) on the eastern side.

The surface was formed from 24 memorial stones (Nos 1-24) and Victorian tiles (225), some of which had suffered from bomb damage in 1940, and further damage during the subsequent clean up, repairs and levelling. During the removal of the post-war and modern concrete layers at the eastern area of the excavation the void created during excavations through the south-east window of the East Crypt (Demidowicz 2015) was revealed. This exposed a west facing section (Fig. 6; Sect. 14) revealing two brick vaults (155 and 159) and an earth cut grave (151) cutting into a deposit (169), relating to the church's eastward expansion in the late 14<sup>th</sup> – mid 15<sup>th</sup> centuries (see Phase 5 above). A stone lined grave (215) was recorded to the northeast. A wall forming the south side of a stone constructed grave (142), and capped by Memorial Stone No 14 (Plate 15), was recorded on the southeast side of the excavation. Two walls (139, 147) forming a foundation for a set of (wooden?) steps providing access to the clearstory were recorded on the south side of the excavation (Fig. 7; Plate 17)

### ***Grave 151***

A single earth cut burial (151) was identified within the exposed section (Figs. 6, 7; Sect. 14; Plate 13). Only the north side of the vertical cut (151) of the burial was identified as the south side had been truncated by the construction cut (153) for a brick vault (155). A crushed lead coffin (170) had been placed at the base of the cut which was still largely sealed. The grave had been backfilled with a soft, mid reddish brown silty sand (152). The graves backfill was sealed by a thin deposit (148) representing a floor bedding layer. A memorial stone (MS 20) had been placed on the surface of this deposit, over the grave, although, did not directly overlay grave 151, but was offset to the north by *c.* 0.14m. The stone is heavily damaged although the date (1762) survives. The stone commemorates someone who's name appears to end with '? ood Esq'. The word 'Law' is visible, almost certainly indicating the profession of the interred individual. It can only be assumed the memorial stone relates to the grave, which appears to have been disturbed slightly during the construction of Vault 155. A pool of molten lead, clearly visible in Plate 14, had collected and solidified beneath the stone which relates to melting of the roof's lead flashing during the fire caused by incendiaries dropped in the World War II bombing raid (see Phase 9).

### ***Deposits 148 and 149***

Two deposits, 148 and 149, were revealed in section (Fig. 6; Sect. 14), with deposit 149 also revealed in plan (Fig. 7), which represented make up and bedding layers for the stone surface. The lower deposit (148) was 0.07m thick and comprised compact, mid reddish orange sandy silt. The upper (149) was 0.08m thick and comprised compact, mid reddish orange sandy silt. The upper deposit (149) was extensively visible in plan where the tile surface (125) were missing, presumably during the post-WW2 bombing clean up and repairs. Square impressions made by the tiles is still evident within the surface of 149. The upper bedding layer (149) appeared to have been cut by construction cuts for two vaults; Vault 155 to the south and Vault 156 to the north.

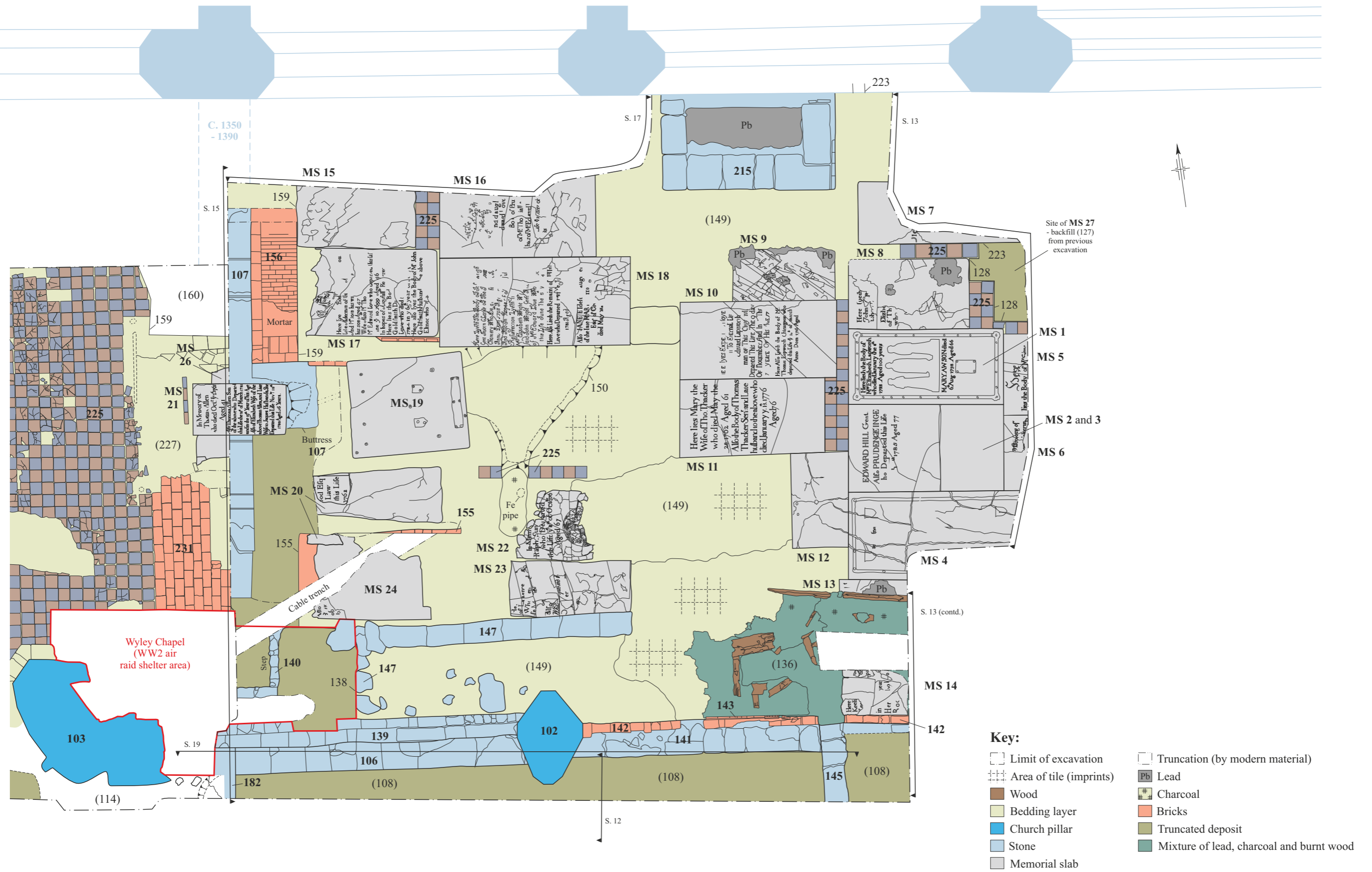


Figure 7: Plan of excavated area - east

### ***Vault 155***

To the south in section 14 (Fig. 6) the construction cut (153) for vault 155 cut both bedding layer 148 and truncated the southern side of grave 151 (Fig. 6; Sect. 14; Plate 13). The cut was near vertical, although there is a distinct dogleg in the cut where the grave digger had apparently encountered a lead coffin (152).

Only the north-west corner of vault 155 was revealed, to a depth of 0.6m (87.25m AOD), the base of the vault was not established. The vault was constructed from moulded, orange red bricks measuring 0.24m x 0.11m x 0.06m. The vault was sealed with Memorial Stone No 24 (Fig. 7; see also 4.8.1). The memorial stone was heavily damaged with much of its surface, and the western part of the stone missing. The stone had also been truncated by a 20<sup>th</sup> century cable trench. Only the single word “also” survives on the surface of the stone, clearly suggesting more than one inhumation has been interred within the vault. The text font is serif which almost certainly dates it to the mid-18<sup>th</sup> century. The cut (153) had been backfilled with a soft, mid reddish brown silty sand (154), with a moderate quantity of charnel.

### ***Vault 156***

To the north, and identified in section 14 (Figs. 6, 7), construction cut 157 for vault 156 was identified as cutting bedding layers 148, 149 and terracing deposit 169, although the relationship with layers 148 and 149 was unclear. The cut was near vertical. Vault 156 was partially revealed in plan, and part of its southern elevation was revealed. The vault was revealed to a depth of 1.3m (86.95m AOD).

The vault was constructed from moulded bricks measuring 0.230m x 0.115m x 0.057m, bonded with a pale yellow mortar. In plan the vault was revealed to have been constructed with a barrel-vaulted roof. The southwest corner of the vault was constructed into the corner created by the north side of the buttress and east face of wall 107, against the north window of the Wyley Crypt. The northern extent of the vault was not revealed, although almost certainly built against the north wall of the extant c. 1390 – 1450 church, which would make it 3.38m wide. As mentioned, the vault has been built against the north east window of the East Crypt which would have almost certainly provided access to the vault. Although the northeast window is obscured it has been recorded (Demidowicz 2015, Fig. 36) as being identical to the southeast window, which is 1.3m (high) x 0.6m in width, perhaps just enough space for the insertion of a coffin. The length of the vault was not established, although possibly corresponds to four memorial stones (MS Nos. 15, 16, 17, 18), making the length of the vault c. 5m.

The four memorial stones (MS Nos. 15 to 18) cannot be conclusively associated with vault 156 as they may have been repositioned during modifications to the floor in the Victorian period (see Phase 8). However, the surname ‘Love’ appears on three of the memorial stones (MS 15 is blank), perhaps suggesting the memorial stones are in their original position and relate to persons interred within the vault. At least sixteen individuals are named on the memorial stones (see 4.8.1), which (as defined) date from 1699 to 18..?.

### ***Vault 174***

The cut (196) for the southern extent of a brick barrel vault (174) was partially revealed within the western section of the drainage excavation (Figs. 2, 3; Sect. 18). The vault was revealed at a depth of 1.05m (87.97m AOD), and was 0.4m high (as seen). Cut 196 was vertical and revealed to a height of 0.32m.

Vault 174 was constructed from single course of mid-reddish orange moulded bricks (laid lengthways), measuring 0.23m x 0.115m x 0.057m. Only 0.3m of the curving southern side of the vault was revealed. The width of the vault can be estimated to be c. 1.8m. The depth of the vault was not established, although most likely to be around 2m. The upper structure of the vault had clearly been destroyed and replaced with a substantial concrete slab (173), creating a void between the partially backfilled vault and its underside.

A personal account of damage to a vault by a concrete lorry in 1963 (during laying of the current York Stone paving) was made by Antony Blee (project architect for Basil Spence). Although the exact location was unknown it was stated as being in the innermost north nave aisle, not far from the west crypt (Demidowicz 2013, 63). Apparently only the top of the cab and the mixer could be seen, suggesting the vault roof had entirely collapsed. There is little doubt that the damage to vault 174 and subsequent repair (concrete slab 173) are the result of this event.

### ***Vault 229***

The roof structure of barrel vault 229 was revealed in section and partly in plan (Fig. 3; Sect. 18) towards the northern end of the west drain excavation. The vault roof was revealed at 0.68m (88.6m AOD) below the current ground level.

The vault was constructed from mid-reddish orange bricks (laid end on) measuring 0.23m x 0.115m x 0.057m. Only 0.8m of the width of the roof was revealed. The vault is estimated to be c. 1.6m wide (the southern extent was obscured). The depth was not established, although most probably to be around 2m. The vault had almost certainly been constructed against the north face of the c. 1390-1450 wall (232), as illustrated in section 18 (Fig. 3), although the relationship was not visible.

The eastern extent and part of the roof of the vault had been removed by the construction of a modern man-hole and cable conduit (186), and cable trench 234 (all related events). A memorial stone (MS No 25) had been placed over cable trench 234 (Figs. 2, 3; Sect. 18). This would appear to indicate the memorial stone had been disturbed during the excavation of the cable trench. Only the eastern half of the memorial stone was revealed, which was either blank or face down. Although clearly disturbed by modern works the memorial stone is highly likely to be associated with Vault 229.

### ***Stone-Lined Grave 215***

A stone constructed grave 215 (Fig. 7; Plate. 15) was identified abutting the north wall of the cathedral. It measured 2.32m x 1.26m and was constructed from substantial reddish brown sandstone blocks measuring up to 0.8m x 0.39m (0.4m x 0.4m average), and earth bonded with a silty sand. Tiles, placed edge on, had been used on the east and north sides to fill the small gap between the north wall and the sandstone, presumably to fill a void. A deposit of lead (216) had collected on the surface of the grave which had been confined to the middle of the grave by the sandstone structure. The lead is almost certainly a result of the WWII bombing which melted the cathedral's lead flashing. The lead appears to have collected beneath a memorial stone which was almost certainly removed during the post-war clean up. Molten lead pooling beneath memorial stones is also seen beneath memorial stone No 20 (Fig. 6, Sect. 14). The makeup bedding layer (149) for floor surface 125 appears to abut the east, west and south sides of the sandstone structure, perhaps suggesting the grave might pre-date the 17<sup>th</sup>-18<sup>th</sup> century floor surface.

#### **4.8.1 MEMORIAL STONES** *(By Alessandro Guaggenti)*

##### ***Introduction***

In total 30 memorial stones were recorded (Fig. 2, Plates. 1, 15, 16) referencing 40 individuals (App. A, Tables. 7, 8), twenty-five (MS Nos. 1-24, 26, 27. MS Nos 2 and 3 form one memorial stone) of which were located in north east corner of the Cathedral, known as the 'Drapers Chapel' also known as 'Our Lady's Chapel' or 'Capella supra montem'. A single stone (MS 29) was incorporated into a Victorian floor (225), and a single stone (MS 25) was identified on the western side of the excavation. A further single stone (MS 30) was revealed at the base of the south drainage trench at a depth of c. 1m, and clearly not in its original position. A memorial stone (MS 28) which was recovered during excavations through the East Crypt (Demidowicz 2015) was also recorded. The earliest memorial stone (MS No 1, Plate 16) recorded, from the date of death on the stone, was dated 1622, and the latest (MS No 18) to the 19<sup>th</sup> century (only 18..? is visible).

Three of the memorial stones (MS Nos. 26, 27 and 28) were fragments found during excavation and not recorded *in-situ*. Twenty four of the memorial stones were considered to be *in-situ* (MS Nos. 1-24). In total twelve were fully uncovered within the excavated area (MS Nos. 1-3, 8-12, 18, 19, 21, and 23). The remaining thirteen memorial stones were discovered on the edge of the excavated area and were therefore not fully uncovered.

Two of memorial stones (MS Nos. 1 and 4) were formed from a light grey limestone, with the remainder formed from slate, which was generally a mid-blue grey. The finish of the stones varied from smooth to slightly rough. The typography of the inscriptions can be grouped into four distinct styles; italic, Roman Serif, dense Roman serif and Gothic. A motif was recorded on five of the memorial stones (MS Nos. 1, 4, 17, 19 and 22). Five of the memorial stones (MS Nos. 1, 4, 17, 19 and 22) had evidence for brass plaques or decoration, although in all cases the brass was missing. The evidence of brass fittings comprised small holes filled with lead and recessed areas, as indicated in Plate 16.

##### ***Historical Background***

There are surviving descriptions of St. Michaels Cathedral, the most useful of which, for these purposes, is that of William Reader's "*Description of St. Michael's Church, Coventry*", written in 1830. This document records all the inscriptions and monuments within St Michael's, and divides the material by location within the Cathedral, therefore we were able to confidently locate the relevant subject matter for the area in which the excavation took place (App A. Table. 7). By cross-referencing the surviving inscriptions found during the excavation with the noted inscriptions within this text, it was largely possible to identify the individuals associated with the memorial stones which were discovered during the excavation where the names were not fully revealed or could not be distinguished due to damage. The names of the individuals mentioned in William Readers text were collected and shown within a table (App A. Table. 8) along with recorded dates and ages. The final two columns show the memorial stone numbers used in the excavation of the site, then their corresponding numbers associated with the sequence used in William Reader's text, both of which relate to the individuals mentioned.





**Plate 15.** Memorial Stones at east end of excavation. Note the surface sloping down to north and east. Walls 141 and 142, bottom middle. Wall 145, bottom right. Grave 215, far top (right of scale), with putlog hole (223) just to its right (just visible). View to north.

### **Condition**

The memorial stones were generally in a poor condition with much of the inscriptions missing or illegible. At least 40 internments were identified, either from names, partial names or references and partial references. Where the stones were blank, heavily damaged or where the memorial stone's brass plaque has been removed, account for a minimum of 10 individuals (assuming each stone accounts for a least one individual). This would make the minimum number of internments at least 50, although some would almost certainly have contained more than one burial.

### **Materials**

Twenty-eight of the stones were formed from slate ranging in colour from light grey to mid-dark grey and blue grey. Two of the stones (1 and 4) were formed from a light grey limestone.

The material used for the majority of the memorial stones is slate, which ranges from a light-mid green-blue-grey to a darker grey slate. There are a number of slate resources around Britain which have been mined for significantly long periods of time, and which would have been mined during the seventeenth and eighteenth centuries. Notable resources of slate come from Cornwall, Devon, the Lake District, Cumbria, and most particularly Wales. Although these are all large resources for slate there is one resource which was closer to Coventry than these. Swithland is located *circa* 5 miles north-west of Leicester and *circa* 25 miles north of Coventry, in 17 square miles of countryside. The resource of Swithland slate has been exploited for a significant period of time and is known to have been mined from the Roman period onwards, Swithland gravestones being well known and an area of particular discussion.





**Plate 16.** Memorial Stone (MS No 1) for Elizabeth Lapworth who died January 8<sup>th</sup> 1722, Aged 100 years, and Mary Awson who died 6<sup>th</sup> August 1792, aged 66. Note: missing brasses of three figures, boarder and plaque. Note; Victorian tiles (225) forming division between memorial stones (bottom right).

A large amount of it is used in the immediate area surrounding Swithland, and throughout Leicestershire, although other areas of use are known for this slate. Transportation of slate from other resources in the country during the seventeenth and most of the eighteenth century would have been particularly expensive and logistically difficult due to the lack of a powerful and developed transportation system. It was not until the mid-19<sup>th</sup> century, with the introduction of railway lines across Britain and the reduction of their rates, that these difficulties were overcome, at which point there is a significant rise in the mining of the thinner and lighter slate from Northern Wales, which led to the failure of the industry of the thicker, heavier slate in Swithland. There is not one specific type of slate which comes from Swithland, but a range of varieties. The light green grey (from the Groby area) and darker purple grey varieties concern us most as they conform to examples which have been uncovered at St. Michaels Cathedral. However, it is not solely at St. Michaels to which we have examples of this slate being used in Coventry, and the excavations of the nearby St. Mary's Cathedral and Priory conducted between 1999 and 2003 found significant use of this type of slate. Alongside this, Swithland slate was often employed at Lichfield Cathedral located *circa* 27 miles east of the source, a Cathedral closely linked with that of Coventry.

### ***Individuals***

Inscriptions were found on twenty-five of the memorial stones, nineteen of which were *in-situ*. However, all the memorial stones, the majority being made of slate (a discussion of this material follows), showed signs of varying levels of damage, which caused the inscriptions to be incomplete, sometimes largely illegible. During the excavation of the site and discovery of the memorial stones it was possible to distinguish, from the fragmentary inscriptions, a provisional, initial total of 40 individual interments.

A total of 84 individuals were identified within William Reader's text. However, not all of the memorial stones mentioned in this text were revealed in the excavation. The ability to obtain all the relevant names only came from association with Reader's text, as only 40 defined individuals were indicated on site (49 min No of individuals, accounting for blank stones). This was due to the fragmented and damaged nature of the memorial stones.

Sixteen of the memorial stones (1, 2, 4, 5, 6, 8, 10, 11, 14, 16, 17, 18, 20, 21, 22, and 23) were easily identified within Reader's text due to surviving elements of the inscriptions, and therefore, where necessary, missing names of individuals were attributed to their relevant memorial stone number (App. A, Table. 7). The names which were identified in full were those of: Elizabeth Lapworth and Mary Awson (MS No1), Edward Hill and Prudence Inge (MS 2), John Lapworth (MS 8), Thomas Lapworth (MS 10), Mary Thacker (MS 11), Thomas Thacker (MS 11), Edward Love (MS 16), John Goldsmith (MS 17), Elinor Goldsmith (MS 17), John Wright (MS 18), Elizabeth Wright (MS 18), Elizabeth Allen and Thomas Allen (MS21). Partial names which were identified were those of: Inge (MS 4), Simon (MS 5), Pickering (MS 6), Elizabeth (MS 8), Keeling (MS 14), Keeling (MS 14), Prudence (MS16), Joan (MS 17), Thomas (MS 17), William (MS 18), Jane (MS 18), Raphael (MS 22), and Lawrence (MS 23).

Four of the memorial stones (9, 12, 15 and 19) had no surviving inscriptions, whereas memorial stones 7, 13, and 24 had very little surviving evidence of their inscriptions. Memorial stones 1, 4, 12, 19 and 23 would have been surmounted with brass plates, the fixings of which are visible, which would have had the individual's inscription. Therefore the identification of individuals associated with these memorial stones is

difficult to ascertain. In order to understand the possibilities of who were interred beneath these unidentified memorial stones William Reader's text was used. By documenting the individuals who were already identified by surviving inscriptions there were left a number of memorial stones from Reader's text which we had not located, this totalled 14 separate memorial stone inscriptions, pertaining to 43 individuals. However, only 6 excavated memorial stones were outstanding. Therefore, using the site plan showing the memorial stones and the numbers allocated on site, it is possible to trace the route of William Reader's description, showing whether there is a pattern present in his documenting of the memorial stones (App. A, Fig. 10).

As can be seen in Table 8 (App. A), a pattern can be seen to the work and the memorial stones with missing information fits into the gaps present between the findings of the excavation and Reader's records. Therefore individuals can be conjectured to be identified with the memorial stones missing inscriptions, those being: Frances Westone and Mary Reeves can be identified with MS7; Catherine Russel with MS9; Charles Parker and Mary Parker could be associated with MS12; William Inge, Letitia Inge, Edward Inge and Mary Gilbert with MS13; Mary Love and Katherine Mathews with MS15; Edward Love, Prudence Love, their 3 unnamed infant grandchildren, Dorothy Graves Love, Mary Love and Charlotte Love with MS19, and John Downing and Elisabeth Downing with MS24.

Attempts to relate these names with the surviving letters, where applicable, of these heavily fragmented memorial stones is impossible. Although it is possible to further estimate the correct location and test this initial theory by assessing surnames of the inscriptions and see if their conjectured identifications fit in with the area of family names located on adjoining or nearby memorial stones. Mary Reeves and Frances Weston, conjectured to be identified with MS7, do not have any other known associated kinsmen in the Drapers chapel therefore a certain location cannot be made. Catherin Russell is conjectured to be identified with MS9 and the same problem of lack of other family members in the Drapers chapel also plagues the certainty of this identification.

The names conjectured to be associated with MS12 also encounter a problem. In this case the description by Reader at this point mentions two memorial stones present between MS22 and MS12 (Fig 7), whereas only one memorial stone (MS12) was found during the excavation. However to the south of MS12 the floor layers have been damaged and in part, an area burnt wood (136) and large amounts of lead fallen from the roof obscure the floor level beneath, which may well have been the location of another memorial stone. Thus the most logical explanation would be that the memorial stone of Charles and Mary Parker has not been discovered during the excavation and that MS12 is to be associated with Thomas Bond. Thomas Bond's memorial stone has been described in another document which describes it as being "*on a flat stone, a plate of brass, a chevron between three roundels and three roundels in chief*". This further bolsters the identification of MS12 with Thomas Bond, as the stone, dark in colour, shows evidence of five brass fittings for a brass plate, now lost.

William, Letitia and Edward Inge, and Mary Gilbert associated with MS13, would locate these individuals in an area at the east side of the site where the name Inge has been seen in MS2 and MS4, both of which are located directly north, and next to MS13.

Mary Love and Katherine Mathews are associated with MS15, which places these individuals in the north-west corner of the Draper's Chapel. It should firstly be noted

that Katherine Mathews was the daughter of Edward Love. Therefore this inscription relates to two members of the same lineage. Other members of the "Love" family are named on memorial stones 16, 17, 18, which relate to ten direct members of the Love family. It is conjectured that MS19 also relates to another 8 members of this family, but the stone, like MS15, lacks an inscription. All of these memorial stones are located in the Draper's chapel overlying brick vault 156, which would have been the family vault.

The inscription identifying the burial of Edward Love, Prudence Love, their three unnamed children, Dorothy Groves Love, Mary love and Charlotte Love, is associated with MS19 which, as noted above, is located in the northwest area of the Draper's chapel, which fits in with the location of the other "Love" family members. The final unknown inscription to be identified with William Reader's text, is that naming the individuals John and Elisabeth Downing who have been associated with MS24. There are no other individuals with this surname located in the Draper's chapel so the identification of this stone with these individuals solely relies on the hypothesis associated with the order of William Reader's documentation of the chapel.

In order for these individuals to be buried within the church, they would have to be "*persons of especial importance*", benefactors, "*notable lay folk, mainly gentry and yeomen*". In the Anglo-Saxon period it was not possible to be buried within a church itself but following this it slowly became more popular, being at its height following the Reformation (Rodwell 1998, 44) up until the introduction of the Burial Act in 1857, brought about to address the health dangers of internal burials (Rodwell 2012, 312). In the evidence obtained through excavation only five different professions associated with seven of the individuals are known: those being: Surgeon, Alderman occurs three times, Captain, Silkman, and Clarke of the High Court Chancery. All of these are notable professions, alluding to the higher status of the individuals. Furthermore, there are four instances of the title *Gent*, and two instances of the title *Esquire*, both alluding to members of the gentry of English society. Therefore it can be seen that the individuals whose memorial stones were uncovered in the course of the excavation were of the privileged members of society.

### ***Form & Treatment***

The memorial stones survive in a largely fragmentary state, all have experienced some level of damage, mostly from the war-time bombing of the Cathedral. Some are also truncated by later activity within the Cathedral. Stones 15 and 17 were cut on their western sides by a later trench (159) which was excavated in the 20<sup>th</sup> century to seal the Wyley Chapel with bitumen. The stones at St. Michaels vary in size, however it must be noted that not all were fully uncovered, with only 12 stones (1, 2, 3, 8, 9, 10, 11, 12, 18, 19, 21 and 23) being fully uncovered (Fig. 2). The full widths of the memorial stones range between 0.66m and 1.22m, and full lengths ranging between 0.79m and 2.53m. All of the memorial stones are rectangular in shape with angular corners. All of them were orientated east-west and facing upward, except for memorial stone 12 which seems to be orientated north-south. The faces of the stones are generally, smooth, and with a particular coarseness seen only on stones (1 and 4) formed from (limestone).

Once placed over the vaults containing the deceased, in position on the floor of St. Michaels the memorial stones were surrounded by floor tiles (225; Fig. 2) as can be seen surviving around memorial stones 1, 2, 8, 7, 10 and 11, in the north east corner of the excavated area, creating a smooth, flush and level floor (Figs. 2, 7).



### ***The Inscriptions***

Of the 30 memorial stones, 21 of them show evidence of inscriptions (discussed above). The inscriptions are not elaborate in terms of their actual text and conform to a specific and limited set of criteria. The majority of the inscriptions begin with “*Here lieth*” with some beginning with “*In memory of*” followed by a name and on occasion the relation to another member who would have been buried within the same vault; after which comes “*who died*” followed by the date and with the inscription ending with the age of the deceased. Three other inscriptions do deviate slightly from this template and add the profession of the individual. The professions that are recorded are “*Surgeon*”, “*Alderman of this city*”, and “*Clarke of the (missing) Court Chancery*”. Often memorial stones, and grave stones in general, were pre-inscribed, with the names and details of the individual to be added at a later date. (Rodwell 2012, 336)

### ***The typography***

As can be seen in Tables 7 and 8 (App. A), the typography of the inscriptions is grouped into four distinct styles, those being: Italic, Roman Serif, dense Roman serif and Gothic. Following this, the typography was then further distinguished by the identification of the scroll as either elaborate or non-elaborate in design. There was very little variation of the typography of the inscriptions and all of the inscriptions conform to these styles.

There are 20 instances of the serif style; 8 instances of the Roman style (one dense Roman serif); 6 instances of the italic style; 3 instances of the Gothic style. The serif style signifies the projections at the tops and bottoms of letters; this appears throughout the Roman style of typography discussed here which has an especially rigid form to the characters. There are instances in these examples where the serif style is the employed typography, but a true rigid Roman style has not been employed. Therefore in this study these two forms overlap in classification. The serif inscriptions have date ranges from 1699 to 1792, essentially comprising the whole of the 18<sup>th</sup> century, and apart from the earliest date of 1699, they are fairly evenly seen throughout the 18<sup>th</sup> century.

The Italic inscriptions are seen in six instances, although two are as single words in inscriptions to a single individual, which also have a number of other typographies; therefore they are no use to this present analysis of the italic style. The full italic inscriptions found, show date ranges from 1703 to 1716. This short range of use shows the fashion of this style of typography in the first quarter of the 18<sup>th</sup> century, but it may also pertain to an individual stone mason at work between these years.

The Gothic style is seen on three memorial stones, all of which have other styles of typography (Roman, serif and italic). These are also the most elaborate inscriptions excavated from the site. These types of typographic inscriptions date between 1737 and 1774. This shows the fashion for this style of inscription was roughly in the middle of the 18<sup>th</sup> century. So throughout the 18<sup>th</sup> century we see the use of three main styles of inscription, the continual use of the serif style, and at the same time, the early use of the italic style and then later mixed use of the more elaborate and decorative, italic, serif and Gothic styles. This suggests an overarching style of inscription coming from the Swithland area but also some more fashionable short lived styles being employed by particular masons and particular periods throughout the 18<sup>th</sup> century. In order to better understand the typography, averages of letter height and widths from lower case and upper case letters and both shortened and longer forms of the lower case, were taken from each individual's inscription, these can be seen on the radar graph (App, A, Chart 1).



### ***Topography***

The eastern excavation revealed the topography of the pre-war church floor to be generally level on the western and southern sides, although distinctly sloping to the east and north-east towards the north-eastern limit of the excavation. The lowest point of the floor (88.43m AOD) is centred on the trench (128) excavated for the endoscope survey (Birmingham Archaeology, 2003). Five metres to the east of Wall 107 the floor breaks from being generally level and begins to slope down at *c.* 8°, to its lowest point.

Seven memorial stones (MS Nos. 15, 16, 17, 18, 22, 23 and 24), located on the western side of the excavation, appeared undisturbed and represent the original floor level of the church at *c.* 88.83m AOD. A single memorial stone (MS No. 4), situated to the south of the site is close to the original floor level at 88.74m AOD. Two walls (139 and 141) and a structure (147) survive at *c.* 88.84m AOD, also appear to represent the original floor level. The break of slope from the west appears to correspond with the eastern ends of Memorial Stones 16, 18, 22 and 23. The slope to the north and north-east generally starts to the north of Memorial Stone No. 4 (Fig. 8, Sect. 13) and deposit 136.

An irregular area (measuring *c.* 3m (E-W) x 2.2m (N-S) to the east of Wall 107 and between Vaults 155 and 156, had slumped by up to 0.4m. The slumping is clearly illustrated in Section 14 (Fig. 6). The slumping corresponds to the area between Vaults 155 and 156 which has been filled with a deposit of moderately compact, mid reddish brown silty sand (169). The deposit has been cut by Grave 151 (see above) which contained the remains of a lead coffin (170) which had been crushed/compacted to at least half its height. The north side of Memorial Stone 19 is supported by Vault 156, whilst the stone slopes to the south at an angle of *c.* 40°. Despite the memorial stone being the thickest recorded (0.08m) the north-west corner of the stone has broken, although this could equally be due to the insertion of a modern pipe (noted in Sections 14 and 15, Figs. 5, 6). Memorial Stone 20 is 0.42m below its original level, as indicated by Memorial Stones 17 and 24 which are over, and therefore supported by, Vaults 155 and 156.

### ***Possible Victorian Modifications***

In three areas the space between memorial stones have been filled with square ceramic tiles (225, Fig. 2), in two plain colours. The obverse of the tiles has the manufacturers stamp 'Minton Hollins & Co Patent Tile Works Stoke on Trench'. Minton and Hollins formed a partnership in 1845 (see 5.4.2). Tiles, in single and double rows, fill the space between Memorial Stones 15 and 16, 8 and 7, 2 and 11, and 1 and 10. It is noted that in all cases the tiles fit exactly between the memorial stones on an east-west axis. In one case a single tile has been modified to fit with the width (N-S) of memorial Stone 11. This would perhaps suggest the memorial stones have been moved to a least some degree to accommodate the tiles.

An irregular cut (150) identified in the central area of the excavation, measuring 2.5m x 2.5m, had clearly been excavated to insert a metal pipe, the remains of which were still evident. The pipe is aligned east-west and can be seen beneath Memorial Stone 19 in Section 14 (Fig. 6.) and in Section 15 (Fig. 5.). No cut for the pipe was visible in Section 14 and it is possible the pipe was pushed beneath the stone, although the stone may have been lifted to accommodate the pipe, which could have been the cause of the damage to it.

**Conclusions** (By Paul Murray)

The archaeological works recorded 30 memorial stones commemorating the death of at least 40 individuals on 19 of the stones. Memorial stones where no inscription survives or were not fully revealed within the excavation must account for a minimum of 11 additional individuals, bringing the total to 49.

William Reader records 25 memorial stones in the area of the Cathedral, known as the 'Drapers Chapel', relating to 84 individuals. Twenty-one of the memorial stones recorded by Reader were identified within the excavation. Five of the memorial stones recorded by Reader were not located within the excavation and it is assumed these stones are either beyond the limits of the excavation or destroyed during the bombing in 1940, or removed during the subsequent repairs.

William Reader's recording of the memorial stones, and the individuals they commemorate, provide an indication of the damage caused by the bombing in 1940. Three memorial stones (MS Nos. 5, 8 and 9) provide the best examples of bomb damage. William Reader records four individuals on Memorial Stone 5, whilst none could be defined within the excavation as the surface of the stone was completely decayed. Memorial Stone 19 is an interesting example; Reader records 8 individuals on this memorial stone, whilst none could be identified in the excavation, although in this case the surface of the stone was intact but the brasses were missing, evidenced by 18 fixing holes. This might suggest the brasses, in this particular case, were removed during the post-war clean-up and repairs. Although the possibility that memorial Stone 19 is not *in-situ* is clearly a possibility and, as recorded in Section 14 (Fig. 6), the memorial stone does not mark a grave or a vault.

The damage to the memorial stones on the western side of the excavation area was clearly as a result of events on the night of the 14<sup>th</sup> October 1940, when three groups of incendiaries landed on the low pitched roofs of the cathedral. The resultant fire, after a few hours, caused the total collapse of the roof. Obviously, the weight of the roof would have been immense causing surface damage and cracks in the stones. In addition molten lead falling from the roof had collected, settled and solidified within the lettering and beneath the stones.

The slope of the floor is generally to the north-east with the lowest point in the area of the endoscope survey conducted by Birmingham Archaeology. The cause of the slope of the floor on the western side of the excavation is likely to be the result of settling of terracing deposit 169 (see 4.6). Records indicate that in 1849 the old seating was removed, providing an opportunity to renovate the floor (Domidowicz 2013, 41). Although the records do not directly state the floor has slumped it does indicate that the floor "composed of flat gravestones" was covered by a foot of soil and a new tile floor laid on top (see 4.9). As stated, the lowest point of the floor centred on the trench (128) excavated by Birmingham Archaeology in 2013. The survey identified a vault wall constructed from wood or concrete with iron bands. Concrete was not extensively used until in the early 19th century and is very unlikely to have been used in the construction of a vault, therefore the vault wall is highly likely to have been constructed from wood, possibly re-enforced with iron straps. It is possible that the partial collapse of the vault is the cause of the slumping of the soils (see 4.5). The two brick vaults (156, 159) to the north-west and south-west were robust enough to withstand the weight of the collapsed roof. The terracing deposit (169) between the vaults had compressed by up to 0.5m. The damage to Memorial Stone No 19 and some of the slumping appears to be a result

of the insertion of a gas pipe in 1851, when gas lighting was introduced (see 4.9), clearly illustrated in Section 14 (Fig. 6) and Figure 2 (150).

The practice of internment within the body of the church reached its height following the reformation (Rodwell 1998, 44) up until the introduction of the Burial Act in 1857, brought about to address the health dangers of internal burials (Rodwell 2012, 312). Individuals buried within the church would have to be "*persons of especial importance*", benefactors, "*notable lay folk, mainly gentry and yeomen*". There are four instances of the title *Gent*, and two instances of the title *Esquire*, both alluding to members of the gentry of English society. Trades recorded on the memorials include surgeon, alderman (three times), Captain, silkman, and Clarke of the High Court Chancery, all very notable professions

The memorial stones provide insight into those interred, their families and their trades, all of which are inextricably linked with the economy of the church, its politics and logistics. Although beyond the scope of this report the memorial stone provide the opportunity to study the family histories of influential people in Coventry and their relationship with St Michael's.

#### **4.9 PHASE 8. (19<sup>th</sup> Century)**

##### ***Introduction***

On the south side of the excavation two contemporary walls were recorded (106 and 141) probably relating to modifications carried out in 1851. Two further walls were recorded (147, 139) relating to foundations for steps. A relatively extensive floor surface formed largely from square tiles (225), although incorporating a small area of bricks (231) and two memorial stones (MS No's 29 and 21) was recorded within the north aisle. A small area of floor (125) was revealed in the eastern area which represented a localised repair. A number of make-up, levelling and bedding deposits for floor surfaces were identified in the east section.

##### ***Walls 106 and 141***

Two walls, 106 and 141 (Figs. 2, 8; Sects. 12, 19; Plates. 15, 17) were recorded abutting the east and west sides of Pillar 102 on the south side of the excavation area in the north aisle.

Wall 141 had been constructed between the east side of Pillar 103 and Wall 145 (see 4.7) on an east-west alignment. The wall was 3.3m long, 0.38m wide and revealed to a depth of 0.7m (the base was not established). It had been constructed from roughly hewn, reddish brown sandstone (average dimensions 0.6m x 0.38m x 0.25m) two courses high. The wall appeared to have been built against the south side of Wall 142 (see 4.7).

Wall 106 (Figs. 2, 8; sect. 19) had been constructed between the west side of Pillar 102 and Wall 182, clearly abutting both structures (see 4.2), on an east-west alignment. The wall was 4m long, 0.4m wide and revealed to a depth of 0.7m (the base was not established). It had been constructed from roughly hewn, reddish brown sandstone (average dimensions 0.6m x 0.38m x 0.25m) two courses high. The wall appeared to have been built against the south side of Wall 142 (see 4.7).

### ***Walls 139 and 147***

Two parallel walls (147, 139) were recorded on the south side of the excavation (Fig. 2; Plate, 17). Wall 139 was aligned east-west, abutting the west side of Pillar 102 to the east, wall 106 to the south and wall 182 to the west (Figs. 2, 8). The wall was two courses wide (0.34m) and 0.38m high (the base of the wall was not established). It was constructed from hewn, reddish brown sandstone (0.65m x 0.55m x 0.2m average) and bonded with a pale yellow brown sandy mortar.

Wall 147, aligned east-west, was one course wide (0.3m) and 3.7m long. The wall was only observed in plan. At its western extent it turns to the south where it abuts the north side of Wall 139 to form a rectangular structure to the west and north of Pillar 102. It was constructed from hewn, reddish brown sandstone (0.5m x 0.3m average) and bonded with a pale yellow brown sandy mortar.



*Plate 17. Walls 106 and 139 to right. Wall 147 in middle (beneath modern pipes). Air raid shelter entrance (138) bottom centre. Brick Vault bottom left. View to east.*

The wall was 4m long, 0.38m wide and observed to a depth of 0.7m. It had been constructed from hewn and roughly hewn reddish brown sandstone (0.65m x 0.55m x 0.2m max), bonded with a pale yellow brown mortar. A maximum of three courses were visible.

### ***Tile Floors 225, 125.***

An extensive Victorian tile floor (225) was exposed within the north aisle of the church (Fig. 2; Plate. 18) and a small area of repair to the floor (125, Plate. 19). Floor 225 was 5.6m wide at the east end, narrowing to 4m, 2m to the east. The floor further narrows to 1.5m to form an aisle aligned east-west. Floor 225 was formed from square tiles (0.16m x 0.16m x 0.02m) in two colours (dark grey and orange) laid to form a checkerboard pattern.



The small area of repair, or surviving area of floor (125), was located directly over an area where a narrow iron (gas?) pipe had been inserted (150, Figs. 6, 7; Sect. 14; see also 5.4.2 *Victorian Tiles*), beneath a memorial stone (MS No 19), apparently causing some slumping/compression of deposit 149 (see 4.8.1 *Topography*). The slumping (or insertion) may have resulted in the breakage and slumping of Memorial Stone No 19 (Plate. 13). The floor was formed from square tiles in two sizes (0.54m x 0.54m x 0.12m and 0.73m x 0.73m x 0.12m), equilateral triangular tiles (0.54m x 0.54m x 0.12m). The triangular tiles were in two plain colours, drab orange and dark grey. The larger square tiles had a fleur de lis pattern in dark red and pale brown. The smaller square tiles were largely plain, in pale green and brown with a small number having a rosette pattern. A small area (c. 0.5m x 0.5m) of the floors surface had evidence of ash and lead clearly associated with the collapse of the roof following the bombing raid in 1940 (see 4.10). Five of the decorated floor tiles found at Old St Michael's clearly show the full maker's mark (*Minton Hollins & Co Patent Tile Works Stoke on Trent*) on the back identifying Minton as the manufacturer, formed in 1845.



**Plate 18.** Tile floor 225, with edging bricks visible to left and medieval edging tiles on right. Note memorial stone (MS No 29, centre). Levelling deposit 226 visible on the far left and right.

### **Bricks 231**

A small rectangular area of bricks (231), measuring 1m x 1.8m, had been laid either to raise the floor to the same height as Floor 225 (Figs. 2 and 5, Sect. 15) or form a foundation for a balustrade. The bricks measured 0.23m x 0.11m x 0.06m, and laid in a garden wall pattern.

***Levelling Deposits 126, 132 and Bedding Deposits 129, 133, 134 and 135.***

The east section (Fig. 8; Sect. 13) revealed a number of deposits relating to raising the slumped floor (see 4.8.1 *Topography*) at the eastern area of the excavation. The lowest deposit (126), which overlaid Memorial Stones Nos. 4, 5, 6, and 14, comprised heavy loose sandstone rubble in a sandy matrix. The deposit was c. 0.1m thick towards the southern side of the excavation, thickening to a maximum of 0.52m to the north. The heavy rubble deposit was overlaid by three broadly similar deposits (130, 132 and 135). These deposits generally comprised soft-firm, black sandy ash and charcoal interleaved with reddish brown sand, c. 0.2m – 0.35m thick. These deposits were overlaid by four, thin laminated deposits (129, 133, 134, 135) comprising firm, mid brown sandy silt with rare small stones (0.1m thick max). These deposits are overlaid by layer 131, representing levelling for the current York Stone surface (101).



**Plate 19.** Tile floor 125. Note memorial stone (MS No 19) partially revealed (upper left) and iron gas pipe (foreground and extending beneath 125). Also note burning related to WWII bombing (bottom left). View to north.

***Levelling Deposits 108 and 124.***

Two deposits (108, 124) were partly revealed on the southern side of the excavation (Fig. 8; Sect. 12). Both deposits abutted Pillar 102 and the south side of Wall 141. The lower deposit, 124, comprising moderately loose, dark brown sandy silt with 30% fragmented plain tiles, 0.1m thick. This was overlain by a deposit (108) of loose, mid brown sand with up to 60% sandstone rubble and 10% CBM fragments.

***Summary***

Walls 106 and 141 possibly relate to two phases of modifications carried out in the middle of the 19<sup>th</sup> century, when oak seats of a uniform character were installed (Demidowicz 2013, 40). At the same time the floor of the drapers chapel and chancel are raised (Demidowicz 2013, 41), represented by deposits 126, 132, 108 and 124.



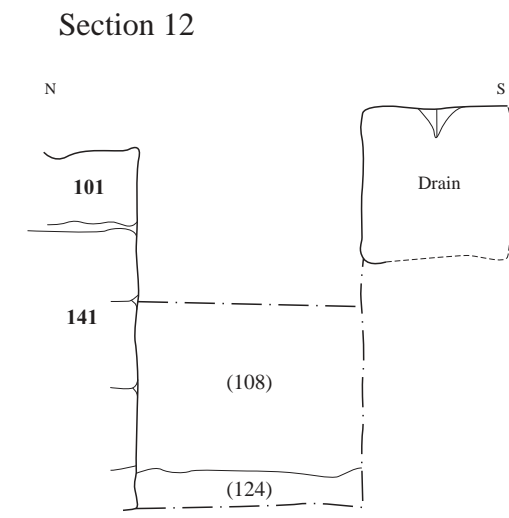
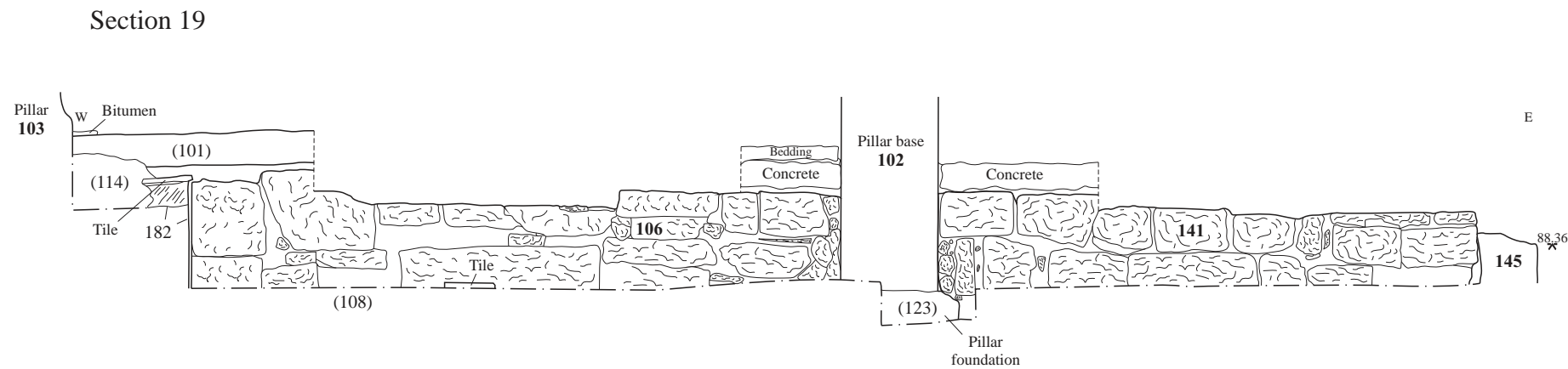
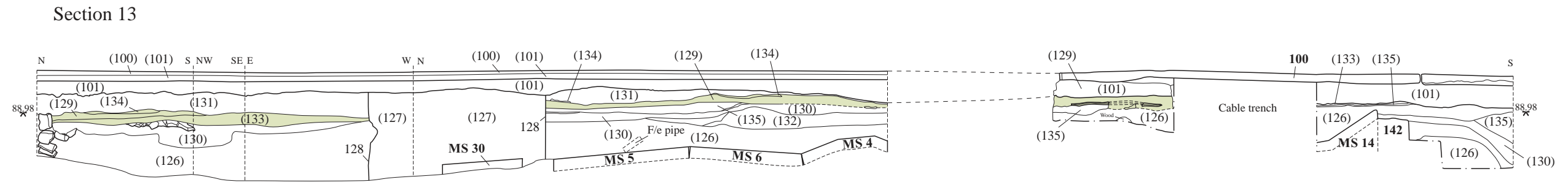
Walls 147 and 139 possibly form the foundation for a set of steps visible on a plan of the church, dated 1818 (Demidowicz 2013, Fig. 15). The steps are not visible on a plan dated 1790's (Demidowicz 2013, Fig. 14) and are not evident on a plan dated 1845 (Demidowicz 2013, Fig. 16), although may not have been included in this plan. This would seemingly assigning the date of their construction to the late 18<sup>th</sup> early 19<sup>th</sup> centuries. The character of the structure might also suggest it could be a stone lined grave with the memorial stone missing. The dimensions certainly suggest this. It may have been disturbed during the late 19<sup>th</sup> century modifications when a new floor was laid. Indeed, the deposit confined by the structure (149) has been recorded as being the same as the bedding for Floor 225.

Bricks 231 correspond to the location of a division within the north aisle which is visible on a plan of the church (Demidowicz 2013, Fig. 17) dated to the 1840s, early 1850s. The bricks appear to form a foundation for this division, which appears to be a wooden screen, although possibly represent levelling (with floor 225) following their removal or destruction in 1941 (see 4.10).

Levelling deposits 126, 132 and bedding deposits 129, 133, 134 and 135 represent a repair to the floor of the Drapers Chapel in 1849. Records indicate that the floor of the chapel "composed of flat gravestones" was covered with a foot of soil and a new tile floor laid and that the same happened in the chancel (deposits 108, 124), losing "the record of many a worthy citizen whose generous gifts are still enjoyed by the needy of the city or parish" (Demidowicz 2013. 41). The fact that the floor has sunk is not noted in the record.

The small area of floor (125) represents the replacement of the 1849 floor in 1884 with tiles in a tessellated geometric design (Demidowicz 2013, 51). This small area of tiles appears to have survived bombing in 1941 (see 4.10) and subsequent repairs, due to it slumping within a cut (150) for the insertion of gas pipes, introduced to the church in 1851 (Demidowicz 2013, 42).

Floor 225 has been laid to form aisles between pews in the north aisle, and the outline of where the pews were located is clearly visible in Figure 2. The layout of the pews is indicated on a plan of the church dated 1840s - early 1850s (Demidowicz 2013, Fig. 17) which fit exactly with the untiled areas. This establishes that the pews were installed first, followed by the laying of the tiled floor around them. This resulted in the areas where the pews had been being lower than the floor, which has been levelled with a deposit of rubble (226) in the post-war period (see Phase 9).



- Key**
- Limit of excavation
  - Roughly hewn sandstone
  - Hewn sandstone
  - Bedding

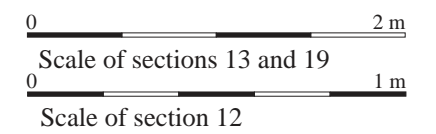


Figure 8: Sections

#### **4.10 PHASE 9. (World War Two)**

##### ***Introduction***

Remains relating to modifications made during the Second World War include Structure 140, forming an entrance into the East Crypt when it was utilised as an air raid shelter and a concrete layer (101), laid to waterproof and strengthen said chapel. *In-situ* deposit 136, representing the destruction of wooden pews, and a deposit of solidified molten lead (224) represent damage following bombing of the cathedral following the dropping of incendiary bombs on the night of 14<sup>th</sup> October 1940.

##### ***Structure 140 and Cut 138***

To the southwest of the excavation, to the east of Pillar 103, remains relating to the construction of an entrance into the East Crypt were recorded (140). A cut (138), apparently respecting the western extent of Structure 147 and Wall 139 (see 4.7), was identified (Fig. 7; Plate 17). The cut measured 1.66m x 1.4m, and was just 0.1m in depth. It was filled with a thin skim of fragmented concrete, 0.1m thick. A structural element (140), comprised bricks measuring 0.25m x 0.11m x 0.06m, had been laid to form a step into the East Crypt. Towards the south-eastern corner of the excavation a deposit of charcoal and wood (136) was recorded, which almost certainly represented *in-situ* remains of pews that were destroyed during the fire of 1940.

##### ***In-Situ Deposit 136***

At the south-eastern area of the excavation a deposit (136), with structural elements, was recorded representing *in-situ* remains of the wooden pews burnt in the fire in 1940 (Figs. 7, 9, Plates 20, 21). The deposit was only recorded in plan after minimal cleaning. Once recorded the deposit was protected and preserved *in-situ* (as instructed by the cathedral). The remains comprised a layer of compacted charcoal, *c.* 0.03m thick, with visible carbonised wooden structural elements and an iron hinge (228) within it.

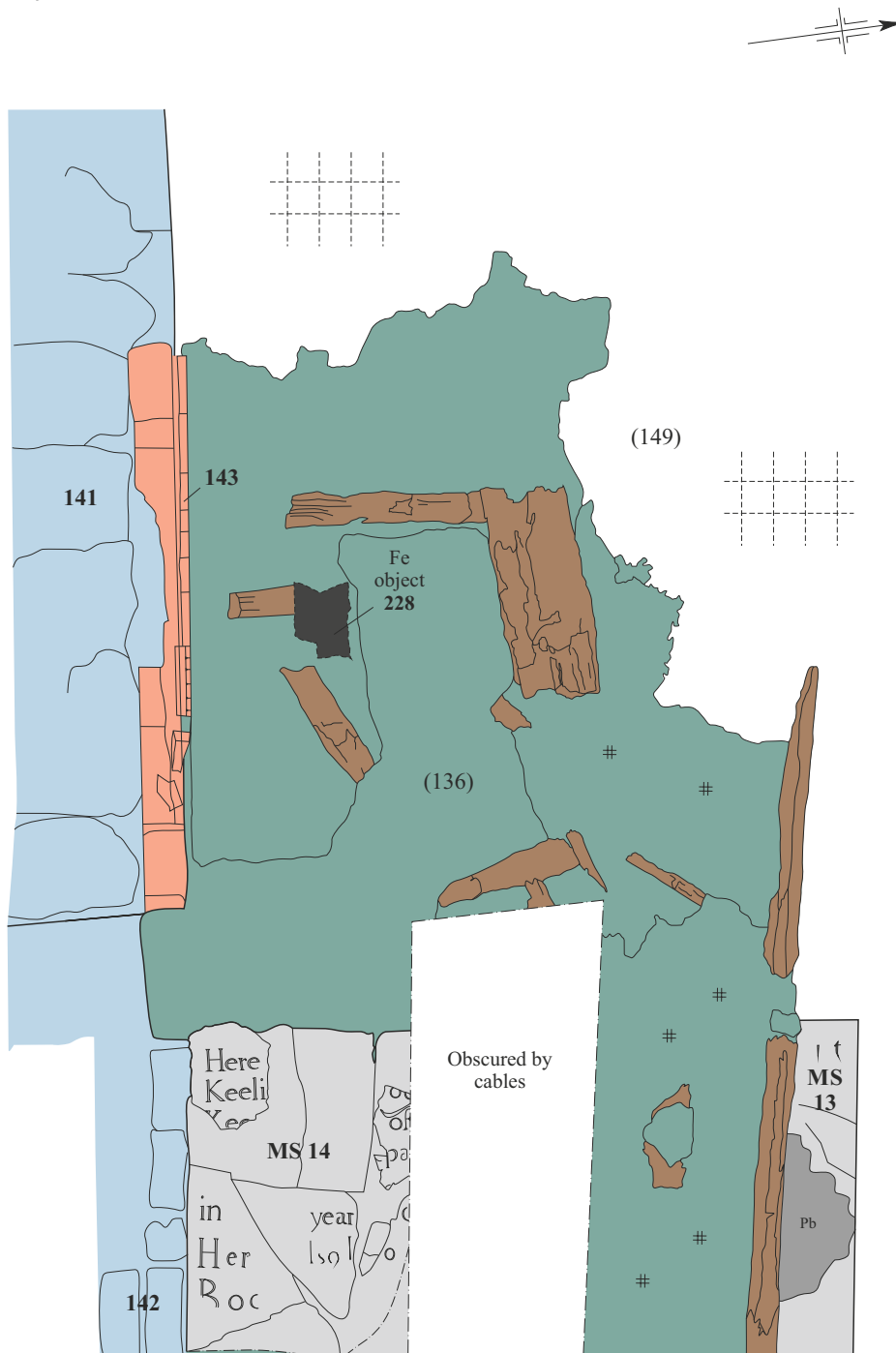
The partly carbonised wooden elements of deposit 136 comprise lengths of batons, generally measuring 0.2m x 0.2m, up to 1.8m in length, broadly laying either north-south or east-west. Hinge 228 appeared to be attached to a small (0.6m) fragment of wood (Plates. 20, 21).

##### ***Deposit 224***

A deposit of solidified molten lead (224) was recorded in the north aisle (Fig. 2). The deposit measured *c.* 2m x 1.4m, and was up to 0.03m thick. The southern extent of the deposit had been confined (when it was molten) by the northern extent of Floor 225.

The size and character of the deposit suggests it had collected beneath a memorial stone located beneath a set of pews, which has subsequently been relocated, presumably during the post-bomb damage clean up.

**Plan 19**



**Key:**

- |                         |  |
|-------------------------|--|
| Limit of excavation     | Pb Lead                                  |
| Area of tile (imprints) | Charcoal                                 |
| Wood                    | Bricks                                   |
| Stone                   | Mixture of lead, charcoal and burnt wood |
| Memorial slab           |  |

Figure 9: Wood

0 1 m



*Plate 20. Deposit 136 with wooden structural elements. View to north.*



*Plate 21. Detail of iron hinge 228 attached to wooden structural element within deposit 136.  
View to east*

### **Summary**

Structure 140 represents the construction of a small stone mono-pitch structure over the stairs leading into the east Crypt, against the east side of structure 103 (Demidowicz 2013, Figs. 64, 67 and 68), presumably providing weather and blast protection.

Deposit 136 represents the *in-situ* remains of a wooden structure, almost certainly pews that were located on the north side of the chancel. The pews were installed as part of



general upgrading of the interior in 1844, when 'ill adapted pews and galleries' were removed and replaced with pews of 'as nearly as possible of one uniform use and shape' (Demidowicz 2013, 39). A detailed plan of the proposed works (Demidowicz, G 2013, Fig. 17) was produced by the chosen contractors, Scott and Moffatt, showing a set of pew (five rows) on the north side of the chancel. The ferrous hinge (Plate. 21) is likely to indicate the seats were folding, therefore, misericords.

Deposit 224 (Fig. 2) represents molten lead, used to weather seal the roof (flashing), that liquefied during the fire of 1940, surviving where it has collected and solidified beneath memorial stones and floor tiles, best illustrated in Section 14 (Fig. 6). The size and character of the deposit appears to suggest it collected beneath a memorial stone which may have subsequently been removed during the clean-up.

#### **4.11 PHASE 10. *Post WWII – 1960***

##### ***Introduction***

Remains relating to post-war repairs is represented by the laying of a concrete surface (101) to waterproof both the east and west subterranean crypts and the excavation of Cut 169 for waterproofing the northeast corner of the East Crypt and a levelling deposit (226) laid after the removal of the pews.

##### ***Concrete 101***

A substantial layer of concrete (101), overlying Deposit 126 (see above) and extending over both the East and West Crypts was recorded (Figs. 2, 3, 5 and 8, Sections. 15, 18 and 19). The concrete (generally 0.2m thick) had been waterproofed with a bituminous tar up to 0.02m thick.

##### ***Cut 169***

Towards the northwest of the excavation (northeast corner of the East Crypt) a cut (169) was partly identified which almost certainly related to the same phase of activity as Concrete 101 (Figs. 5 and 7, Sect 15). The cut measured *c.* 2m x 2m and 0.44m in depth, although almost certainly extended further north to the current wall of the cathedral. The cut has almost certainly removed the western extents of Memorial Stones Nos. 15 and 17 and truncates Tile Surface 225. The cut appears to have been excavated in order to apply a bituminous tar, similar to the sealing layer over 101, to at least two of the joints in Wall 107 (noted on Fig. 5, Sect. 15).

##### ***Deposit 226***

The deposit of lead (224; see Phase 9) was overlain by a layer (226; Fig 2) comprising rubble and elements of the roof, such a bolts and nails and artefacts relating to other elements of the church (gas pipe, light bulb etc.), 0.4m thick. Of particular interest were a few fragments of carbonised bible pages (Plate see 5.8).

##### ***Summary***

The excavation of Cut 169 is almost certainly contemporary with the laying of the concrete re-enforcement (101), and the same bituminous material is used as a sealant in both instances. The work is likely targeting a particular problem with water ingress into the northeast corner of the East Crypt.



Just 13 days after the fire which destroyed the roof and much of the inside of the cathedral, the Wyley Chapel (East Crypt) was used for the celebration of Holy Communion, continuing without a break until 1958, although without the cathedral roof water ingress became a problem. By 1945 the Provost, Howard, arranged for a concrete cap to be laid on the floor of the cathedral, waterproofing both the east and west subterranean crypts (Demidowicz 2013, Fig. 64).

As noted above (see Phase. 9), the pews in the north aisle were installed first, and the tiled floor (225) laid to respect them. As such, once the remains of the burnt/destroyed pews were removed after the end of the war, the floor beneath them was lower than the tiled floor. Deposit 226 was laid to raise the area to the same level as Floor 225. This deposit is clearly derived from destroyed elements of the cathedral, and formed largely from smallish sandstone rubble. This deposit may have undergone some sorting prior to being laid as no architectural pieces were within it. The deposit contained a mixture of artefacts relating to the destruction of the roof and other elements of the church, although only a representative sample was retained (see 5.6 - 5.8; Finds). The deposit contained a selection of nails, such as; sprig, clasp, T headed and foundry nails relating to various elements of the church, presumably mostly from the roof and pews. Other finds, although not of great interest, provide insight into the destructive event in 1940, and include screws, twisted link chain, padlock, wooden pulley, curtain rings, a button, key, brass nameplate holder (possibly from one of the Church benches), a lead frieze, stained window glass, a light bulb and bottle stopper. Emotive finds include the carbonised pages from a bible and large bolts from the roof.

#### **4.12 PHASE 11. 1960-Present**

##### ***Repair to Vault 174***

Within the western drainage alignment a concrete raft (173) was identified (Figs. 2 and 3, Sect. 18). The concrete was 2.7m (N-S) x 0.67m (as seen) x 0.18m thick. The concrete had clearly been laid to repair the damaged/destroyed upper structure of Vault 174.

##### ***Concrete Layer and York Stone Surface 100***

Directly overlying the concrete re-enforcing (101) laid by Provost Howard (see above) a further concrete layer and York stone surface (100) was recorded. The concrete was generally 0.1m thick, becoming thicker (0.23m) to the north to create a fall to a drain immediately to the south of the site. The York Stones were of a variety of sizes, although on average 0.7m x 0.7m and generally 0.06m thick.

##### ***Summary***

In 1963 the cathedral floor was in a poor condition and a contract was awarded to John Laing and Son for the insertion of shallow surface drains, raising of the floor to provide a fall to the drains and the laying of the current York Stone surface. During the contract a concrete mixer lorry collapsed into a vault, with only the top of the cab and the mixer visible. The location of the vault was described as being in the centre of the innermost north nave, not far from the West Crypt (Demidowicz 2013, 63). The concrete raft almost certainly represents subsequent repairs to the vault.

## 5 FINDS

### 5.1 Medieval Pottery *(By Paul Blinkhorn)*

#### ***Introduction***

The pottery assemblage comprised five sherds with a total weight of 215g. Four of the sherds (80g) occurred in context (190). They are all Coventry 'A' Ware, fabric Sq202 in the Warwickshire Medieval and Post-Medieval Pottery Type-Series (Ratkai and Soden, in archive), and generally dateable to the 12<sup>th</sup> – 14<sup>th</sup> century. The material is a common find on medieval sites in the city. Three of the sherds (50g) are all from the same vessel, probably a jug, with a decayed greenish-yellow glaze which is typical of such vessels in this tradition. The fourth is the rim of an unglazed jar with extensive external sooting. It has a diameter of 280mm, and is 8% complete. The sherds are all in good condition, with no evidence of abrasion, and thus appear reliably stratified.

The other sherd is a near-complete tyg (multi-handled cup) in Cistercian Ware, Warwickshire fabric CIST, of late 15<sup>th</sup> – 17<sup>th</sup> century date. The vessel has two loop handles, both on the same side of the cup. This ware is also a common find in Coventry, and the vessel was probably manufactured at Chilvers Coton near Nuneaton (Mayes and Scott 1984).

### 5.2 Post Medieval Pottery *(By Simona Denise)*

#### ***Introduction***

A single residual pottery sherd weighing 45 gr was found in context (226).

The item is a fragment of carinated jug base; the fabric is a purple-pinkish fine clay with dark green/greyish surfaces. It was identified as Midland purple ware, very common on late medieval to post-medieval sites in the west Midlands.

### 5.3 Architectural Stone *(by Stephen Yeates)*

#### ***Introduction***

This account considers the sculptural fragments that have been stored in the Wyley Crypt of Saint Michael's Church. Each stone was provided with an alpha numeric code, dimensions and profile recorded (App. C, Profiles) recorded, described and assessed stylistically below, to suggest a possible date (Table. 1). The worked stone has been catalogued as coming from two contexts (183, 187). Context 183 is a general number that covers sculptural pieces that were stored within the crypt and largely thought to have come from an excavation through the Wyley crypt east window (Demidowicz 2015). However, certain fragments, such as Worked Stone No 22 was part of a pinnacle that had a metal bar and cement inserted to hold the pinnacle together. It could possibly be doubted if this stone came from that excavation. It may imply that the area was opened up later and that further stonework was added or that stonework found elsewhere was also stored within the crypt. Context 187 refers to worked stones that were recovered from a modern intrusion recorded in the excavation. One theory expressed is that much of the worked stone found was derived from the former Lady Chapel constructed on the north side of the church, which was demolished for the later Perpendicular rebuild of the structure.

***Worked Stone No 1 (Context 183)***

Dimensions: 490mm x 450mm x 410mm. Material: sandstone. Description: part of a stone canopy of a tomb or stall. There is a carved vault with five ribs and a central boss. The top of a round headed arch below the canopy has an internal cinquefoil design. The upper part of the canopy design contains a moulding around a slender pointed arch, which contains a roundel containing a quatrefoil. Crockets are a feature of Gothic features, most notably capitals, spires, canopies and pinnacles (Verey and Brooks 1999, 773). Their design developed throughout the Gothic period. Though this particular piece was undoubtedly for an internal canopy there are similarities in the architecture here to features that were constructed as part of the decoration of the tower that was constructed c 1350-c 1390 (Demidowicz and Gilderdale Scott 2015, 31-32, 36).



*Plate 22. Worked Stone No 1.*

***Worked Stone No 2 (Context 183)***

Dimensions: 195mm x 195mm x 190mm. Material: sandstone. Description: this contains a simple chamfer design. The plain chamfer was used early in abaci and plinths (Morris 1992, 12), although there is nothing to indicate that this is from either of these designs. The simple chamfer was used in arches, ribs and mullions from the later 13<sup>th</sup> century and more widely from the 14<sup>th</sup> century.

***Worked Stone No 3 (Context 183)***

Dimensions: 280mm x 210mm x 70mm. Material: sandstone. Description: this moulding contains two hollow chamfers. The hollow chamfer can be identified in English Gothic and Romanesque styles of architecture. The hollows are indicative of this piece being 13<sup>th</sup> to 14<sup>th</sup> century (Morris 1992, 13).

***Worked Stone No 4 (Context 183)***

Dimensions: 340mm x 310mm x 130mm. Material: sandstone. Description: the moulding contains a narrow roll with a single axial fillet. In England this feature occurs in string courses, capitals and bases from the 13<sup>th</sup> century (Morris 1992, 14). This particular example has an angle between the fillet and roll, thus implying that it is probably of a later date. At the base of the roll there are quirks, followed by a sunk chamfer on the one site. This particular example is part of a moulding from a decorative arch.

***Worked Stone No 5 (Context 183)***

Dimensions: 260mm x 250mm x 155mm. Material: sandstone. Description: the moulding appears to use a double roll with quirks and angle fillet. The quirk and angle fillet are likely to make this piece of sculpture Romanesque or Early Gothic (Morris 1992, 11, 14).

***Worked Stone No 6 (Context 183)***

Dimensions: 300mm x 240mm x 140mm. Material: sandstone. Description: a roll containing a fillet with hollow chamfers. The roll and fillet are the latest feature in this design, and must be dated to the late 13<sup>th</sup> century or later (Morris 1992, 14).

***Worked Stone No 7 (Context 183)***

Dimensions: 205mm x 140mm x 155mm. Material: sandstone. This is a simple ashlar block which is un-diagnostic. The excavations have noted that walls from after the 1250-70 rebuild are ashlar faced, the recognised wall in the excavations that pre-dates this date has a foundation that is made of rubble stone. This would imply that this stone is late 13<sup>th</sup> century at the earliest, but possibly later.

***Worked Stone No 8 (Context 183)***

Dimensions: 430mm x 330mm x 230mm. Material: sandstone. Description: the moulding has a hollow chamfer with a broad headed fillet, a right angled quirk and an angle fillet. The feature is Romanesque or Early Gothic in appearance (Morris 1992, 11-14).

***Worked Stone No 9 (Context 183)***

Dimensions: 265mm x 230mm x 155mm. Material: sandstone. Description: a roll containing a fillet with hollow chamfers. The roll and fillet are the latest feature in this design, and must be dated to the 13<sup>th</sup> century or later (Morris 1992, 14).

***Worked Stone No 10 (Context 183)***

Dimensions: 175mm x 130mm x 150mm. Material: sandstone. Description: the moulding contains a roll with fillet flanked by two quirks. The roll and fillet do not have sharp breaks at their juncture, which would imply that these were of a later date possibly 14<sup>th</sup> century (Morris 1992, 14).

***Worked Stone No 11 (Context 183)***

Dimensions: 360mm x 360mm x 140mm. Material: sandstone. Description: a moulding with a roll, then angle fillet, a further roll followed by an angle fillet. The angle fillet is a feature of Romanesque and Early Gothic architecture, and would be unusual in England after the 13<sup>th</sup> century (Morris 1992, 11).

***Worked Stone No 12 (Context 183)***

Dimensions: 280mm x 230mm x 140mm. Material: sandstone. Description: a roll containing a fillet with hollow chamfers. The roll and fillet are the latest feature in this design, and must be dated to the 13<sup>th</sup> century or later (Morris 1992, 14).

***Worked Stone No 13 (Context 183)***

Dimensions: 220mm x 130mm x 120mm. Material: sandstone. The moulding contains a roll with angle fillet and also a worn spiked hollow. The spiked hollow is a feature from later Gothic and thus a date of about the 14<sup>th</sup> century is appropriate (Morris 1992, 15).

***Worked Stone No 14 (Context 183)***

Dimensions: 210mm x 160mm x 110mm. Material: sandstone. Description: the moulding contains a central roll flanked by two angle fillets, beyond which are two ogee moulds, and on one side the remains of a chamfer. The angle fillet is usually associated with late Romanesque and Early Gothic and is rare in England after the 13<sup>th</sup> century (Morris 1992, 11), while the ogee is a Late Gothic feature (Morris 1992, 13-14). A date for this moulding is thus associated with the end of the 13<sup>th</sup> century.

***Worked Stone No 15 (Context 183)***

Dimensions: 290mm x 270mm x 240mm. Material: sandstone. Description: simply moulded block containing two chamfers and a small groove or niche. One of the chamfers has a narrow chamfer, which would indicate a moulding of the 14<sup>th</sup> century or after as this is the recognised period for this feature (Morris 1992, 12).

***Worked Stone No 16 (Context 183)***

Dimensions: 150mm x 150mm x 140mm. Material: sandstone. Description: part of a fragmentary moulding that appears to use freestanding fillets and chamfers and crocket motifs. Freestanding fillets are used in the later Gothic period, but more conventional fillets occur in the 13<sup>th</sup> and 14<sup>th</sup> centuries (Morris 1992, 12-13). Crockets are a feature of Gothic features, most notably capitals, spires, canopies and pinnacles (Verey and Brooks 1999, 773). Their design developed throughout the Gothic period. In this particular case it may be that the design is taken from a decorative canopy, similar to what is evident in WS1.

***Worked Stone No 17 (Context 183)***

Dimensions: 255mm x 190mm x 80mm. Material: sandstone. Description: a moulding fragment containing a hollow chamfer. The chamfer is that of a quarter occasionally called a cavetto, which is common in Gothic design but also occurs in later Romanesque architecture (Morris 1992, 13). This style is particularly un-diagnostic and may occur from any date from the late 11<sup>th</sup> to the 16<sup>th</sup> centuries.

***Worked Stone No 18 (Context 183)***

Dimensions: 505mm x 235mm x 240mm. Material: sandstone. Description: part of a moulding that contains a hollow chamfer and a roll as part of cyma recta or small ogee moulding connected to a larger chamfer. The stone also appears to have a fitting for lead tracery. This feature is more common in later Gothic (Morris 1992, 13-14). The fact that the stone appears to have a slot for the fitting of lead tracery would imply that this was part of the moulding associated with a window. That the size of the moulding is wide, would indicate that this is not a mullion from the window tracery, but one of the mouldings on the outside of the window. The profile of the moulding has similarities to the jambs of the perpendicular windows, which is dated c 1390- c 1450 (Demidowicz and Gilderdale Scott 2015, 36, 52).

***Worked Stone No 19 (Context 183)***

Dimensions: 405mm x 265mm x 145mm. Material: sandstone. Description: part of a moulding probably associated with a mullion of a window frame. There is a roll and fillet at the one end flanked by two angle fillets associated with hollow chamfers. At the other end of the moulding there is a spiked hollow, which is flanked by two hollow chamfers. Lead is still attached to its fitting, thus indicating the stones use as a mullion. The spiked hollow is part of a feature found in later Gothic (Morris 1992, 15). This



would imply a date of the later 13<sup>th</sup> century to the early 15<sup>th</sup> centuries. This is a piece of tracery that is probably associated with the c 1390-c 1450 church build.

***Worked Stone No 20 (Context 183)***

Dimensions: 310mm x 290mm x 200mm. Material: sandstone. Description: part of a hollow chamfer but with a circular marking on part of the stone. The hollow chamfer appears to be a quarter circle which could be a common Gothic feature but also occurs on Romanesque architecture also (Morris 1992, 13). This means a rough date for this stone from the 11<sup>th</sup> to 16<sup>th</sup> centuries. The circular marking is approximately 70mm across with the width of the circular cut some 20mm. It is difficult to positively define the origins of this mark as the majority of mason's marks are relatively fine in their composition. This is apparent with a sketch of a window design from Saint John's College, Cambridge, dated c 1280 (Hislop 2000, 22 pl.8), and the 14<sup>th</sup> century examples illustrated by Hislop (2000, 51 pl.51). There are a number of medieval architects that are known to be associated with medieval Coventry. David Oswestre was a carpenter who was granted in 1416 by the Holy Trinity Guild a lease for 24 years for cottages in Bishop's Street if he rebuilt the cottages in two years (Harvey 1987, 224). Thomas Phillips of Bristol was a mason operating in Coventry from 1541-1552 (Harvey 1987, 232), he rebuilt the cross at Coventry taking some stone from Saint Mary's priory. A further architect was the King's Mason William de Ramsey III who was operating in Coventry 1323-1349 (Harvey 1987, 244). He is known to have built the Carmelite Friars church in Coventry, but is also recognised as the founder of the Perpendicular style with his work at Saint Paul's in London and Saint Peter and Paul's at Gloucester. Reginald the Mason was the master mason at the priory of Saint Mary at Coventry 1224-25 (Harvey 1987, 249). He is known to have had houses located outside the cemetery walls. None of these can be directly associated with that mark. Excavations at Saint Mary's priory at Coventry have identified a series of mason marks (Rylatt and Mason 2003, 82-83), however, none can be directly associated with this mark. The mark is probably either one to indicate what two stones fit together or a piece of graphite.

***Worked Stone No 21 (Context 183)***

Dimensions: 460mm x 255mm x 220mm. Material: sandstone. Description: part of a moulding containing a fillet as part of a variation on a chamfered beak, flanked on the one side by a hollow that is between a semi-circular hollow and a  $\frac{3}{4}$  hollow, alongside which is semi-circular roll with. Hollows that are larger than a semi-circular feature are recognised as being of a 13<sup>th</sup> or 14<sup>th</sup> century date in England (Morris 1992, 13).

***Worked Stone No 22 (Context 183)***

Dimensions: 200mm x 135mm x 135mm. Material: sandstone. Description: a tapering squared block of stone with foliated design of a crocket style running from the bottom corners of the blocks to the upper and central part of the face. Crocket decoration is commonly found on pinnacles and canopies (Verey and Brooks 1999, 773). The motif first appears at the end of the 12<sup>th</sup> century, but its design changes as it continued to develop through into the 15<sup>th</sup> century. This particular example is small and bud like so it is probable that it is of a 13<sup>th</sup> century date. The pinnacle had previously been repaired with a metal rod and cement inserted to hold the stone structure together.

***Worked Stone No 23 (Context 183)***

Dimensions: 390mm x 240mm x 235mm. Material: sandstone. Description: the moulding has a roll flanked by an angle fillet followed by an ogee wave then a further angle fillet; with a further ogee and an angle fillet. The latest feature recognised here is

the ogee, which is a late Gothic development in England (Morris 1992, 13). This detail usually occurs on continuous mouldings for arches. There are similarities with WS14.



*Plate 23. Worked Stone No 22.*

***Worked Stone No 24 (Context 183)***

Dimensions: 270mm x 250mm x 160mm. Material: sandstone. Description: moulding containing central roll with fillet, this means that this feature is probably of a 13<sup>th</sup> century at the earliest (Morris 1992, 14).

***Worked Stone No 25 (Context 183)***

Dimensions: 375mm x 325mm x 260mm. Material: sandstone. Description: the moulding contains two semi-circular rolls with quirk between, then an angle-fillet and cyma possible continuing into a casement mould that is not complete. Angle fillets normally occur in later Romanesque and Early English examples of architecture (Morris 1992, 11). This would imply a 13<sup>th</sup> century date. However, if the casement suggestion is correct, and the feature is not whole, then this feature would suggest a late Gothic date (Morris 1992, 12). This could mean a slightly later origin.

***Worked Stone No 26 (Context 183)***

Dimensions: 300mm x 290mm x 230mm. Material: sandstone. Description: fragment of moulding showing a triple roll with angle fillet and a further semi-circular roll or part of an ogee on either side. Triple roll designs are known to have been in use from the 12<sup>th</sup> to the 14<sup>th</sup> century (Lowe, Harrison et al. 2004, 57-60, 73, 98). However, here they are used in conjunction with an angle-fillet a more common feature of later Romanesque and Early English (Morris 1992, 11). The ogee moulding would suggest a 13<sup>th</sup> to 14<sup>th</sup> century date (Morris 1992, 13-14). It should be noted that triple roll design does occur in the Perpendicular chantry at Saint Michael's church (Demidowicz and Gilderdale Scott 2015, 37). The moulding here is far more extensive and it is possible that the Perpendicular style is drawing from a motif evident in an earlier church.

***Worked Stone No 27 (Context 183)***

Dimensions: 460mm x 315mm x 240mm. Material: sandstone. Description: the stone appears to contain a quirk, an angular incision. The quirk occurs on Romanesque and Early Gothic (Morris 1992, 14). This implies a late 11<sup>th</sup> to 13<sup>th</sup> century date.

***Worked Stone No 28 (Context 183)***

Dimensions: 380mm x 190mm x 170mm. Material: sandstone. Description: the moulding contains a semi-circular roll at its centre, which is flanked by a quirk and then hollow chamfers. The hollow chamfer and the quirk occur mainly in later Romanesque and Early English (Morris 1992, 13-14). It would be appropriate to place this piece of sculpture as dating to the 13<sup>th</sup> century.

***Worked Stone No 29 (Context 183)***

Dimensions: 160mm x 125mm x 100mm. Material: sandstone. Description: the moulding appears to use exaggerated waves or ogee designs. The shallow undulating moulding is mainly associated with 14<sup>th</sup> century English Decorated (Morris 1992, 15), however, exaggerated wave designs such as this one may be slightly later and be Perpendicular in their affiliation.

***Worked Stone No 30 (Context 183)***

Dimensions: 250mm x 190mm x 160mm. Material: sandstone. Description: a moulding that combines raised flat ended fillets that cross each other along with hollow chamfers, and also a hollowed spike. The spike hollow would imply that this feature is 14<sup>th</sup> century or later (Morris 1992, 15). The spike hollow is common in window tracery, which is what this stone was originally carved as. This piece of tracery could come from Saint Michael's Perpendicular windows c 1390-c 1450.

***Worked Stone No 31 (Context 183)***

Dimensions: 140mm x 140mm x 130mm. Material: sandstone. Description: part of a moulding with freestanding broad fillets. The broad fillets have basic chamfers. There is also a cusp moulding with a variation on the spiked fillet. One of the spiked hollow has a convex and concave variation, while the spiked fillet on the cusp is a more standard example with two chamfered hollows either side. The spiked hollow is a feature of later Gothic (Morris 1992, 15), which dates this stone to the very late 13<sup>th</sup> century to the 15<sup>th</sup> century. This is probably part of a piece of Perpendicular panelling dated c 1390-c 1450.

***Worked Stone No 32 (Context 183)***

Dimensions: 410mm x 320mm x 200mm. Material: sandstone. Description: the moulding contains a roll and is flanked by arrangements of flat ended fillets and hollow chamfers, which form cusps. The moulding appears to be part of a tracery that would be associated with later Gothic windows (Morris 1992, 13) of the 13<sup>th</sup> and 14<sup>th</sup> centuries. The moulding could come from the tracery of Saint Michael's Perpendicular windows c 1390-c 1450.

***Worked Stone No 33 (Context 183)***

Dimensions: 330mm x 280mm x 180mm. Material: sandstone. Description: a triple roll design but with angle fillets inserted between the semi-circular rolls. The triple roll development is associated with Gothic from the 13<sup>th</sup> century (Morris 1992, 9).



*Plate 24. Worked Stone No 32.*

***Worked Stone No 34 (Context 183)***

Dimensions: 540mm x 300mm x 230mm. Material: sandstone. Description: a worn fragment of moulding that contains two roll with fillet mouldings, which protrude from the moulding, and between which there is a hollow chamfer, with one of them being flanked by a further hollow chamfer. There are similarities in design from Rouen Cathedral dated 1280, and York Minster dated 1291 (Morris 1979, 2), although they are not identical. The design would thus imply a date in the later part of the 13<sup>th</sup> century and extending into the 14<sup>th</sup> century, thus being associated with English Decorated.

***Worked Stone No 35 (Context 183)***

Dimensions: 290mm x 250mm x 120mm. Material: sandstone. Description: a roll with fillet, which is flanked by two angle fillets and parts of further ogee mouldings that only partially survive. The ogee moulding is the latest feature here and is associated with later Gothic styles of the 13<sup>th</sup> to 15<sup>th</sup> centuries (Morris 1992, 13).



*Plate 25. Worked Stone No 35.*

***Worked Stone No 36 (Context 183)***

Dimensions: 290mm x 180mm x 120mm. Material: sandstone. Description: the moulding contains a roll with keel, probably an ogee keel, which is flanked by a fillet. The keel or arris in this particular example appears to be concave. The ogee keel was

popular in England in the 13<sup>th</sup> century and associated with Early English (Morris 1992, 13).

***Worked Stone No 37 (Context 183)***

Dimensions: 420mm x 220mm x 215mm. Material: sandstone. Description: moulding roughly worked, either damaged or not finished. Two mouldings running at right angles to each other. One appears to contain a fillet or degraded roll with a pointed fillet alongside. The other contains a semi-roll or demi-roll without a fillet. Dating of this is difficult but probably 13<sup>th</sup> to 14<sup>th</sup> centuries if not later. This appears to be part of a window sill and side c 1390-c 1450.

***Worked Stone No 38 (Context 183)***

Dimensions: 310mm x 260mm x 150mm. Material: sandstone. Description: a rectangular block with a number of ashlar faces, one of which has two dimple like depressions and a few scratch marks one of which has a circular shape. The excavations have noted that walls from after the 1250-70 rebuild are ashlar faced, the recognised wall in the excavations that pre-dates this date has a foundation that is made of rubble stone. This would imply that this stone is late 13<sup>th</sup> century at the earliest, but possibly later.

***Worked Stone No 39 (Context 183)***

Dimensions: 350mm x 190mm x 190mm. Material: sandstone. Description: stone with chamfer. The plane chamfer is broad on this stone suggesting that it is probably of a 12<sup>th</sup> to 13<sup>th</sup> century date (Morris 1992, 12).

***Worked Stone No 40 (Context 183)***

Dimensions: 390mm x 210mm x 200mm. Material: sandstone. Description: the moulded fragment contains a central semi-circular roll that is flanked by quirks with hollow chamfers outside of this. The hollow chamfer and the quirk occur mainly in later Romanesque and Early English (Morris 1992, 13-14). It would be appropriate to place this piece of sculpture as dating to the 13<sup>th</sup> century. This moulding is similar to that of WS28.

***Worked Stone No 41 (Context 183)***

Dimensions: 390mm x 160mm x 150mm. Material: sandstone. Description: a fragment of moulding that contains a semi-circular roll with a quirk and a hollow chamfer. The hollow chamfer and the quirk are both recognised as late Romanesque and Gothic features, but with the quirk it is mainly an early Gothic feature (Morris 1992, 14), so a 13<sup>th</sup> century date is more likely.

***Worked Stone No 42 (Context 183)***

Dimensions: 340mm x 260mm x 250mm. Material: sandstone. Description: part of a tracery moulding located at an arch springing or trifurcation point. The moulding uses broad freestanding fillets associated with hollow chamfers, some of which are associated with cusps. The freestanding fillet is a feature of the later Gothic (Morris 1992, 13) period and so this stone should be placed with a date range from the later 13<sup>th</sup> century to the 15<sup>th</sup> century. The moulding could come from the tracery of Saint Michael's Perpendicular windows c 1390-c 1450.





*Plate 26. Worked Stone No 42.*

***Worked Stone No 43 (Context 183)***

Dimensions: 280mm x 260mm x 170mm. Material: sandstone. Description: part of a window moulding that contains crossing freestanding fillets, and also a cusp with a freestanding fillet. The fillets are flanked by hollow chamfers. On the other side of the fillet there is a cyma recta type ogee. The freestanding fillet is a feature of the later Gothic period from the late 13<sup>th</sup> to 15<sup>th</sup> century (Morris 1992, 13), and is usually associated with window tracery. With this example lead is still attached in its fitting slot. The moulding could come from the tracery of Saint Michael's Perpendicular windows c 1390-c 1450.

***Worked Stone No 44 (Context 183)***

Dimensions: 250mm x 200mm x 180mm. Material: sandstone. Description: the stone contains a semi-circular hollow running across an otherwise flat surface. The semi-circular hollow is normally dated to the 12<sup>th</sup> to 14<sup>th</sup> centuries (Morris 1992, 13).

***Worked Stone No 45 (Context 183)***

Dimensions: 330mm x 240mm x 180mm. Material: sandstone. Description: a triangular piece of tracery that contains a semi-circular roll, which is flanked by an angle-fillet on one side, which is joined to a variant of the freestanding fillet. Below the fillet is an ogee and following on from this is a further variant of the angle fillet and a chamfer. The freestanding fillet is a feature of the later Gothic period (Morris 1992, 13), which is indicative of this being later 13<sup>th</sup> century to 15<sup>th</sup> century. The moulding could come from the tracery or panelling of Saint Michael's Perpendicular windows c 1390-c 1450.

***Worked Stone No 46 (Context 183)***

Dimensions: 180mm x 140mm x 100mm. Material: sandstone. Description: part of a moulding that contains a roll with fillet, which contains sharp breaks in the angle between the fillet and roll. The fillet is flanked by a hollow chamfer on either side. The filleted roll is first used in England from the 13<sup>th</sup> century and continues as a decorative motif into the later Gothic periods (Morris 1992, 14). It has also been recognised that stonework that has an angular shape between the roll and the fillet tend to be of an earlier date. This would imply that this stonework is of a 13<sup>th</sup> or early 14<sup>th</sup> century date.

***Worked Stone No 47 (Context 183)***

Dimensions: 230mm x 210mm x 160mm. Material: sandstone. Description: a piece of moulding with a triple roll (Morris 1992, 14). Triple roll mouldings occur in shafts and vaults. Vault shafts are recognised from 1120s at Sarum Cathedral and Reading Abbey (Lowe, Harrison et al. 2004, 98). Similar vaults have been found at Keynsham Abbey in Somerset where triple base and shafts have also been found (Lowe, Harrison et al. 2004, 57-60, 73, 98). The profile of the triple shafts appear similar to those at Keynsham where they are used in a 12<sup>th</sup> century and a 14<sup>th</sup> century phase. It should be noted that triple roll design does occur in the Perpendicular chantry at Saint Michael's church (Demidowicz and Gilderdale Scott 2015, 37). Indeed this particular piece could have come from that location.

***Worked Stone No 48 (Context 183)***

Dimensions: 210mm x 170mm x 140mm. Material: sandstone. Description: a roughly rectangular block of stone with moulding using a freestanding fillet and pointed fillets, which are not totally angle fillets or spiked fillets with one side convex and the other concave. As the fillet is partly hollowed on one side it is presumably part of a late Gothic tradition (Morris 1992, 15). This is probably 15<sup>th</sup> century. This would appear to be part of the panelling of the clearstory of the c 1390-c 1450 rebuild.

***Worked Stone No 49 (Context 183)***

Dimensions: 270mm x 230mm x 210mm. Material: sandstone. Description: a part of an L-shaped moulding with one arm containing a fillet with chamfer, while the other appears to have a partial demi-roll and fillet with two angle fillets. There is a possible wave continuing from the second angle fillet. The angle fillet is rare after the 13<sup>th</sup> century; (Morris 1992, 11). There is a further accompanying chamfer.

***Worked Stone No 50 (Context 183)***

Dimensions: 330mm x 220mm x 190mm. Material: sandstone. Description: moulding with central roll flanked by a raised chamfer, then a quirk and angle fillet, and subsequently a hollow chamfer. Some of these features have been noted in later Romanesque, but it is highly likely that this moulding is of an Early Gothic form (Morris 1992, 13). This is probably Early English from the later 12<sup>th</sup> century to the early 13<sup>th</sup> century.

***Worked Stone No 51 (Context 183)***

Dimensions: 200mm x 190mm x 160mm. Material: sandstone. Description: the stone contains a semi-circular hollow flanked by two flat faces. The semi-circular hollow or sunken semi-circle is normally dated to the 12<sup>th</sup> to 14<sup>th</sup> centuries (Morris 1992, 13).

***Worked Stone No 52 (Context 183)***

Dimensions: 170mm x 100mm x 70mm. Material: sandstone. Description: a fragment of semi-circular roll mouldings. This piece was probably associated with a string course but difficult to date precisely as rolls were used from the late Romanesque period into the Gothic period.

***Worked Stone No 53 (Context 183)***

Dimensions: 140mm x 100mm x 80mm. Material: sandstone. Description: a fragment of ogee moulding with a slight angle fillet. The ogee moulding would mean that this is a later Gothic moulding probably of the 14<sup>th</sup> century (Morris 1992, 13-14).

***Worked Stone No 54*** (Context 183)

Dimensions: 270mm x 175mm x 160mm. Material: sandstone. Description: a fragment of moulding that contains a quirk, angle fillet and part of a wave, ogee or hollow chamfer. The ogee and the wave is predominantly associated with later Gothic mouldings of the English Decorated style in the 14<sup>th</sup> century (Morris 1992, 13-15).

***Worked Stone No 55*** (Context 183)

Dimensions: 210mm x 200mm x 190mm. Material: sandstone. Description: a fragment of tracery sculpture containing a roll flanked by angle fillets, but also containing freestanding fillets and hollow chamfers. Freestanding fillets are a late Gothic development (Morris 1978, 46-49; Morris 1992, 13), and it is presumed that this is dated c. 1290 to the 15<sup>th</sup> century. The moulding could come from the tracery of Saint Michael's Perpendicular windows c 1390-c 1450.

***Worked Stone No 56*** (Context 183)

Dimensions: 360mm x 310mm x 180mm. Material: sandstone. Description: moulding of a triple roll flanked by two angle fillets and hollow chamfers. Mouldings of this type are often used in triple roll ribs (Morris 1992, 14). Triple roll designs are evident in various forms from the later 13<sup>th</sup> and 14<sup>th</sup> centuries. It should be noted that triple roll design does occur in the Perpendicular chantry at Saint Michael's church (Demidowicz and Gilderdale Scott 2015, 37). This particular example is more complex and it is possible that the Perpendicular church had mouldings derived from an earlier church

***Worked Stone No 57*** (Context 183)

Dimensions: 200mm x 200mm x 160mm. Material: sandstone. Description: a fragment of a roll moulding that could be dated from the Gothic period diagnostically (Morris 1992, 14).

***Worked Stone No 58*** (Context 183)

Dimensions: 310mm x 300mm x 230mm. Material: sandstone. Description: a piece of window tracery with a freestanding fillet flanked by a hollow chamfer. The freestanding fillet is a feature of later Gothic so a date from the very end of the 13<sup>th</sup> century is possible although a 14<sup>th</sup> century date is more likely (Morris 1978, 46-49; Morris 1992, 13). There are also file-rolls used on one side of the tracery associated with an angle fillet. The stone also contains the remains of cusps. The feature is part of an English Decorated window tracery.



**Plate 27.** *Worked Stone No 58.*

***Worked Stone No 59*** (Context 183)

Dimensions: 220mm x 200mm x 170mm. Material: sandstone. Description: an extremely worn moulding with an apparent ogee moulding. The ogee moulding is a later Gothic feature dated to the late 13<sup>th</sup> and 14<sup>th</sup> centuries (Morris 1992, 13-14).

***Worked Stone No 60*** (Context 187)

Dimensions: 152mm x 140mm x 105mm. Material: sandstone. Description: a fragment of moulding appearing to contain a wave, quirk and hollow chamfer. The wave moulding here would indicate a date for this moulding c 1290-1360 (Morris 1992, 15).

***Worked Stone No 61*** (Context 187)

Dimensions: 200mm x 155mm x 135mm. Material: sandstone. Description: a fragment of moulding containing an ogee-roll with a wave moulding, a quirk and part of a further wave moulding. The ogee moulding is a product of the later Gothic period (Morris 1992, 13-14) while the wave moulding is associated with English Decorated (Morris 1992, 15), so a late 13<sup>th</sup> to 14<sup>th</sup> century date would be appropriate for this moulding (c. 1290-1360). This is part of a moulding for an arch or tracery.

***Worked Stone No 62*** (Context 183)

Dimensions: 330mm x 210mm x 210mm. Material: sandstone. Description: a complex moulding that incorporates floral carvings. The moulding appears to use a series of features including a roll, a chamfered beak or fillet, a scroll, and two quirks located either side of a semi-circular bead. The beak moulding is a feature of Early English architecture at the end of the 12<sup>th</sup> century and extending into the earlier part of the 13<sup>th</sup> century (Morris 1992, 12). The foliage is probably stiff-leaf design rather than crocket, which is an Early English feature of the 13<sup>th</sup> century (Verey and Brooks 1999, 792).

***Worked Stone No 63*** (Context 183)

Dimensions: 72mm high by 40mm diameter. Material: sandstone. Description: small rounded head with ridge across the top of the head and sunken feature eyes. There are a series of six or so triangular teeth above a torus collar. The object may be the top most carving of a pinnacle. The pinnacle is on the whole not considered a common feature of Norman or later Romanesque architecture although it is noted that examples of this period occur sporadically in France and that there are examples at Rochester Cathedral in Kent. More locally examples are noted at Bredon, Worcestershire (Brooks and Pevsner 2007, 162-165), and Bishops Cleeve, Gloucestershire (Verey and Brooks 2002, 184-188), both examples from the Diocese of the Hwicce people that extended as far as Warwick up the Avon valley. However, in most areas it is recognised that the development of pinnacles to provide greater vertical elevation can only be dated to the Early English period of the latter 12<sup>th</sup> century and early 13<sup>th</sup> century. The torus design is first evident on the base of Classical columns, but was reused in the Norman and Early English periods. It is particularly common in Early English architecture from the late 12<sup>th</sup> to early 13<sup>th</sup> centuries (Morris 1992, 14).

**Summary and Conclusions*****Summary***

The earliest attempts to provide a synthesis of the development of the church of Saint Michael was by Chatwin (1928, 132-44). This was followed by further analysis based on Chatwins' work by the VCH (1969, 321-361). Here it is noted that the earliest

reference to the church of Saint Michael is 1144-1148 when Ranulf II restored the church to Coventry Priory with all of its chapels. This phrase implies that the church was constructed prior to the mid-12<sup>th</sup> century, but how much earlier than that has still not been demonstrated categorically. Here it is mentioned that the tower was constructed between 1373 and 1394, and that the spire building commenced in 1432. The Lady Chapel, Crypt and Charnel House were added to the north side of the structure in c. 1300. Later a small crypt was added to the east of this. The major rebuild is mentioned as occurring after 1373. A further synthesis of the church was given in *The Buildings of England: Warwickshire* (Pevsner and Wedgwood 1966, 249-259). This account suggests that the south porch is 13<sup>th</sup> century and so may certain walls attached to the tower. The tower and spire were begun in 1371 and finished in the 1430s.

The Perpendicular development is considered to date from after 1371. Later attempts to phase the structure have some highly conjectural phasing (Demidowicz and Gilderdale Scott 2015, 36). Here a series of nine phases of development were proposed, which was admittedly, derived from earlier work: Phase 1 (c 1100-c 1200), Phase 2 demolition (c 1250-c 1270), phase 3 rebuild (c 1250 - c 1270), phase 4 demolition (c 1300), phase 5 (c 1350-c 1390), phase 6 build (c 1350-c 1390), phase 7 demolition (c 1390-c 1450), phase 8 rebuild (c 1390-c 1450), and phase 9 (c 1450-c 1500). The earliest phasing here is problematic in that Bond (1988, 119-158) in a study of Worcestershire Norman churches showed that they were proportionately designed, and the suggestion here does not conform and, therefore, the current interpretation could be reconsidered.

Profiles of the architectural forms were drawn of the crypt in the 1860s, which show base and capital along with the profile of the ribbed vault. It should be noted that triple roll design does occur in the Perpendicular chantry at Saint Michael's church (Demidowicz and Gilderdale Scott 2015, 78). The vault design is based around a simple chamfer.

**Table 1.**

<b>Date</b>	<b>Worked Stone Number</b>
C11-C13	WS5, WS8, WS27
C11-C16	WS17, WS20
C12-C13	WS39, WS50, WS62, WS63
C12-C14	WS26, WS44, WS51
C12-C16	WS52, WS57
C13	WS4, WS6, WS7, WS9, WS14, WS22, WS24, WS25, WS28, WS33, WS36, WS38, WS40, WS41, WS49
C13-C14	WS1, WS2, WS3, WS16, WS21, WS34, WS54, WS56, WS58, WS59
C13-C15	WS11, WS12, WS35
C14	WS10, WS13, WS15, WS29, WS53
C14-C15	WS23
c 1390-1450	WS18, WS19, WS30, WS31, WS32, WS37, WS42, WS43, WS45, WS47, WS48, WS55

### **Conclusions**

A theory had previously been proposed that the stones reputedly recovered from excavations at Saint Michael's church were deposited in dumped ground that included material from the demolition of the 13<sup>th</sup> century church. There are significant amounts of stone that can be fitted into a general 13<sup>th</sup> century date and may well be recovered from deposits that were associated with the destruction or demolition of the 13<sup>th</sup> century



church. However, it is also apparent that not all of the stones are of this date and it is apparent that at least 12 pieces of worked stone can be associated directly with profiles from the Perpendicular style church. In one respect it would be possible to argue that such stones could be ones damaged during construction, however, it is apparent that some of the pieces of tracery contain pieces of lead tracery and it is apparent that they are most likely to have derived from parts of the clearstory that was destroyed in the bombing of 14<sup>th</sup> October 1940.

Harvey's (1987) listing of medieval architects or craftsmen provide some interesting associations that should be mentioned even if not seen as being categorically associated with Saint Michael's church. Perhaps most interestingly is the association of Reginald the Mason in 1224 with the priory church of Saint Mary at Coventry. A 13<sup>th</sup> century phase of building work has been proposed at the priory that would include the west end of the church, the west range of the cloisters, the infirmary and other buildings around a small courtyard (Rylatt and Mason 2003). The reconstruction of the chapter house architecture shows the use of crockets and stiff leaf mouldings with pinnacles and other details (Rylatt and Mason 2003, 73) that could be compared to what was carried out at Saint Michael's church. This phase may relate to the references in 1224-5 of a mason being employed by the priory. The phasing at Saint Michael is considered to be slightly later, but it is known that when religious houses had major rebuilds carried out quite often churches in their sphere of influence had masons from the larger mother church move on to that church to carry out further rebuilds in a similar style. The association between the priory and the church of Saint Michael appears through this period to have been a bit intermittent and under dispute (VCH 1969, 321-361). William de Ramsey III, the founder of the Perpendicular style carried out work at the Carmelite Friary and although it is too early for the work that was carried out at Saint Michael it does indicate a possible link and significance associated with the new style and influence (Harvey 1987). The carpenter David Oswestre appears to have rented cottages for 24 years and one could assume that this is associated with a significant building project in Coventry and may not simply be associated with the Holy Trinity Guild. The associated date here 1416 falls right in the middle of the period proposed for the major reconstruction of Saint Michael's church.

## **5.4 Ceramic Building Material**

### **5.4.1 Medieval Tiles** *(By Cynthia Pool)*

#### ***Introduction***

A small number of floor tiles were recovered from the excavations of which nine were seen by the specialist from contexts 241 and 167. Three of these were medieval decorated inlaid tiles, five were plain glazed and one was a modern unglazed tile of 19<sup>th</sup> or early 20<sup>th</sup> century date. Details are summarised in Table 2. Five medieval tiles were complete or virtually so and a complete width survived for a sixth.

The tiles are all square except two that had been scored diagonally pre-firing and snapped post-firing to produce half size tiles of triangular form. The medieval tile falls into two size categories: a smaller tile 110-113mm wide but with thickness ranging from 20-29mm and a larger size of about 125mm width with a thickness of 21-27mm. The decorated tiles in both size categories were all thicker than the plain tiles. None of the tiles were keyed, all having flat even bases. The edges were cut smooth and

bevelled, except for one tile where two adjacent edges were vertical. The decorated tiles all had a sharp deeply impressed design suggesting the moulds used were new and unworn.

All were made in a light pinkish red or orange sandy fabric containing a high density of medium coarse quartz sand (fabric Q). However two had additional dark rock grits, possibly shale or a ferruginous grit (Fabric QSh). It is probable that the tiles were made in the vicinity of Coventry. Clay working sites occur along the band of coal measures clay deposits that occur around Coventry and to the north around Nuneaton. Tile production from the late 13<sup>th</sup> to the early 14<sup>th</sup> century has been identified at Chivers Cotton (Mayes and Scott 1984) north of Coventry, but production also occurred closer to the city. A tile kiln producing floor tiles from 14<sup>th</sup> to 16<sup>th</sup> century was found in the suburb of Stoke in 1911 (Chatwin 1940, 2), though it has not been possible to match any patterns from the cathedral to those of the kiln site.

Two tiles, one decorated (Tile No 1) and one plain triangular (Tile No 6), had evidence of a small nail hole c. 3mm wide piercing the upper surface in one of the corners.

The plain tiles were all glazed with a clear or amber glaze that produced a brown colour over the red of the fired clay. The exception was one glazed in olive green mottled with bottle green patches from concentrations of copper in the glaze. All had been subject to exceptionally heavy wear, which had removed the glaze almost in its entirety from the tile surfaces. Glaze only survived where it had dripped or dribble down the tile edges or into the scored sections of the snapped tiles. On the green glazed tile the glaze had also run across an extensive area of the tile base. On one of the triangular tiles the least wear occurred alongside the diagonal cut, resulting in a margin of glaze surviving here. It is probable this lay at the edge of a block of tiles alongside a wall or other structure that had mitigated the amount of wear.

The three decorated tiles were all glazed with an amber glaze to produce a yellow pattern over the pipe clay inlaid contrasting against the brown ground. Three different designs are represented:

***Tile No 1.***

Decorated encaustic floor tile with deeply impressed sharp design well preserved in spite of wear. It forms part of a four tile pattern using 4 tiles of the same design to produce an overall design of four fleur de lys in each quadrant enclosing a small circle of ?flambeaux and framed by 4 thin circles which enclose a circle of triangles between the 2 central lines (Plate. 32). In the remaining corner is a geometric foliate pattern which would join with adjacent tiles and would probably form a foliate cross. A small nail hole occurs in the corner at the centre of the design.

***Tile No 2.***

Decorated encaustic floor tile with deeply impressed sharp design well preserved in places, but heavily worn towards the edges. The tile is divided into half by two diagonal lines from corner to corner (allowing the design to be cut into triangles if required). In each triangle are arranged three chalices with covers (Plate 31), the central one in each group being slightly larger than the ones to either side.

**Tile No 3.**

This tile is very fragmentary and it has not been possible to precisely identify the design, which consists of a pattern of radiating lines thickening as they expand outwards. This possibly represents a fleur de lys radiating from the corner of the tile or some form of foliate pattern.

**Conclusions**

No exact parallels for these tiles have been found, though a number of similar tile designs have been identified in the Parker-Hore (P-H) record held by the Ashmolean Museum (<http://tileweb.ashmolean.org/> accessed May/June 2015). Designs incorporating chalices (or cups with a cover) occur at St Michael's church Coventry (P-H: j002), where it has been interpreted as an armorial tile representing Baleter of Coventry and at Wormleighton church Warwickshire (P-H: (P-H: j041), also interpreted as an armorial tile of an unknown family. Chatwin (1940) suggests both tiles represent the Boteler family (presumably variant spellings of the same family). Another tile from Wormleighton (P-H: j032) church described as "a floriate cross encompassed with thorns and encircled with a nimbus" provides a parallel in concept, though not in its precise style, with Tile 1. The motif in the corner of Tile 1 may also be intended to depict thorns. The designs of the decorated tiles appear to be confined regionally to the area of Warwickshire as no similar designs have been noted from neighbouring counties or more distant areas.

The variety of tiles indicates that areas of both decorated and plain tiles were used for the floors of the medieval cathedral probably in combination with panels of decorated tiles separated by areas of plain tile. The different sizes of tile suggest they derive from at least two separate areas of flooring. The triangular tiles indicate that at least some areas were laid on a diagonal to create a diamond effect. No plain tiles were found covered with a white slip, which could be used to create a contrasting chequerboard pattern; any variations in colour must have been achieved by differing fabric colour and variations in the glaze. Surviving areas of floor revealed by the excavation consisted entirely of Victorian encaustic tiles laid in 1885-90. Tile 4 may date to this phase of work.

The medieval floor tile was recovered from the backfill of graves. Context 3/10 filled a grave, which cut a wall foundation of 1300, but cannot be more securely dated. The tile could be contemporary with the foundation. Context 241 was the back fill of intercutting graves, which cut a wall dated *c.* 1390-1450. The cut is thought to represent a row of graves in the nave of the 15th century church, but the presence of a 19<sup>th</sup>-20<sup>th</sup> century tile from this context suggests there was some later disturbance to the deposits. As a result it is not possible to date the tile more closely than the general date of late 13<sup>th</sup> – 14<sup>th</sup> century for this type of tile.

**Table 2.**

Id	Ctx	N o s	Wt (g)	Fabric	Condition	Type	Surface finish	TH	W	L	Date
1	241	1	651	Q	100%	decorated	Inlaid	29	111	111	mC13-14
2	241	1	844	Q	100%	decorated	Inlaid	25-27	125	127	mC13-14
3	241	1	93	Q	<20%	decorated	Inlaid	25	>47	>71	mC13-14
4	243	1	1407	G	100%	plain	Unglazed, machine made	27	156	158	C19-1940
5	241	1	345	Q	60%	plain	Olive green glaze with bottle green mottles	23	124	>94	mC13-14
6	241	1	348	QSh	98%	Plain triangular	Amber glaze	20-21	111	110	mC13-14
7	241	1	822	QSh	100%	plain	Dark brown glaze	21-22	122	125	mC13-14

8	3/10=167	1	159	Q	c. 30%	plain	Clear/amber firing brown	23	>55	>102	mC13-14
9	3/10=167	1	215	Q	90%	plain triangular	Clear/amber firing brown	22	113	>98	mC13-14

#### 5.4.2 Victorian Floor Tiles (By Simona Denis)

##### *Introduction*

Twenty two floor tile fragments dated to the Victorian period, with a combined weight of 2797.4 gr, were collected from five contexts (App. B, Table 9). Traces of burning were observed on two examples collected from a floor that still survived *in-situ* (Fig. 2, 225).

##### *Tiles*

The design of decorated tiles was clearly inspired by medieval examples, although largely simplified for mass-production. Two different decorations were observed among the tiles recovered:

1. Single, central 5-petal rosette; drab on pale buff
2. 4 schematic fleurs-de-lis arranged to form a circle; pale buff on drab

During the 19<sup>th</sup> century a large number of churches were restored or built, providing a broad market for floor tiles producers; in some cases, the tiles were donated to the church by pious manufacturers like Herbert Minton (Durbin 2004). Five of the decorated floor tiles found at Old St Michael's clearly show the full maker's mark (below) on the back identifying Minton as the manufacturer.

*MINTON HOLLINS & Co*  
*PATENT TILE WORKS*  
*STOKE ON TRENT*

Herbert Minton entered into partnership with Michael Hollins and formed the tile making firm of Minton Hollins & Co. in 1845. The assemblage includes several examples of the range of colour, sizes and decorations offered by Minton Hollins & Co as shown in their *Complete Price List* of 1909); the plain tiles comprise both square and triangular examples, in a variety of colours. This 'use of flamboyant colour and pattern' typical of Victorian churches, is probably a direct result of the manufacturers including excess stock and remnants in their donations (Durbin 2004). Minton Hollins & Co's *Complete Price List* lists this type of tiles as 'machine-made encaustic tiles, in two plain colours'.

The unstratified examples, as well as the fragments from context 225 (Fig. 2), are probably remains of the larger tiles forming the chequered central part of the presbytery paving as visible in a 1930s photograph (Demidowicz 2013, Fig. 62).

The rectangular, glazed fragment from context (113) shows an unusual decoration, characterized by a linear colour gradient ranging from a bright, emerald green to the buff colour of the fabric. Similar items are shown in the Minton Hollins & Co's catalogue as elements of wall tiling.

## 5.5 Dressed and Worked Stone *(By Simona Denise)*

### ***Introduction***

Two fragments of worked stone were recovered, one was unstratified the other from context 113.

### ***Building Stone***

One unstratified fragment of building stone, weighing 356 gr and preserved to a maximum extent of 62x68x55 mm, was also recovered during the excavation. The item has two finely dressed faces, forming an arris, and shows traces of burning.

### ***Marble Plaque***

Context (113) yielded two conjoining fragments of white marble-like stone, of a combined weight of 184 gr, worked in a triangular shape preserved to a maximum of 73x55 mm, and measuring 25 mm in thickness. The object was tentatively identified as an element of the wall decoration.

## 5.6 Ferrous Metal Objects *(By Simona Denise)*

### ***Introduction***

A collection of 51 metal objects, including a variety of iron, lead and copper alloy items, was recovered from seven different contexts (Table. 3). Context (226), a levelling deposit related to the 1940 bombing, is the richest in metalwork finds, with 43 items or 84% of the assemblage. Some of the finds clearly bear the signs of the fire caused by the 1940 bombing. The second richest context is (3/10), with three iron fasteners; the remaining five context held a single metal object each and represent 9% of the collection combined.

**Table 3.**

<b>Context</b>	<b>Number</b>	<b>Fe</b>	<b>Cu Alloy</b>	<b>Pb</b>
3/06=227	1	-	-	1
165	3	3	-	-
3/26	1	-	1	-
110	1	-	1	-
112	1	1	-	-
113	1	-	-	1
226	43	35	7	1

### ***Iron fasteners***

Of the 39 iron items, weighing 4554 gr in total, found during the excavations at St Michel's, the vast majority (89%) is represented by various types of carpentry and masonry fasteners.

### ***Nails (17<sup>th</sup>-20<sup>th</sup> century)***

Most of the items positively identified as nails are complete, although in poor state of preservation due to the advanced oxidation. In three case the corrosion prevented from the identification of the specific nail type. The vast majority (86%) was positively recognised as machine produced nails, dating between the 18<sup>th</sup> and the early 20<sup>th</sup> century; all of the identified types serve different functions in carpentry and masonry (Table 4). Two of the general purpose nails were completely hand-wrought, as clearly



indicated by their distinctive onion-like pattern of corrosion (Bodey 1983); these items were also heavily affected by fire. 23 of the iron nails, of a combined weight of 807 gr, were found in context (226). Two examples were collected from context (3/10), the remaining item being found in context (112).

**Table 4. Iron Nails**

Context	Type	Weight (gr)	Length (mm)	Manufacturing technique	Head	Point	Function	Date Range
3/10	?Lath	6	57	Machine cut with handmade head	?Flat	Sharp	Carpentry	E19th C
		6	40			Missing		
112	Clasp	24	100	Machine cut with handmade head	2-facets	Sharp	Carpentry and masonry	E19th C
226	Sprig	11	76	Machine cut	L-head	Flat	Trim and flooring	19 <sup>th</sup> -20 <sup>th</sup> C
		11	76					
		15	76					
		12	76					
	Clasp	18	88	Machine cut with handmade head	2-facets	Missing	Carpentry and masonry	E19th C
		17	90			Sharp		
		20	104			Flat		
		22	104					
		19	104					
		20	104					
	General purpose	81	155	Machine cut with handmade head	Rose	Flat	Framing, lathing and concealed work	18 <sup>th</sup> -19 <sup>th</sup> C
		49	145					
		50	130					
		44	130					
		29	11					
		46	95					
93		161	?Hand wrought					
50	133	Missing						
T-head	58	158	Machine cut with handmade head	T-head	Flat	Finishing	18 <sup>th</sup> -19 <sup>th</sup> C	
	49	135						
?Foundry	50	160	Machine cut	None	Flat	Metal sculpturing	?19 <sup>th</sup> C	
Unidentified	24	76	Unidentified	Unidentified	Flat	Unidentified	Unknown	

**Screws (19<sup>th</sup> -20<sup>th</sup> century)**

A small group of six screws, of a total weight of 2456 gr, were collected from context 226 (Table. 5; Plate. 35). The items show advanced corrosion, although they are completely preserved with a single exception.

**Table 5. Screws**

Context	Weight (gr)	Length (mm)	Head (mm)	Point	Washer
226	866	282	Square, 32x32	Semi-cone	1
	632	272	Square, 32x32	Cone	
	612	240	Square, 32x32	Cone	2
	256	124	Square, 29x29	Missing	1
	68	147	Rounded, countersank, 180mm $\varnothing$	Cone	
	22	72	Rounded, countersank, 150mm $\varnothing$	Cone	

The very large examples were possibly part of the buckled metal fitch plates from the roof of the Cathedral; similar items are clearly visible in a photograph taken soon after the air raid of the 14<sup>th</sup> of October 1940 (Demidowicz 2013).

***Curved fastener (19<sup>th</sup> century)***

A fragment of curved fastener weighing 3 gr was recovered from context (167). It is a rectangular section shaft, preserved to a length of 30 mm, with a sharp point bent at c. 45° to the shaft; the head is not preserved. The object was tentatively dated to the 19<sup>th</sup> century.

One complete wrought iron curved nail weighing 139 gr and measuring 132 mm in length was found in context (226). The item, dated to the 19<sup>th</sup> century, has a rectangular cross-section (12x8 mm) shaft and a T-head: the point is not preserved.

**5.6.1 Other Iron Objects (By Simona Denise)*****Twisted Link Chain (18<sup>th</sup>-20<sup>th</sup> century)***

A portion of a twisted link chain, weighing 451 gr, measuring 380 mm in length and including 13 links. The object is severely corroded. An indicative dating between the 18<sup>th</sup> and the 20<sup>th</sup> century is suggested.

***Padlock (19<sup>th</sup> -20<sup>th</sup> Century)***

The iron padlock (Plate 33) recovered is completely preserved although severely corroded and damaged by heavy fire, resulting in the partial melting of the surface of the body. The object, measuring 110 mm in height and weighing 486 gr, was positively identified as a tumbler padlock, with a U-shaped shackle with rounded cross-section and a trapezoidal keyhole cover, and dated to the Victorian period.

***Pulley (20<sup>th</sup> Century)***

One corroded iron item weighing 106 gr and measuring 58x58 mm was found in context (226). It is composed of an octagonal flat plate connected to a rounded, flat element through 4 flat strips. Both plates have a small (7 mm in diameter) circular hole through the centre, on the same alignment, possibly for passing a cable or wire. The object was identified as fixed pulley, and tentatively dated to the early 20<sup>th</sup> century.

***Decorative Object***

An incomplete, S-shaped iron object was collected from context (226). The item weighs 56 gr and is preserved to a length of 140 mm, and has a rounded cross-section 6 mm in diameter. Although not positively identified, the general aspect of the object suggests a possible decorative function.

***Unidentified Object***

A very thin (2mm in diameter), severely oxidised iron wire object was also recovered. It weighs 14 gr and is preserved to a length of 165 mm, and passes through the bent loop of a fastener made of twisted wire. Function and date of the object remain undetermined.

**5.6.2 Copper Alloy Objects (By Simona Denise)*****Fastener***

A single copper alloy nail was found in context (3/10). The item is complete, weighing 3 gr and measuring 40 mm in length, with a T-head and a flat point. The object can be broadly dated to the post-medieval period.

### 5.6.3 Copper Alloy Decorative Objects and Fittings

#### ***Introduction***

7 copper alloy objects, of a combined weight of 264 gr, were collected from context (226). The largest part (5 objects, or 71%) of the assemblage was identified as decorative or fitting elements, and dated between the late 19<sup>th</sup> and the early 20<sup>th</sup> century. One rounded copper object weighing 43 gr was also recovered. It is made of a flat copper alloy strip folded along its length on both sides and with cut-off corners. The item, measuring 240 mm in length and 23 mm in width, with a maximum thickness on 2 mm, is curved to form an open ring. The object was probably part of the fittings or the decoration. A dating between the late 19<sup>th</sup> century and the early 20<sup>th</sup> century is proposed on the basis of its overall aspect.

#### ***Curtain Rings (19<sup>th</sup> -20<sup>th</sup> century)***

Two copper alloy rings of a combined weight of 103 gr were found in context (226); the items show advanced oxidation and are flattened and bent, with a reconstructed diameter of ca. 100 mm. Although the rings have are very similar in weight, size and general aspect, their manufacturing details differ.

The example weighing 53 gr and is made of a length of cast tubular copper, while the item weighing 50 gr is made of a flat strip of copper rolled into a tubular shape. Two pairs of small (4 mm in diameter) holes through the rings were observed on both objects, regularly spaced 150 mm apart.

The items are probably part of the copper fittings of the Church, specifically for the suspension of curtains as visible in early 19<sup>th</sup> century paintings (Henry Jeayes 1800).

#### ***Fitting***

Two conjoining fragments of a copper fitting, complete with three much corroded small screws, was recovered from context (226). The object, weighing 37 gr and preserved to a length of 75 mm, has an undulated profile and is slightly curved; two pairs of rounded slots for fasteners are located at the two wider points of the item.

#### ***Copper Sheet***

An additional possible decorative element made of a rolled copper sheet, weighing 24 gr and preserved to a length of 153 mm was also found in context (226). Function and date of the item remain undetermined, although the general aspect is very similar to the copper alloy rings from the same context.

### 5.6.4 Other Objects

#### ***Button***

A fragmentary cast copper alloy object, weighing 7 gr was found in context (110). The item is a domed disc, measuring 24 mm in diameter, with a fragment of possible shank at the back; it was tentatively identified as the face of a 2-piece button.

#### ***Key (19<sup>th</sup> -20<sup>th</sup> Century)***

The complete brass key (Plate 33), measuring 65 mm in length and weighing 18 gr, was identified as an undecorated padlock key and dated between the late 19<sup>th</sup> and the early

20<sup>th</sup> century. The cast object has an oval, plain bow and a hollow shaft with circular cross-section and a triple bit.

***Nameplate Holder (19<sup>th</sup> century?)***

Context (226) yielded a copper alloy frame, measuring 92x44 mm and weighing 39 gr. The object is a rectangular, slightly curved holder with four small (2 mm in diameter) slots for fittings in the corners. It was tentatively identified as a label or nameplate holder, possibly from one of the Church pews.

**5.6.5 Lead (By Simona Denise)**

***Introduction***

Three lead objects were recovered from three contexts (113, 226 and 3/06), weighing a total of 2254g.

***Lead Frieze***

One lead object weighing 1982 gr was collected from context (226). Although severely damaged and largely deformed, the object appears to be completely preserved. It was tentatively identified as a decorative element or frieze, from the interior of the Church or from a grave. It shows a cut out decoration in the shape of a Gothic foil arch with a larger central cusp flanked by two smaller elements. The same decorative element is repeated three times.

***Lead Frame***

Two conjoining fragments of lead frame for stained window glass were recovered from context (113). Weighing 29 gr, the object has an H cross-section and is preserved to a total length of 190 mm. The frame is most probably part of the Victorian stained glass windows.

***Lead Object***

Two pieces of molten lead, of a combined weight of 243 gr, were found in context (3/06). The largest fragment measures 135x80 mm and has no recognisable shape, but it appears to have been a lead object heavily damaged by fire, possibly as a consequence of the 1940 bombing.

**5.7 Window Glass (By Simona Denise)**

***Introduction***

A total of three fragments of flat window glass, of a combined weight of 59 gr were recovered from context 226 (Plates. 36, 37). The objects are very likely to be remains of the Victorian stained glass windows installed in 1853 (Demidowicz 2013) destroyed in the 1940 bombings.

***Stained Window Glass***

The two conjoining fragments of light green window glass, of a combined weight of 32 gr, form ca. 80% of a circular element, measuring 71 mm in diameter and 3 mm in thickness, with a brown-reddish decoration consisting of a peripheral circle and a central element representing a flower with 6 petals in negative.

The remaining fragment, weighing 27 gr and measuring 68x65 mm, is the inner portion of a stained panel, 2.5 mm thick and amber-coloured. The visible decoration shows a floral pattern in negative, with two schematic tulip-like flowers and a spiral element.

### **5.7.1 Other Glass Objects** *(By Simona Denis)*

#### **Introduction**

Two glass objects were recovered from context 226, weighing a total of 57g.

#### **Light Bulb** *(20<sup>th</sup> Century)*

One incandescent light bulb weighing 45 gr, was found in context (226). The item is complete but severely damaged by the fire, resulting in the melting of the glass bulb. It was positively identified as an OSRAM 60W bulb with a standard bayonet cap measuring 22 mm in diameter. The bulb preserved the complete stamped manufacturer's mark. The Osram Company established its first factory in UK in 1906; therefore, the object can be dated to the early 21<sup>st</sup> century.

#### **Bottle Stopper SF5** *(19<sup>th</sup> Century)*

An extremely shedded, incomplete glass cylindrical object, identified as a bottle stopper shank, was also found from context 223. It measures 38 mm in length and 17 mm in diameter, and weighs 12 gr.

### **5.8 Other Objects** *(By Simona Denis)*

#### **Introduction**

A few fragmented and carbonised paper pages and a small fragment of slate were recovered from context 226.

#### **Bible Pages** *(SF10)*

A number of carbonised printed pages was recovered from context (226). The largest fragment (75x40 mm) was sufficiently preserved to allow the identification of Psalm LXII. The Bible from which the pages were from was presumably burnt in the fire that followed the 1940 bombing.

#### **Slate**

Context (226) yielded a single fragment of slate measuring 52x24 mm and weighing 9 gr. Although the small size and the lack of diagnostic elements prevent from a positive identification, it is highly probable that the item is part of a slate roof tile. The date of the object remains undetermined.

### **5.9 Coins** *(by Andrej Čelovský)*

#### **Introduction**

An assemblage of six coins and one jeton (App. D, Table. 10) was recovered from five contexts during archaeological investigations at St Michael's Cathedral in Coventry. Basic analysis, which involved the cleaning, measuring, photographing and detailed visual examination of the coins, was carried out to assess the assemblage. The



assemblage represents relatively common types of copper-alloy post-medieval and early modern coinage, dated from second half of 17<sup>th</sup> century to 1936.

**Token 1.** (SF No 7. Context 213)

The earliest dated coin is 17<sup>th</sup> century Coventry token issued by Robert Bedford (Plate 28). This token has not been listed as a known type (Dickinson M. 1986, p219).

**Coin 2.** (SF No 1)

This is a halfpenny of William III (Plate 28), broadly dated from 1695 to 1701.

**Coin 3.** (SF No 2)

Halfpenny of George III; first issue type of halfpenny minted at Tower Mint, London, in 1772.

**Coins 4, 5, 6.** (SF Nos 3, 4, 9)

The rest of the assemblage are three very worn and corroded one penny coins. Coin No 4 was identified as Victoria's old head issue, broadly dated from 1895 to 1901. Coin No 5 is one penny of George V, dated to 1916. Coin No 6 was identified as same type of penny generally dated from 1910 to 1936.

**Jeton 7.** (SF No 8)

A single copper-alloy Rose and Orb type Nuremberg jeton of Hans Krauwinkel II (1586-1635). Jetons are generally quite common finds from urban and high status sites.



**Plate 28 - Token 1 (C1).** 17<sup>th</sup> century Coventry token issued by Robert Bedford. **Coin 2 (C2).** halfpenny of William III, broadly dated from 1695 to 1701.

**Conclusions**

Token 1 and coins 2 and 3, were recovered from a deposits (108, 213) related to raising of the chancel and aisle floors during a phase of modification to the interior of the church in 1851 (see Phase 8). The coins and token date from the 17<sup>th</sup> and late 18<sup>th</sup> centuries, which fits well with the date of these modifications. Coins 4 and 5 were recovered from a deposit (110) related to repairs and modifications of war damage (see Phase. 10) made after the end of the war. The jeton (Coin 7) was not recovered from an archaeological context, but found on the edge of the excavation following a group tour during an open day and, apparently, dropped by member of the public? The edges of the excavation were cleaned prior to the open day, therefore, without doubt not from the excavation.

## 6 HUMAN SKELETAL REMAINS (By Sharon Clough)

### **Introduction**

Two inhumations were recovered from archaeological monitoring of a drainage trench at Coventry Cathedral. They were located either within the north aisle of the 14<sup>th</sup> century phase of the church or within the nave of the 15<sup>th</sup> century phase of the church development. Both of the graves have been cut into foundations dated to *c.* 1300.

### **Methodology**

All skeletal material was examined and recorded in accordance with national guidelines (Hillson 1996a; Brickley and McKinley 2004; Mays *et al.* 2004).

### **Biological Age Assessment**

Aging is a highly variable process whose causative factors and biological mechanics are not fully understood (Cox 2000). In addition, 'biological age' does not always equate to 'chronological age' or 'social age' (Lewis 2007) of which adulthood is primarily a culturally defined concept (Cox 2000, Lewis 2007). With this in mind, a multi-method approach was taken (Table 6) to provide a range of estimates. Then each indicator was weighted on reliability. Where only one (less reliable) method was available, then this individual was determined to be only adult or sub-adult.

**Table 6:** *Macroscopic techniques used*

Pubic symphysis – Brooks and Suchey 1990
Auricular surface – Lovejoy <i>et al</i> 1985
Older adults - Buckberry and Chamberlain 2002
Dental attrition – Miles 1962
Cranial suture closure – Meindl and Lovejoy 1985
Sternal Rib ends – Işcan & Loth 1984 & 1985
Epiphyseal fusion – McKern and Stewart 1957 and Webb and Suchey 1985
Dental eruption – Moorees, Fanning and Hunt 1963, AlQahtani 2009

### **Sex Estimation**

The biological sex of all adult skeletons was based on examination of standard characteristics of the skull and pelvis (Ferembach *et al.* 1980; Schwartz 1995), with greater emphasis on features of the latter as they are known to be more reliable (Cox and Mays 2000). Measurements of the femoral and humeral heads were employed as secondary indicators (Giles 1970). Adult skeletons were recorded as male, female, probable male (male?), probable female (female?), or indeterminate depending on the degree of sexual dimorphism of features. No attempt was made to sex subadults defined as individuals below 20 years of age for whom there are no accepted methods (Cox 2000), with the exception of adolescent skeletons whose innominate bones had fused and where preservation was adequate.

### **Skeletal Condition and Completeness**

The completeness of each skeleton was classified as a percentage of the whole and divided in to four groups , 0-25% 25-50% 50-75% and 75+%. The condition of the bone surface of each skeleton was recorded in detail with reference to different anatomical

areas (skull, arms, hands, legs and feet) after McKinley (2004, 16) and given an overall summary score.

### ***Metrics***

Measurements of long bones were used to estimate stature in adults (Trotter 1970). Measurements of other long bones and skulls were taken (where appropriate) and used in the calculation of indices to explore variation in the physical attributes of the population.

### ***Nonmetric***

The presence or absence of frequently recorded non-metrical cranial and post-cranial traits were scored (Berry and Berry 1967; Schwartz 1995; Hillson 1996).

### ***Dental***

Dentition was recorded using the Palmer notation. Caries were graded into small (<1mm), medium (2-4 mm) and large (>4 mm). Abscesses were recorded with reference to Dias and Tayles (1997). Periodontal disease and dental enamel hypoplasia were graded using Ogden 2008. Calculus was graded per tooth (flecks, slight, medium, heavy after Brothwell 1981) and recorded as sub and supra gingival.

### ***Musculo-skeletal stress markers***

Hawkey and Merbs (1995) distinguished between robusticity markers caused by “normal reaction of the skeleton to habitual muscle use and [which] reflect daily activities that produce rugged markings at the musculoskeletal site of attachments” and stress lesions, “a pitting or furrow into the cortex to the degree that it superficially resembles a lytic lesion.” It was suggested that the differences in appearance reflected a continuous response to overload (Hawkey and Merbs 1995).

Specific muscle insertion sites were scored in order to examine any possible patterns. These were graded from 0-3 (after Hawkey and Merbs 1995). Particular sites were used as these have been shown to indicate activity.

Lower limb MSM is usually not indicative of a particular repeated action or occupation. These muscles are used for many different activities.

### ***Pathology***

Skeletal pathology and/or bony abnormality was described and differential diagnoses explored with reference to standard texts (Ortner and Putschar 1981; Resnick 1995; Aufderheide and Rodriguez-Martin 1998).

## **RESULTS**

### ***Introduction***

The inhumations are discussed as individual burials.

### ***SK 163***

This individual had the upper left torso (0-25%) of the skeleton present for analysis. This comprised cervical vertebrae fragments, clavicle, ribs, scapula fragments and humeral fragments upper third. The occipital bone was also present. The bone surface

was grade 2, as there was cracking longitudinally on some bones, possibly from wet/dry action. The bone was also very fragmented.

The nuchal crest on the occipital bone was very prominent indicating a male individual. The scapula glenoid fossa width was 33 mm placing it well into the male range (>28.6). The muscle insertion sites were well-defined, often observed on male skeletons. Although multiple factors and the pelvic area are needed to establish sex of the skeleton, it is very probably a male individual.

The remaining elements are not usually used for age estimation. However, the fragments of cranium were thick and where sutures could be observed they were well fused, nearly obliterated. These two indicators are often found on older individuals. Further signs of the older age range were from the bone lipping on the glenoid fossa and the thoracic vertebrae. These are age-related joint degeneration. It is therefore suggested that this male was in the mature-older age range at the time of death.

### **SK 166**

This individual had most of the parts of the skeleton represented. There was between 25-50% of the bones present, although they were all fragmented and also displayed the longitudinal cracking seen on SK 163. Bone surface grade was therefore grade 2. The cranium had a 'tide' line of calcified product. This is commonly seen where the body has lain in a water-tight environment (e.g. coffin) during the process of decomposition. There were nine teeth present, all loose with no pathological lesions. They were all from the maxilla and the molars which were present had a slight amount of wear. The pubic ramus was present and was small and narrow, typical female. The frontal bone slope and bossing were also typical of a female skull. Other post cranial elements were small and gracile. This individual is therefore considered to be female.

The pubic symphysis was stage 6, 42-87 years (Suchey-Brooks method). Sutures where seen were well fused. The dental attrition on the maxilla molars was low, and therefore not corresponding with the other age-indicators for the mature-older age range. This may indicate a soft diet, free of coarse food.

The femoral platymetric index was 72 (right femur) this is platymetric (flattened). No other measurements were taken due to fragmentation and post mortem damage to bones.

The enthesophytes and cortical defects (muscles insertion sites) where observable, were faint (grade 1).

The calcanei had a double facet (non-metric trait) and the right occipital bone lambdoid suture had 4 ossicles.

The right femoral head had osteophytic growth around the perimeter on the superior surface and the corresponding right acetabulum had 3 mm osteophytic growth around extending beyond the joint surface.

The 1<sup>st</sup> metatarsal (bilateral) had a cortical defect central on the proximal articular surface. This lesion is thought to represent a small area of bone death, perhaps relating to compression in this area.

There were four arachnoid granulations on the endocranial surface of the frontal bone. This is an age-related defect common in all populations, older females tend to be most affected, especially following the menopause, and aetiology is not yet understood.

### **Conclusions**

The two inhumations recovered from Coventry cathedral, though not complete, provided an age and sex estimate. Skeleton 163 was an adult male and skeleton 166 was a female between 42 and 87 at the time of death. Skeleton 166 had osteophytosis in the right hip joint, which indicates degeneration at the joint, more often seen in older individuals. Arachnoid granulations in the frontal bone are highly correlated with age (Barber et al 1995). The teeth which were present were not affected by caries or heavy wear, which suggests a soft diet low in refined sugars.

## **7 SUMMARY AND DISCUSSION**

### **Summary**

The archaeological monitoring of the drainage trench and excavation conducted within the ruins of Saint Michael's has successfully achieved the specific objectives stated in the 'Brief for a Programme of Archaeological Works at Old St Michael's Cathedral (Patrick 2015), which were: to retrieve information on the development of the medieval church, particularly whether the Chapel of the Virgin Mary was a standalone building or attached to the 13<sup>th</sup> century church. To identify if a concealed crypt exists to the east of the East Chapel and to record information on undocumented modifications to Saint Michael following the bombing raid of 1940.

The archaeological works identified remains representing eleven phases of Saint Michael's development from the 12<sup>th</sup> to 20<sup>th</sup> centuries. The possible position of the 12<sup>th</sup> century Castle Chapel and structural remains relating to the church's expansion in the mid-late 13<sup>th</sup> century, the mid-late 14<sup>th</sup> century and the late-14<sup>th</sup> mid 15<sup>th</sup> centuries. Two inhumations were identified, either buried in the north aisle of the 14<sup>th</sup> century church or the chancel of the 15<sup>th</sup> century church.

Remains directly related to the destruction of the church following a bombing raid in 1940 include the *in-situ* remains of pews and deposits of solidified lead. A layer of concrete over two crypts represented its subsequent repairs.

Although the results largely confirm the postulated medieval phasing of the cathedral, illustrated in Coventry Old Cathedral, A Conservation Plan by George Demidowicz (2013), it has identified the probable location of the 12<sup>th</sup> century Castle Chapel, or perhaps its north aisle, as further to the north. Also, the archaeological works have significantly increased the detailed understanding of the cathedral's development.

### **Geology**

The geological horizon was identified at a single location, within a sondage placed at the southwest corner of the site, at 1.4m below the current ground surface (87.58m AOD). The construction cuts of the 12th and 13th-century walls (189, 191) truncated the horizon.



### **12<sup>th</sup> Century Castle Chapel**

The north face of an undressed, earth bonded and roughly built wall (168), aligned east-west, was recorded on the southern side of the excavation. The wall almost certainly represented the 12<sup>th</sup> century Castle Chapel, or perhaps its north aisle. The wall appeared to have been trench built and was cut into the geology (221). The wall was only 7.5m long, with its eastern extent having been truncated by at least one burial (162). A deposit (161) to the east of, and cut by the burial, has been interpreted as representing the backfill of multiple, intercutting graves, deeper than the impact of the drainage works. Truncation by graves would explain the absence of Wall 168, which was just c. 7m long. While no dating evidence was recovered directly relating to the wall, three sherds of pottery dating from the 12<sup>th</sup> 14<sup>th</sup> centuries were recovered from the backfill of the construction cut for the mid-late 13<sup>th</sup> century wall (171), which truncated deposits immediately to its north, thus providing an associative date.

The precise location of the chapel is unknown, although speculated to be within the nave in alignment with two internal projections in the east elevation of the Cathedral tower (Domidowicz 2013, 15 and Fig. 8). If the speculated location of the Castle Chapel is correct, logically, the foundation wall could represent an aisle on its north side, estimated to be c. 3.5m in width. Aisles were commonly added to naves, providing more congregational space, facilitate procession and to provide a setting for side chapels (Rodwell 2012, 76). Some aisles in the 12<sup>th</sup> and early 13<sup>th</sup> centuries were little more than 1.5m wide, in contrast to aisles in the later middle ages, which could be as wide as the nave (Rodwell 2012, 76). Perhaps most probably Wall 168 represents the north wall of the Castle Chapel itself, and its speculated position is incorrect. The supposed dimensions of the Castle Chapel have been assumed using a plan of the surviving 12<sup>th</sup> century daughter chapel in the suburb of Wyken as a guide (Domidowicz 2013, 15, Fig. 8), constructed in a two-celled Romanesque style. A study of Worcestershire Norman churches by Bond (1988, 119-158) showed that they were proportionately designed, such as the use of the “golden section” (McCague, 2003) and other ratios.

While the location of Wall 168 provides additional information on the Castle Chapel's location or development, the size and proportions of the chapel can only be speculated. Almost certainly the eastern extent of the chapel was dictated by the topography, specifically the slope to the east. The eastern extent of the c. 1250-1270 and c. 1300 phases of the cathedral's development (Domidowicz G. 2013, Fig. 8) are likely to reflect the area of relatively flat land suitable for building without the need for terracing (as in the mid-15<sup>th</sup> century. See Phase 4).

### **13<sup>th</sup> Century Re-Build**

In the 13<sup>th</sup> century, St Michael's was re-built in the new Gothic style when much (or all) of the nave and chancel were demolished to construct arcades connected to the north and south aisles (Domidowicz G. 2013, p16). It was established that the north aisle of St Michael's 13<sup>th</sup> century north aisle wall (171) was correctly conjectured in the cathedral's conservation plan (Demidowicz 2013; Fig. 8).

The excavation revealed that Wall 171 had been truncated in the c. 1300, by the construction of the subterranean Chapel of Unity (west crypt). The base of the crypt is estimated to be some 3-4m below the current ground level. Its construction would have required the dismantling of the 13<sup>th</sup> century north aisle wall to accommodate its south wall (172). Slight but convincing evidence indicated that the construction of the crypt removed a north buttress in Wall 171. Wall 171, built free standing, had a chamfered

offset in its north face and small stepped foundations on the south. The north face of the wall would have been visible while the south face had been terraced into the geology and truncated probable graveyard soils accumulated to the north of the Castle Chapel.

Chamfer plinths generally replace the square projecting basements of the Romanesque style in the 12<sup>th</sup> century. Chamfer courses have two functions, aesthetic and practical: aesthetically the chamfer softens the break between horizontal ground and the vertical wall. The practical aspect of the chamfer was to prevent water collecting at the base of the wall and entering the joints (Bond 1905, 403).

The four sherds of pottery recovered from the wall's construction cut backfill broadly date from the 12<sup>th</sup> – 14<sup>th</sup> centuries, which fits well with the wall's surmised date. As stated above, the wall appears to have truncated a burial horizon on the north side of the Castle Chapel (or aisle), evidenced by the percentage of fragmented charnel and its soft loamy character, in comparison to the general reddish brown sandy soils derived from the geology. The sherds are from a jug and an unglazed jar which were all in good condition, with no evidence of abrasion. The sherds were entirely of Coventry 'A' Ware, fabric Sq202, commonly recovered from sites in and around Coventry. The unglazed jar has extensive external sooting.

### ***c. 1300s West Crypt, Walls 172, 238***

The Coventry Cathedral conservation plan (Domidowicz 2013, 17, 18) attributes a *c.* 1300 date to the construction of the West Crypt and the (above) Chapel of the Virgin Mary. The south and west walls (172 and 238 respectively) of the west subterranean crypt were revealed during the archaeological works.

The construction of the subterranean crypt, which is some 3-4m below the current ground surface, would have required the complete removal of any earlier structures. This was clearly established in the archaeological works where the eastern extent of the 13<sup>th</sup> century north aisle wall (171) had been removed to accommodate the construction of the crypt's south and west walls.

It appeared that some effort had been made to bond the two walls, which abut flush, suggesting the earlier wall (171) was still in use and that the subterranean crypt and the upper chapel (of Virgin Mary) were incorporated into the north side of the 13<sup>th</sup> century church.

Notably, the width of Wall 172 was 2m, in comparison to wall 171 which was 1.26m, and also abutted the south face of the 12<sup>th</sup> century Castle Chapel wall (168). Obviously, the wall formed the foundation of the upper chapel's south wall, likely to have been *c.* 1.3m in width. It appears the width of the foundation has been constructed to level a slight slope to the north, raise the ground level and provide a substantial foundation for the south wall of the chapel (north aisle wall of the 13<sup>th</sup> century church). In the late 14<sup>th</sup> – mid 15<sup>th</sup> centuries the church is again expanded to the north and east. Wall 172 also forms the foundations for at least two of the 15<sup>th</sup> century pillar bases (104, 105). Subsequently, two burials have been cut into the southern side of the foundations.

The northern West Crypt's wall appears to have been removed to accommodate the church's expansion in the late 14<sup>th</sup> – early 15<sup>th</sup> centuries, evidenced by the apparent truncation to the northern extent of the crypt's west wall.

### ***Post 1300 Burials***

Two earth cut burials were excavated (163, 166); one female aged 42-87 (166), the other a mature male (163). Both of the graves had been cut into and, therefore, stratigraphically post-date the *c.* 1300 foundations. The burials were revealed at a depth of *c.* 0.9m below the current ground surface. Both were cut through (in addition to Wall 172) a homogenous deposit (161) of sandy silt with, notably, up to 15% small and fragmented charnel. Neither grave cut could be defined within this deposit, which has been interpreted as the backfill of numerous intercutting graves. The burials are either located in the north aisle of the post *c.* 1300 church, or within the nave of the 15<sup>th</sup> century church. Burial within the body of the church and evidence suggesting a basic diet perhaps indicate that the individuals had a religious function of some standing or were wealthy or notable members of the church.

### ***1350-1390 Expansion East***

The Coventry Cathedral Conservation Plan (Demidowicz 2013) indicates that in the mid to late 14<sup>th</sup> century a second crypt (East Crypt) and chapel above are constructed against the east face of the West Crypt and Chapel above. The east elevation of the wall (107) and its plan were revealed in the archaeological works, revealing the crypt's east wall window, with niche above, and its buttress; all of which previously identified during the excavation through the window in 2014. Also, the cill and two pedestals for jamb columns were revealed, conclusively establishing that there was an upper, contemporary, structure (Chapel of All Saints) with two windows, apparently, divided by a buttress. It was established that the north end of the Wall 107 was 0.22m lower than its south end. This subsidence appeared to have caused two relatively substantial cracks in the wall.

It has been postulated that the 12<sup>th</sup> century castle ditch was almost directly beneath the north wall of the current church, *c.* 3m to the north (Demidowicz 2013; Fig. 7). It can be speculated that the reason for the north end of the wall being slightly lower is due to it being constructed over the relatively soft fills of the castle ditch, which have settled over time, causing the wall to subside.

The distance from the buttress to the south pedestal jamb column was 1.6m, while to the north jamb column it was 2.28m, resulting in the north window being 0.68m wider. The asymmetry of the window is unusual and difficult to explain. Perhaps if the full width of the 14<sup>th</sup> century phase of the cathedral's development were revealed the opposing southern windows would show the same asymmetry, forming a symmetrical eastern elevation overall. Figure 8 of the cathedral's conservation plan (Demidowicz 2013) surmises an apse to this phase, although offsets it to the south in line with the conjectural location of the Castle Chapel. It has been established that the Castle Chapel is probably *c.* 4m further to the north than speculated. If the conjectured apse is repositioned to account for the new, probable location of the chapel, the apse would be central to the current (late 14<sup>th</sup> – mid 15<sup>th</sup> century) cathedral. If correct, this would support the theory that the southern elevation had the same asymmetrical windows, forming a symmetrical eastern elevation overall, including an opposing buttress.

It was established that there was not a third subterranean crypt to the east of the East Crypt; rather an eastern area had been substantially built up/terraced with soil during the late 14<sup>th</sup> - mid 15<sup>th</sup> centuries when the church was expanded to the east (and north).

### ***c. 1390-1450 Expansion to the North and East***

Structural remains relating to the c. 1390-1450 phase of the cathedral's development were exposed in three places; the north wall (232) of the north aisle, the wall (235) forming the south side of steps down into the East Crypt, a deposit (114) forming the foundation to Pillar 103 and retained by Wall 182. The base of Pillar 102 was also established. A putlog hole (223) was recorded in the north wall of the current cathedral.

Wall 232's location has been correctly surmised in the cathedral's conservation plan (Demidowicz 2013). Little of Wall 232 was exposed, and there was not an opportunity to investigate it through excavation, although it did appear to truncate the north end of the West Crypt wall (238), opposed to it being keyed into the crypt's north-west corner. It is probable that Wall 232 had a buttress, although not conclusively established in the excavation.

Wall 235 forms the underground south wall to steps into the East Crypt, which can be clearly seen in a measured plan and cross-sections produced by J Oldrid Scott in 1885 (Demidowicz 2013, Fig. 36). The Coventry Cathedral Conservation Plan (Demidowicz 2013, 24) indicates the staircase was probably constructed following the demolition of the Chapel of All Saints, providing access to the East Crypt. A papal petition from 1449 – 1450 relates to work already carried out, providing a 'terminus ante quem' for the construction of the main body of the church.

Deposit 169 conclusively confirms the results of the excavation through the East Crypt carried out by George Demidowicz in 2014. The report concludes that the area to the east of the East Chapel did not contain a stone vault but was built up, terraced ground which has subsequently been cut into by burials and 17<sup>th</sup> – 18<sup>th</sup> century brick vaults, and supporting a grave slab pavement representing the church's north aisle original floor level (Demidowicz 2015). In total 22 memorial stones were recorded on the surface, most of which probably marked earth cut graves in the 17<sup>th</sup> and 18<sup>th</sup> centuries. At least three of the memorial stones were confirmed as being associated with brick vaults, and a single earth cut burial was overlain by a memorial stone. The topography, which slopes to the east, is discussed below.

The put-log hole (223) is probably to accommodate a scaffold structure related to the construction of the c. 1390-1450 phase of the cathedral's development. It clearly pre-dates stone grave 215, which is undated, although likely to be 17<sup>th</sup> or 18<sup>th</sup> century in date as suggested by its character, style and location.

Wall 182 and foundation deposit 114 for Pillar 103 appear to be contemporary. The wall may have formed a step down into the chancel, which was raised to the same level as the aisles in the 19<sup>th</sup> century.

### ***Architectural fragments***

In total 63 sculptured architectural fragments stored within the Wyley Crypt were recorded. The fragments were largely thought to have derived from an excavation conducted through the Wyley Crypt's east window in 2014 (Demidowicz 2015), although it is probable other fragments of stone had been stored there. The excavation penetrated deposits relating to the levelling of the topography to accommodate the church's eastern expansion in the late 14<sup>th</sup> - mid 15<sup>th</sup> centuries. The stones are thought to have derived the Chapel of the Virgin Mary and the Chapel of the Cross, both of which are thought to have been demolished during this phase of the churches expansion.

The stones broadly date from the 11<sup>th</sup> to 14<sup>th</sup> centuries, although four stones have been dated from the 11<sup>th</sup>/12<sup>th</sup> - 16<sup>th</sup> centuries. Twelve of the stones have been assigned a narrower date of *c.* 1390-1450, which fits well with the considered date of the cathedral's expansion. The fragments include elements from tombs, mouldings from decorative arches, a topmost pinnacle in a torus design, parts of window tracery and simple ashlar mouldings. Norman, Romanesque and Gothic architectural styles are all represented. A particularly complex moulding (WS No 56) is suggested as having derived from the Norman church and re-used in the 13<sup>th</sup> 14<sup>th</sup> century phases of the church's development. Worked stone No 48 is suggested to be part of the clearstory of the *c.* 1390-1450 rebuild. A fragment of vault shaft with triple roll moulding (WS No 47) is suggested to have come from the Perpendicular chantry at Saint Michael's. At least eight pieces (WS Nos. 18, 19, 30, 32, 42, 43, 45 and 55) are considered to be parts of the late 14<sup>th</sup> – mid 15<sup>th</sup> tracery windows of St Michael's.

### ***Post c. 1450-1500 Burials***

No structural remains were identified during archaeological monitoring relating to this phase of the cathedral's development. At least two burials were identified, clearly post-dating the construction of the steps into the East Crypt (see above), therefore, stratigraphically have been assigned to Phase 5 of the cathedral's development.

### ***Burials***

The wall (235) forming the south side of steps into the East Crypt and Deposit 241 were cut by at least two graves. The articulated remains of a hand(s) and feet, clearly belonging to separate individuals (due to their proximity) were encountered in a narrow (0.5m) excavation slot, placed to investigate Wall 235. The remains extended beyond the limit of the excavation and were below the depth of impact (1.3m BGL) of the drainage works. Therefore, in agreement with Chris Patrick (Cathedral Archaeologist) the remains were protected and left undisturbed. A grave cut (240), cutting both Wall 235 and Deposit 241, was clearly associated with the remains as being 1.4m+ wide (N-S) and almost certainly representing a row of burials within the nave of the 15<sup>th</sup> century cathedral.

### **17<sup>th</sup> and 18<sup>th</sup> centuries Memorial Stones and Vaults.**

The 17<sup>th</sup> and 18<sup>th</sup> centuries are represented by a surface formed from memorial stones and Victorian tiles in the north aisle and four brick vaults. In total 30 memorial stones commemorating the death of at least 44 individuals, dating from 1622 to the 19<sup>th</sup> century (only the number 18..? is legible on the latest memorial stone), were recorded. Memorial stones where no inscription survives or not fully revealed within the excavation must account for a minimum of 11 additional individuals, bringing the total to 52. Twenty-two of the memorial stones were revealed in the excavation of the east end of the cathedral's north aisle. Four of the memorial stones (MS Nos. 15, 16, 17, 18) were located over Vault 156, and a single memorial stone (MS No. 24) was located over Vault 155.

William Reader's "Description of St. Michael's Church, Coventry", written in 1830, documents all the inscriptions and monuments within St Michael's and provides an opportunity for comparison with the memorial stones recorded in the archaeological works. This comparison provides an indication of the damage caused by the bombing in 1940. Three memorial stones (MS Nos. 5, 8 and 9) provide the best examples of bomb damage. William Reader records four individuals on Memorial Stone 5 and two on MS No. 9, while none could be defined on the stones within the excavation as the



surface of the stone was completely decayed. MS No. 19 is an interesting example; Reader records eight individuals on this memorial stone while none could be identified in the excavation, although in this case the surface of the stone was intact, but the brasses were missing, evidenced by 18 fixing holes. This might suggest the brasses, in this particular case, were removed during the post-war clean-up and repairs. Although the possibility that MS No. 19 is not *in-situ* is clearly a possibility as the memorial stone does not mark a grave or a vault, and the gas pipe had been inserted beneath it.

The majority of the damage to the to the memorial stones was clearly a result of events on the night of the 14th October 1940 when three groups of incendiaries landed on the low pitched roofs of the cathedral. The resultant fire, after a few hours, caused the total collapse of the roof. Also molten lead falling from the roof had collected, settled and solidified within the lettering and beneath the stones.

The two brick vaults (156, 159) to the north-west and south-west were robust enough to withstand the weight of the cathedral's collapsed roof and have not been affected while terracing deposit (169) between the vaults had compressed by up to 0.5m.

As stated, the lowest point of the floor centered on the trench excavated by Birmingham Archaeology in 2009, which identified a vault with a wall constructed from wood or concrete with iron bands. Concrete was not extensively used until in the early 19<sup>th</sup> century and is very unlikely to have been used in the construction of a vault. Therefore, the vault wall is highly likely to have been constructed from wood or brick (the iron banding perhaps suggests wood). Although not identified in the survey the vault must have suffered at least some collapse due the floors slumping.

Records indicate that in 1849 the old seating was removed, providing an opportunity to renovate the floor (Domidowicz 2013, 41). Although the records do not directly state the floor has slumped it does state the floor was "composed of flat gravestones" was covered by a foot of soil and a new tile floor laid on top (Domidowicz 2013, 41). The slumping of the floor is almost certainly due to the compression of the soils over time, although the continuous and numerous excavations for burials and vaults would have loosened the soil which may have been a contributing factor.

The memorial stones provide insight into those interred, their families and their trades, all of which are inextricably linked with the economy of the church, its politics and logistics. Although beyond the scope of this report the memorial stones provide the opportunity to study the family histories of influential people in Coventry and their relationship with the church.

Five of the memorial stones (MS Nos. 1, 4, 17, 19 and 22) had evidence of brass plaques or iconography, although in all cases the brass was missing. The evidence for brass fittings comprised small holes filled with lead and recessed areas in the stones. William Reader's "Description of St. Michael's Church, Coventry", written in 1830 noted that sixteen of the stones of the memorial stone had their brasses missing, and was aware of a theft that had taken place in the 17<sup>th</sup> century.

Two brick vaults (174, 229) were partially revealed in the west drainage trench. The roof of Vault 224 had collapsed into the vault which had been largely filled with rubble, although leaving a void between the backfill and a concrete repair. A substantial concrete raft (173) had been laid over the damage, apparently not as a repair to the vault

but to support a new concrete surface being laid at the time. An account in the conservation plan (Demidowicz 2013, 91) describes when a cement lorry collapses into a vault while delivering cement for a new surface in 1963, although the precise location, until now, was not known. A further brick vault (229) was recoded to the north. Again, the vault's roof had collapsed into the vault, although in this instance the damage was due to the construction of a manhole and insertion of a conduit sometime in the late 20<sup>th</sup> century.

Two brick vaults (155, 156) were recorded in the eastern excavation area. Vault 156 had been constructed against the east wall (107) of the East Crypt. The vault has been constructed in line with the north window of the crypt, which almost certainly would have provided access to the vault. Although the length of the vault was not revealed four memorial stones (MS Nos. 15, 16, 17 and 18), have been placed on the vault. From surviving inscriptions on the memorial stones and in conjunction with William Reader's records, six family names have been identified: the name Love appears eight times, Goldsmith and Wright both appear twice, and Mathews, Roach and Viall all appear once. The west face of Vault 155 was revealed in section only. One, possibly two memorial stones (MS Nos. 23 and 24) have been placed on the vault. Memorial Stone No. 24 is clearly associated with the vault. While much of its surface has decayed and the inscription illegible William Reader records the names of two individuals; one Elizabeth Downing and a Thomas Bond. Memorial Stone No. 23 is c. 1m to the south of MS No. 24 and is probably associated with the vault. This memorial stone is also damaged although from William Reader's records, it is known to have had the names of Laurence and Margret Wright.

The practice of internment within the body of the church reached its height following the Reformation (Rodwell 1998, 44) up until the introduction of the Burial Act in 1857, brought about to address the health dangers of internal burials. (Rodwell 2012, 312). Individuals buried within the church would have to be "persons of especial importance", benefactors, "notable lay folk, mainly gentry and yeomen". There are four instances of the title Gent, and two instances of the title Esquire, both alluding to members of the gentry of English society. Trades recorded on the memorials include a surgeon, alderman (three times), Captain, silkman, and Clarke of the High Court Chancery, all notable professions.

### ***19<sup>th</sup> century***

The 19<sup>th</sup> century is largely represented by remains relating to two phases of restoration carried out in 1849 and 1851. In 1849 oak seats of uniform character were installed and the pulpit moved from the stair pier on the north side to the south. The floor of the chancel was raised to the same level as the north aisle. In 1851 gas lighting was installed.

A sondage placed against Pillar 102 revealed the 15th-century chancel floor at c. 1m below the current floor level. The floor had been raised using deposits of soil (108 and 124), which produced two halfpenny coins of William III (1694-1702) and George III (1760-1820) and a near complete Cistercian Ware multi-handled cup of late 15<sup>th</sup> – 17<sup>th</sup> century date. To the north, these deposits were retained by Walls 106 and 141, which are considered to be associated with the works, specifically with the installation of oak pews or screens in the north aisle. Two further walls were recorded (147, 139), possibly relating to foundations for steps. The walls appear to form a foundation for a set of steps visible on a plan of the church, dated 1818 (Demidowicz 2013, Fig. 15). The steps are

not visible on a plan of the church dated to the 1790s (Demidowicz 2013, Fig. 14) or on a plan dated 1845 (Demidowicz 2013, Fig. 16), seemingly assigning the date of their construction to the late 18<sup>th</sup> early 19<sup>th</sup> centuries.

A relatively extensive floor surface formed largely from square tiles (225), although incorporating a small area of bricks (231) and two memorial stones (MS Nos. 29 and 21) was recorded within the north aisle. A small area of the floor (125) represented the replacement of the in 1849 with tiles in a tessellated geometric design (Demidowicz 2013, 51) was also recorded. Tile floor 125 appears to have survived the 1940s bombing and subsequent repairs due to it sinking slightly within a cut (150) for the insertion of gas pipes, introduced to the church in 1851 (Demidowicz 2013, 42). Floor 225 has been laid to form aisles between pews in the north aisle, clearly visible in a plan of the church, dated 1840s - early 1850s (Demidowicz 2013, Fig. 17).

A sequence of levelling deposits (126, 132) and bedding deposits (129, 133, 134 and 135), recorded in the east section of the excavation represent a repair to the north aisle floor in 1849. Records indicate that the floor of the chapel “composed of flat gravestones” was covered with a foot of soil and a new tile floor laid and that the same happened in the chancel (deposits 108, 124), losing “the record of many a worthy citizen whose generous gifts are still enjoyed by the needy of the city or parish” (Demidowicz 2013, 41).

### ***WWII Destruction***

The event of 14th October 1940, when three groups of incendiaries landed on the low pitched roofs of the cathedral causing the roofs complete destruction, are well described in Provost Howard's book, *Ruined and Rebuilt, The Story of Coventry Cathedral 1939-1962* (1962). A structure (140), deposits of burnt wood (136) and deposits of lead (224) were recorded relating to the modifications made during the war and the damage caused by the bombing of the church.

The remains of a structure (140) situated to the east of the Pillar 103, which forms the 15<sup>th</sup> century entrance to the East Crypt, represents the construction of a small stone mono-pitch structure over crypt's entrance (Demidowicz Figs. 64, 67 and 68) to provide weather and blast protection.

Deposit 136 represents the *in-situ* remains of a wooden structure, almost certainly pews that were located on the north side of the chancel. The pews were installed as part of the general upgrading of the interior in 1849, when ‘ill adapted pews and galleries’ were removed and replaced with pews of ‘as nearly as possible of one uniform use and shape’ (Demidowicz 2013, 39). A detailed plan of the proposed works (Demidowicz, G 2013, Fig. 17) was produced by the chosen contractors, Scott and Moffatt, showing a set of pews (five rows) on the north side of the chancel. The ferrous hinge (Plate 34) is likely to indicate the seats were folding and were misericords.

Deposit 224 (Fig. 2) represents molten lead, used to seal the roof (flashing) that liquefied during the fire of 1945, surviving where it has collected and solidified beneath memorial stones and floor tiles, best illustrated in Section 14 (Fig. 6). The size and character of the deposit appear to suggest it collected beneath a memorial stone which may have been destroyed in the bombing or subsequently removed during the clean-up.

***Post-World War II***

Remains relating to post-war repairs is represented by the laying of a concrete surface (101) to waterproof and strengthen both the east and west subterranean crypts.

Just 13 days after the fire which destroyed the roof and much of the cathedral's internal fixtures and fittings, the Wyley Chapel (East Crypt) was used for the celebration of Holy Communion, continuing without a break until 1958. However, without the cathedral roof, water ingress becomes a problem. By 1945 the Provost, Howard, arranged for a concrete cap to be laid on the floor of the cathedral, waterproofing both the east and west subterranean crypts (Demidowicz 2013, Fig. 64).

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**APPENDIX A. Memorial Stones****Table 7.**

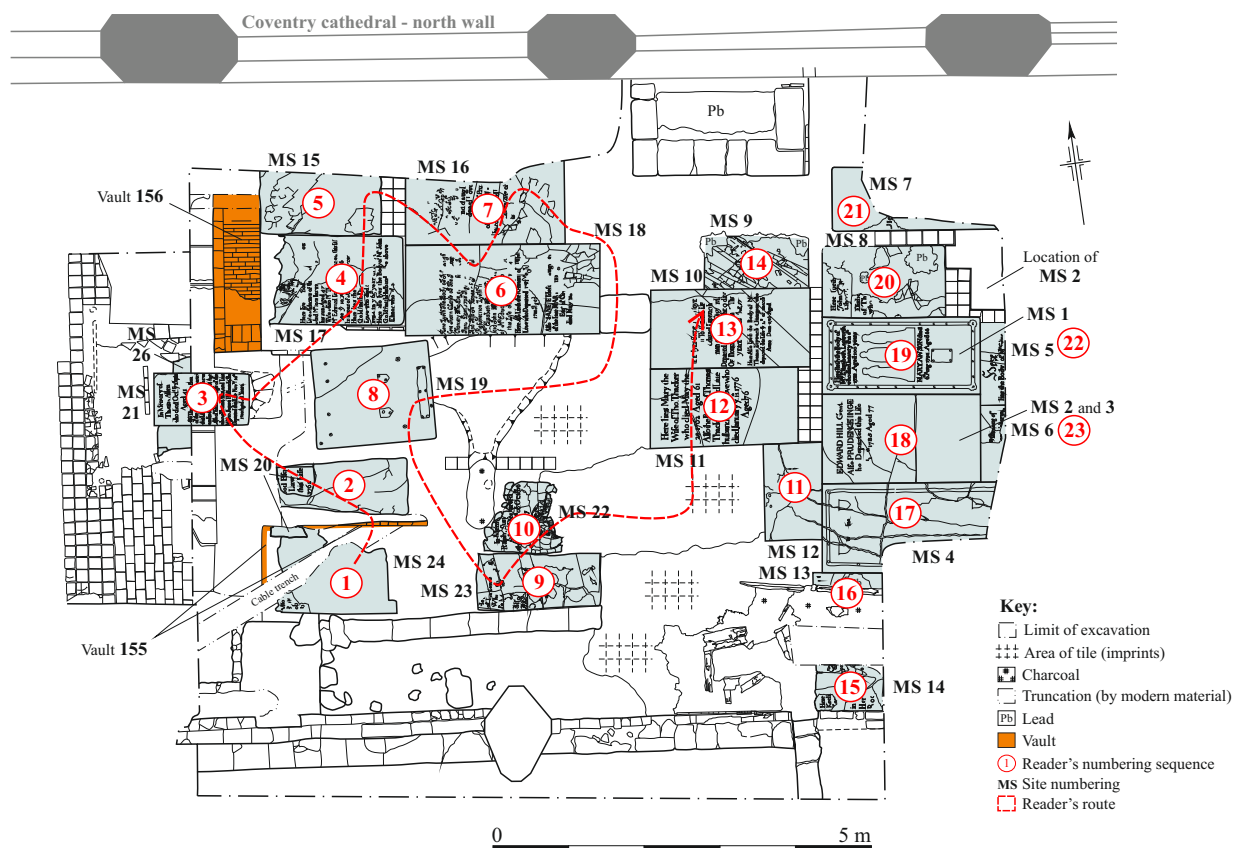
No	Type	Colour	Width (m)	Length (m)	Depth (m)	Death Date/Dates	Writing Style	Scroll	Motif	Fittings	No. of People Named
1	Limestone	Light Grey	1.01	2.14	-	1722. 1792	Serif	Non-Elaborate	Yes	47	2
2	Slate	Light Grey	1.22	1.16	-	1785	Serif-Roman	Non-Elaborate	No	0	2
3	Slate	Light Grey	0.91	1.15	-	-	-	-	No	0	?
4	Limestone	Light Grey	1.13	2.24	-	?	Serif	Non-Elaborate	Yes (shield)	3	1
5	Slate	Mid blue grey	1.13	0.31	-	?	Serif and Gothic styles	Elaborate	No	0	1?
6	Slate	Mid blue grey	0.96	0.32	-	?	Italic and Gothic	Elaborate	No	0	1?
7	Slate	Mid blue grey	0.91	1.92	-	?	Serif	Non-Elaborate	No	0	?
8	Slate	Mid blue grey	0.98	1.69	0.05	?	Serif, italics	Partially Elaborate	No	0	2
9	Slate	Mid-dark grey	0.66	1.37	0.03	?	-	-	No	0	?
10	Slate	Light grey	1.02	2.14	-	1716	Italics, Serif	Partially Elaborate (initial part)	No	0	2
11	Slate	Light blue grey	1.04	1.98	-	1762, 1776	Serif	Non-elaborate	No	0	2
12	Slate	Dark blue grey	1.3	0.79	-	-	-	-	No	5	?
13	Slate	Mid light grey	0.8	0.93	-	?	Serif	Non-Elaborate	No	0	1?
14	Slate	Light grey	0.85	0.6	0.08	?	Serif	Non-Elaborate	No	0	2?
15	Slate	Mid blue grey	0.85	1.45	-	?	-	-	No	0	?
16	Slate	Mid blue grey	1	2.1	-	1783?	italic, serif	Elaborate (initial part)	No	0	4
17	Slate	Mid blue grey	1.17	1.84	0.05	1699. 1724.	italic, serif-roman	Partially Elaborate (initial part)	Yes	0	7?
18	Slate	Mid blue grey	1.21	2.53	0.11	1703. 1781. 18??	Italic, Serif, dense roman serif.	Elaborate (initial part)	No	0	4
19	Slate	Dark blue grey	1.3	1.51	0.15	?	-	-	Yes (shield)	18	?
20	Slate	Light-mid blue grey	0.76	1.72	0.1	1762	Serif roman style	Non-Elaborate	No	0	1
21	Slate	Light grey	0.71	0.74	0.1	1781. 1782	Serif roman style	Non-Elaborate	No	0	2
22	Slate	Light blue grey	0.94	1.04	0.05	1767	Serif roman style	Non-Elaborate	Yes	0	1
23	Slate	Light blue grey	0.76	1.63	-	17??	Serif Roman, Italic and Gothic	Elaborate	No	4	2
24	Slate	Mid grey				?	Serif	Non-Elaborate	No	0	2?
25	Slate	Mid grey	0.9	0.61	0.05	-	-	-	-	-	-
26	Slate	Mid grey	0.28		0.05	?	-	-	-	-	-
27	Slate	Light-mid blue grey	0.55	0.44	0.08	?	Serif roman style	Non-Elaborate	-	0	1?
28	Slate	Mid blue grey	-	-	0.18	?	Serif roman style	Non-Elaborate	-	0	?
29	Slate	Mid blue grey	2.26	1.2	-	-	-	-	-	-	-
30	Slate	Mid blue grey	0.74	0.3m	-	-	-	-	-	-	-

**Table 8. Memorial Stones - Names, Age, Date of Birth and William Readers Numbering Sequence.**



Individual	Date of Birth	Date of Death	Age	Memorial Stone Number	William Reader's recording sequence
Elizabeth Lapworth	??/??/1622	08/01/1722	100 years	1	19
Mary Awson	??/??/1726	26/08/1792	66 years	1	19
Edward Hill	-	-	-	2, 3	18
Prudence Inge	??/??/1708	11/03/1785	77 years	2, 3	18
Henry Inge	-	-	-	4	17
Simon Pickering	??/??/1726	15/11/1774	48 years	5	22
Simon Pickering Jr. (nephew)	??/??/1758	16/01/1784	26 years	5	22
Sarah Wilmer	??/??/1752	11/11/1791	39 years	5	22
Ann Pickering	??/??/1733	13/07/1797	64 years	5	22
Simon Pickering	??/??/1690	30/11/1756	66 years	6	23
Jane Pickering	??/??/1732	30/06/1757	25 years	6	23
John Pickering	??/??/1718	30/07/1764	46 years	6	23
Sarah Pickering	??/??/1698	09/07/1772	74 years	6	23
Garner Pickering	??/??/1729	20/01/1774	45 years	6	23
Wm Pickering	??/??/1726	20/01/1775	49 years	6	23
John Lapworth	??/??/1661	26/08/1720	59 years	8	20
Elisabeth Awson	??/??/1736	08/02/1774	38 years	8	20
Edward Lapworth	??/??/1625	09/11/1703	78 years	10	13
Thomas Lapworth	??/??/1664	18/03/1716	52 years	10	13
Mary Thacker	??/??/1701	28/05/1762	61 years	11	13
Thomas Thacker	??/??/1700	13/01/1776	76 years	11	13
Anne Keeling	??/??/1688	07/01/1721	33 years	14	15
Alice Keeling	??/??/1700	23/04/1729	29 years	14	15
Wm Keeling	??/??/1682	22/10/1746	64 years	14	15
Anne Roach	??/??/1657	29/12/1707	50 years	16	7
Prudence Viall	??/??/1663	19/11/1746	83 years	16	7
Thomas Love	-	-	75 years	17	4
Joan Love	-	-	-	17	4
Edward Love	-	-	47 years	17	4
Prudence Love	-	-	-	17	4
Edward Love	??/??/1653	10/06/1699	46 years	17	4
Elinor Goldsmith	??/??/1659	10/12/1724	65 years	17	4
John Goldsmith	??/??/1647	08/06/1720	73 years	17	4
John Wright	??/??/1648	03/07/1703	55 years	18	6
Elizabeth Wright	-	05/06/1714	-	18	6
William Love	??/??/1744	16/01/1781	37 years	18	6
Jane (last name missing)	-	15/05/18??	-	18	6
Gery Packwood	-	10/04/1762	-	20	2
Thomas Allen	??/??/1720	02/10/1761	41 years	21	3
Thomas Allen Jr.	??/??/1762	21/03/1781	19 years	21	3
Elizabeth Allen	??/??/1727	13/11/1783	56 years	21	3
Raphael Sumerville	??/??/1700	08/10/1767	67 years	22	10
Elizabeth Sumerville	??/??/1716	11/04/1773	57 years	22	10
Laurence Wright	??/??/1672	21/05/1737	65 years	23	9
Margaret Wright	??/??/1673	04/10/1751	78 years	23	9

Thomas Bond	-	17/03/1506	-	-	12
George Newton	??/??/1715	01/02/1761	46 years	-	25
Elizabeth Newton	??/??/1703	27/05/1764	61 years	-	25
Elizabeth Newton	??/??/1717	25/02/1772	55 years	-	25
Wm Newton	??/??/1740	16/03/1781	41 years	-	25
Sarah Carter	??/??/1740	02/10/1778	38 years	-	26
Ann Cheshire	??/??/1704	20/12/1761	57 years	-	27
Hannah White	??/??/1726	30/07/1761	35 years	-	28
<i>Infant child of Hannah and John White</i>	-	-	-	-	28
<i>Infant child of Hannah and John White</i>	-	-	-	-	28
<i>Infant child of Hannah and John White</i>	-	-	-	-	28
Elizabeth White	??/??/1742	21/02/1786	44 years	-	28
<i>Infant child of Elizabeth and John White</i>	-	-	-	-	28
<i>Infant child of Elizabeth and John White</i>	-	-	-	-	28
John White	??/??/1718	08/12/1786	68 years	-	28
Elizabeth White	??/??/1760	07/05/1798	38 years	-	29
Sarah Harbidge	-	29/07/1773	infancy	-	30
Charles Parker	??/??/1712	28/02/1769	57 years	12?	11
Mary Parker	??/??/1714	14/09/1779	65 years	12?	11
Wm Inge	??/??/1713	12/06/1760	47 years	13?	17
Letitia Inge	??/??/1711	15/01/1794	83 years	13?	17
Edward Inge	??/??/1707	24/11/1794	87 years	13?	17
Mary Gilbert	??/??/1710	28/12/1806	96 years	13?	17
Mary Love	??/??/1668	10/12/1725	57 years	15?	5
Katherine Mathews	??/??/1662	07/04/1729	67 years	15?	5
Edward Love	-	-	-	19?	8
Prudence Love	-	-	-	19?	8
<i>Infant grandchild of Edward Love</i>	-	-	-	19?	8
<i>Infant grandchild of Edward Love</i>	-	-	-	19?	8
<i>Infant grandchild of Edward Love</i>	-	-	-	19?	8
Dorothy Graves Love	??/??/1771	06/02/1773	26 years	19?	8
Mary Love	??/06/1772	15/02/1773	8 months	19?	8
Charlotte Love	??/08/1770	01/09/1770	1 month	19?	8
John Downing	??/??/1726	27/06/1799	73 years	24?	1
Elizabeth Downing	??/??/1723	24/01/1803	80 years	24?	1
Frances Weston	??/??/1749	22/04/1786	37 years	7?	22
<i>child of Frances Weston</i>	-	<i>died young</i>	<i>died young</i>	7?	22
Mary Reeves	-	-	-	7?	22
Catherine Russell	??/??/1710	22/03/1772	62 years	9?	15



William Reader's numbering sequence

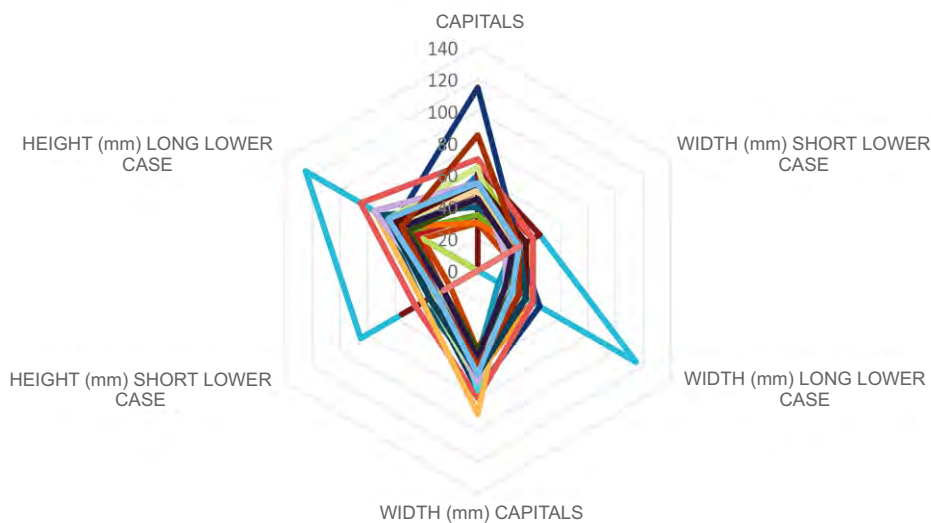
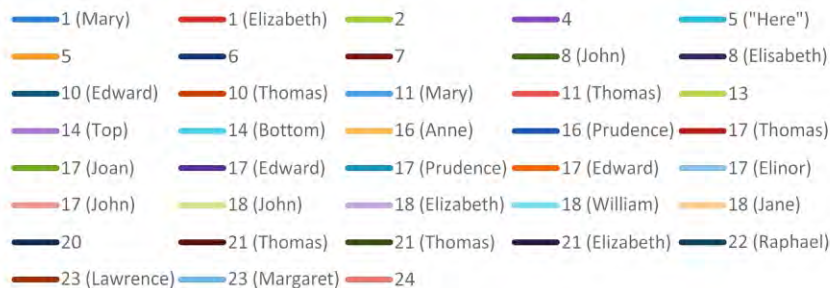


Figure 10: Radar chart of Memorial Stone Lettering Size  
 114

**APPENDIX B. TILES***Table 9. Victorian Floor Tiles*

Context	No. of Items	Weight (gr)	Shape	Max Dimensions (LxWxT, mm)	Colour	Decoration	Maker's Mark	Date
U/S	1	448	?Square	130 x 80 x 25 (max)	Black	None	None	18 <sup>th</sup> - 19 <sup>th</sup> C
	1	311		78 x 74 x 29 (max)	Salmon			
4/10 =225	1	114.4	?Square	72 x 40 x 22 (max)	Salmon	None	None	18 <sup>th</sup> - 19 <sup>th</sup> C
	1	171.2	?Square	75 x 56 x 23	Black			
112	1	73.2	?Square	51 x 40 x 22	Salmon	Trace of dark glaze on side	None	18 <sup>th</sup> - 19 <sup>th</sup> C
	1	44.3	?Square	32 x 36 x 25 (max)	Salmon	None		
	1	54.8	?Square	47 x 35 x 20 (max)	Salmon			
113	2	156.6	Square	54x54x12	Green	None	None	1845- 1900
	1	93	Rectangular	63 x 56 x 13	Drab			
	1	63.7	Square	54x54x12	Pale Buff	Rosette	(...)NTON, - (...)LLINS & - (...)Co; EN 13 BSD	
	1	48.1	Square	50 x 57 x 12 (max)	Drab	Fleur de lis	(MINTON HOLLINS & Co)- (PAT)ENT TIL(E WORKS) - (S) TOKE O(N TRENT)	
	1	38.8	Triangular	54x54x12	Pink	None	None	
	1	120.2	Rectangular	116 x 37 x 12	Pale Buff	Glazed linear gradient green to buff		
125	2	339.6	Square	73 x 73 x 12	Drab	Fleur de lis	MINTON HOLLINS & Co - PATENT TILE WORKS - STOKE ON TRENT - NO ro R ENC	
	1	83.2	Square	54 x 54 x 12	Pale Buff	Rosette	MINTON - HOLLINS & - Co EN; 13 BSD	
137	1	73.5	Square	57 x 57 x 12	Black	None	None	
	1	45.3	Triangular	55 x 55 x 12	Black			
	1	141.5	Square	73 x 73 x 12	Drab	Fleur de lis	MINTON HOLLIS & Co - PATENT TILE WORKS - STOKE ON TRENT - NO ro R ENC	

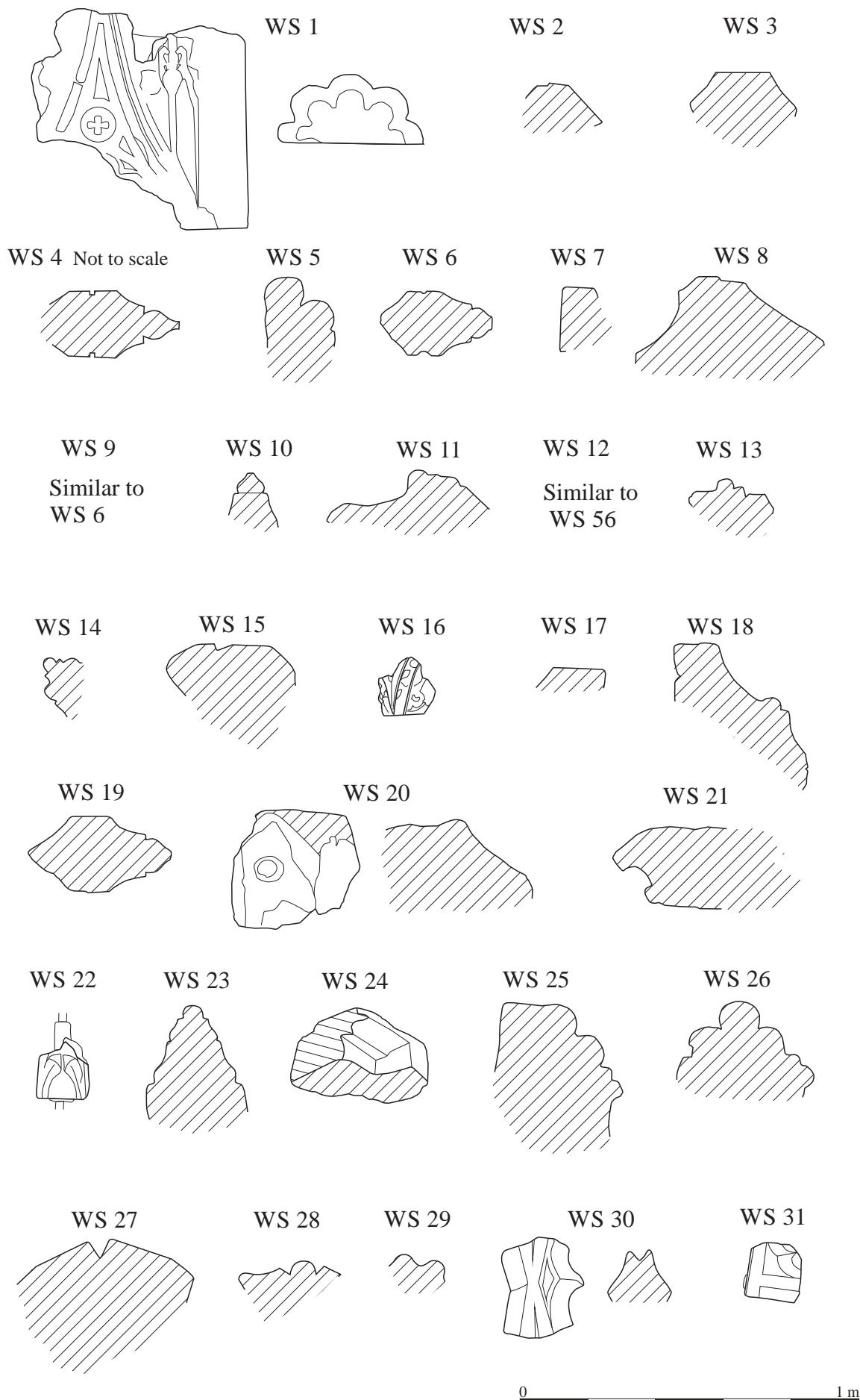


Figure 11: Worked stones

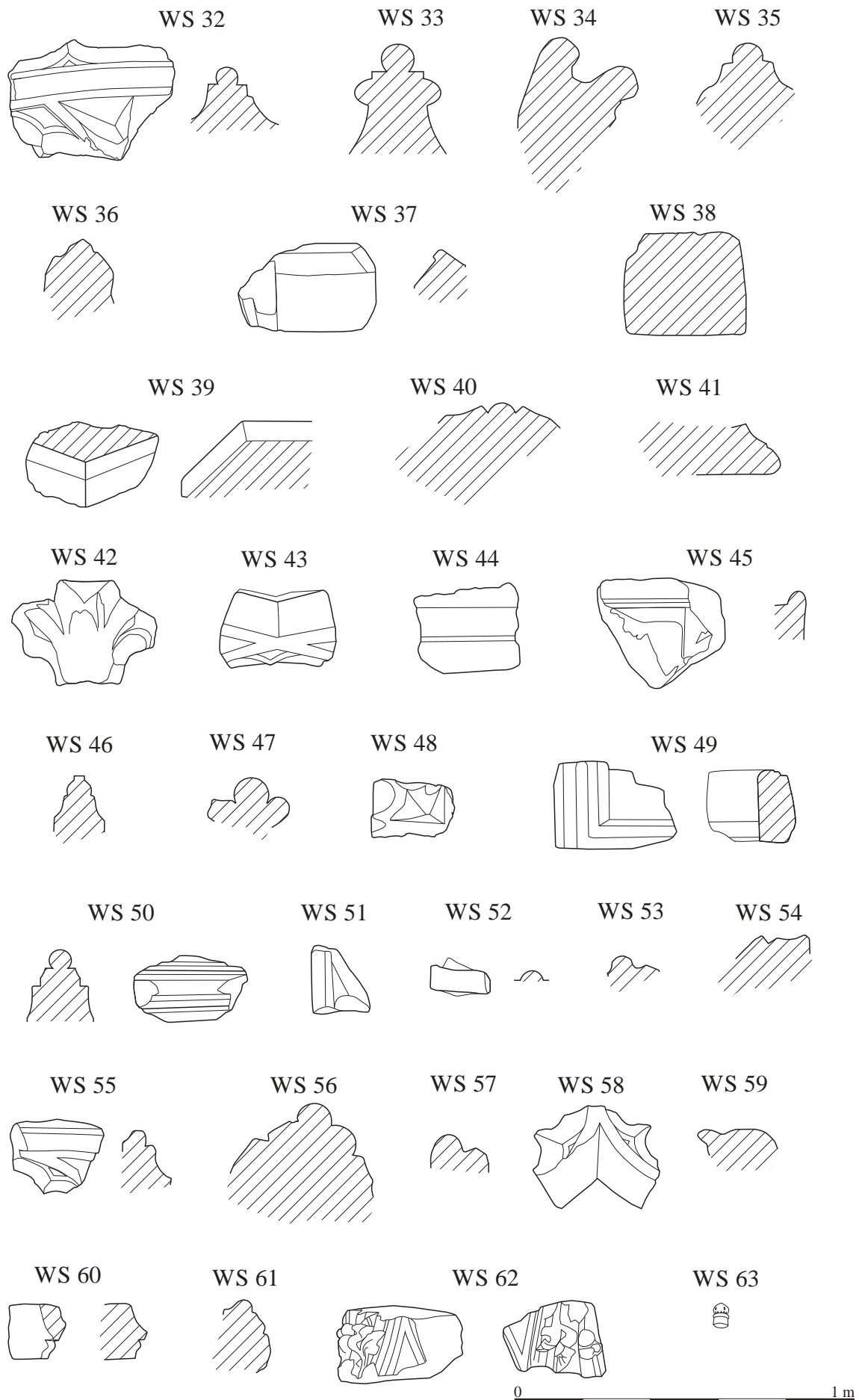


Figure 11: Worked stones



**APPENDIX D. COIN TABLE.***Table 10. Catalogue of Coins and Tokens.*

	<b>Token 1</b>	<b>Coin 2</b>	<b>Coin 3</b>	<b>Coin 4</b>	<b>Coin 5</b>	<b>Coin 6</b>	<b>Jeton 7</b>
<b>Ruler/Issuer</b>	Robert Bedford	William III (1694-1702)	George III (1760-1820)	Victoria (1837-1901)	George V (1910-36)	George V (1910-36)	Hans Krauwinkel II (1586-1635)
<b>Catalogue reference</b>	SM15_213_SF07	SM15_108_SF01	SM15_108_SF02	SM15_110_SF03	SM15_110_SF04	SM15_226_SF09	SM15_214_SF08
<b>Date of issue</b>	Second half of 17th century	Illegible (1695-1701)	1772	Illegible (1895-1901)	1916	Illegible (1911-26)	n/a (1586-1635)
<b>Denomination</b>	Token	Halfpenny	Halfpenny	Penny	Penny	Penny	Nuremberg Jeton
<b>Obverse legend</b>	[RO]BERT BE[DFOR]D ◊ 1[...]	GVLIELMVS [TERTIVS]	GEORGIVS · III · REX	[VICTORIA · DEI] · GRA · BRITT [-] RE[GINA · FID · DEF · IND ·] I[MP]	[GEORGIVS V DEI GRA : BRITT : OMN : REX FID : DEF : IND : IMP :]	[GEORGIVS V DEI GRA : BRI]TT [-] OMN : REX FID : DEF : IND [-] IMP :]	Rose HA[NNS KR]AVWINCKEL · IN · NV
<b>Obverse type</b>	n/a	Laureate and cuirassed bust right	Laureate and cuirassed bust right	Old veiled bust left	Bare head left, beard and neck partially visible	Bare head left	Three crowns, alternately with three fleur-de-lis, arranged around a central rose
<b>Reverse legend</b>	CITY ◊ OF ◊ COVENTRY rose Y L/.	[BRITAN-NIA]	BRITAN-NIA · date in exergue	[ONE PENNY], date in exergue	O[NE] PENNY, date in exergue	[ONE PENNY], date in exergue	Orb within a tressure of three arches and three angles
<b>Reverse type</b>	Maker's initials, R A B	Britannia seated left, left arm partially visible	Britannia seated left	Britannia seated right, helmet and chest partially visible	Britannia seated right, partially visible	Britannia seated right, right arm partially visible	GOTTES · GABEN · SOL [MA]N LOB
<b>Condition</b>	Obv. Very worn, Rev. slightly worn	Very worn	Slightly worn	Very worn / corroded	Very worn / corroded	Very worn / corroded	Worn
<b>Diameter (mm)</b>	16.06	28.2	28.79	31.22	31.01	31.29	21.95
<b>Thickness (mm)</b>	0.57	1.85	2.02	1.75	1.76	1.89	0.65
<b>Weight (g)</b>	0.56	8.32	9.59	8.94	9.55	9.22	1.05
<b>Die-axis</b>	180°	180°	180°	0°	0°	0°	180°
<b>Archaeological info.</b>	Cont. (213) - Victorian levelling layer	Cont. (108)- Possible backfill of crypt	Cont. (108) - Possible backfill of crypt	Cont. (110) - Post WW II layer	Cont. (110) - Post WW II layer	Cont. (226) - Post WW II layer	Cont. (214) U/S
<b>Other information</b>	Recorded before conservation	Recorded before conservation	Recorded before conservation	Recorded before conservation	Recorded before conservation	Recorded before conservation	Recorded before conservation
<b>References</b>	Dickinson 1986, 219 (not listed)	S. 3554-3556	S. 3774 (not listed)	S. 3961	S. 4051	S. 4051	UKDFD

**APPENDIX E****Table 11. Context Inventory**

Context No.	Type	Description	Finds	Interpretation	Date
100	Layer	York stone surface - Flagstone floor, recently laid, various sizes.	None	Flagstone surface	20th C
101	Layer	Grey Concrete	None	Concrete/bitumen	20th C
102	Masonry	Upstanding remains. Number given for reference.	N/A	Pillar	c. 1390-1450
103	Masonry	Upstanding remains of stone steps from Wyley crypt. Number given for reference	N/A	Steps	c. 1390-1450
104	Masonry	Upstanding remains. Number given for reference.	N/A	Pillar	c. 1390-1450
105	Masonry	Upstanding remains. Number given for reference.	N/A	Pillar	c. 1390-1450
106	Masonry	Sandstone, hewn. Mortar bond - pale brown sandy limestone mortar. E-W alignment.	N/A	Victorian Support Wall	19th C
107	Wall	Hewn reddish brown sandstone. 6 vertical courses visible on eastern side. Mortar bonded - pale brown lime mortar. Aligned N-S.	N/A	East wall of Wiley chapel.	c. 1390-1450
108	Layer	Loose mid brown sand. 60 % sandstone rubble.	None	Possible backfill of crypt defined by walls 106, 107, 122.	19th/20th C
109	Layer	Soft mid dark brown silty sand. Frequent round pebbles.	None	Levelling layer w. Pebbles. Post war levelling of victorian surface.	20th C
110	Layer	Firm dark blackish brown silty sand w. Frequent CBM, rubble, occasional small pebbles.	Metal, CBM, Burnt material, Human Bone.	Levelling layer w. Tile and brick	19th C
111	Layer	Soft light yellowish brown sand. Occasional CBM	CBM. Not retained	Levelling Layer	20th C
112	Layer	Soft black charcoal. Occasional stone	None	Burnt Material	20th C
113	Layer	Hard mid reddish brown silty sand. Frequent CBM, occasional small rounded stone.	Metal, CBM, Burnt material	Victorian backfill	20th C
114	Deposit	Compact mid reddish brown sandy silt. 80% sandstone rubble, 3% mortar flecks.	None	Foundation deposit for 104. Same as 172, 176	
115	Fill	Backfill - eastern area. Loose material from excavation through east window. Number given for reference only.	None	20th C backfill within crypt	20th C
116	Layer	Loose light orange red silty sand. Large stone blocks throughout	None	Rubble deposit - large fragments	
117	Layer	Friable mid orange red stoney silty sand. Frequent small stones.	None	Victorian deposit	

118	Layer	Soft black silty ash. Occasional small stones.	None	Victorian waste deposit	19th C
119	Layer	Compact to friable mid orange red stoney silty sand. Occasional small stone fragments.	None	Levelling Deposit	19th C
120	Masonry	Fired clay tile floor. Smooth finish. Mortar bonded.	N/A	Tile floor	19th C
121	Layer	Soft mid brownish red sandy silt. Moderate small stone, occasional charcoal flecks.	None	Terracing deposit	19th C
122	Wall	Same as 106.	N/A	Same as 106	19th C
123	Structure	Very compact mid reddish brown sandstone rubble.	None	Stepped foundations for 102	20th C
124	Deposit	Moderately loose dark brown sandy silt. 80& tile and tile fragments	None	Layer associated with robbing/modification to medieval floor.	19th C
125	Surface	Victorian tile floor of cathedral extending over much of the excavated area although often truncated across the site from war-time bomb damage	None	Victorian tile floor	19th C
126	Deposit	Mid/light brown rubble deposit associated with levelled collapse of cathedral	None	Lower rubble	20th C
127	Fill	Soft mid brown silty sand.	None	Fill of test pit	20th C
128	Cut	Square in plan, sharp BoS, vertical sides.	N/A	Cut of test pit	20th C
129	Deposit	Soft black sandy ash. Moderate small stone, charcoal flecks	None	Post-war floor make up layer	20th C
130	Deposit	Soft black sandy ash. Moderate small stone, charcoal flecks	None	Floor make up layer	20th C
131	Deposit	Firm mid brown sandy silt. Frequent medium sized stone, occasional tile.	None	Post-war levelling deposit.	20th C
132	Deposit	Hard mid brown grey silt. Occasional small stones.	None	Post-war levelling deposit.	20th C
133	Deposit	Firm mid brown sandy silt. Frequent small stones.	None	Levelling Deposit	20th C
134	Deposit	Friable mid orange red stoney silty sand. Frequent small stones.	None	Bedding layer for tiles	19th C
135	Deposit	Friable mid orange red stoney silty sand. Frequent small stones.	None	Bedding layer for tiles	20th C
136	Choir Stalls	Soft black ash. Frequent wood, charcoal	None	Wooden choir stalls/screen. Burnt deposit	19th C

137	Tile floor	Tile floor. Tiles 6cm x 6cm in size. Dry bonded, flush fitted. Colour of tiles varies from orange to dark grey. Some patterned.	Tile	Victorian tile floor. Same as 125	19th C
138	Cut	Rectilinear in plan, Vertical sides, sharp BoS at base and a flat base.	N/A	Air raid shelter - construction cut.	20th C
139	Wall	Hewn red sandstone, 500mm x 180mm x 140mm average size. Mortar bonded. 2 rows of 6 blocks.	N/A	E-W victorian wall south of air raid shelter.	19th C
140	Wall	Brick - 250mm x 110mm x 80mm. Mortar bonded. Two courses visible,	N/A	Brick linear in front of steps leading down to crypt.	19th C
141	Wall	Roughly hewn sandstone, two vertical courses. South faced. Bonded with lime mortar.	N/A	Substantial E-W sandstone wall. Divides the chancel and the Drapers chapel.	19th C
142	Wall	Brick- 240mm x 120mm x 60mm. Vertical courses, linear. North and south faces. Mortar bonded.	N/A	Brick wall. Same alignment as 139	19th C
143	Tile linear	Tile - 60mm x 30mm x 40mm. Rectangular tile linear.	None	Upright tile linear, abutts 142.	19th C
144	Cut	Sub-rounded in plan, Sharp BoS at top and base of slope, sharp slope, concave base.	N/A	Cut. Filled by rubble 126	20th C
145	Wall	Roughly hewn sandstone. Avg 350mm x 240mm x 280mm. N-S linear wall, 2 courses visible. Bonded with lime mortar.	N/A	Substantial N-S sandstone wall.	19th C
146	Wall-Same as 147	Short length of wall, located to the east of the bomb shelter entrance. Made up of roughly hewn sandstone blocks and it seems to be possibly disturbed by the construction of the bomb shelter.	N/A	Linear structure. Mixed materials	18th-19th C?
147	Wall	Smooth stone (possibly tufa). Avg 520mm x 250mm x 200mm. Single vertical and horizontal course. Linear, aligned E-W.	N/A	E-W ashlar wall	18th-19th C?
148	Surface	Compact mid orange sandy silt. Frequent small/medium stones.	None	Floor make up layer	19th C
149	Surface	Firm mid red-orange.	None	Floor surface/bedding layer for tiled floor 225.	19th C
150	Cut	Irregular in plan, rounded corners. Depth unknown. Sharp BoS at top of slope. Contains gas pipe	Pottery	Cut associated with post-war clearance. Not fully excavated	19th C
151	Cut	Linear in plan, Sharp BoS at top of slope. Steep to vertical sides.	N/A	Grave cut containing a lead coffin. Not fully excavated	17th - 19th C?
152	Fill	Soft mid reddish brown silty sand. Moderate small stones.	None	Grave fill	
153	Cut	Linear in plan, Sharp BoS at top of slope. Steep to vertical sides.	N/A	Vault construction cut	

154	Fill	Soft mid reddish brown silty sand. Moderate small stones. Occasional charnel	Bone	Fill of construction cut	
155	Vault	Brick - 240mm x 110mm x 60mm. Rectilinear brick vault. Mortar bonded.	None	Brick built vault wall - south.	
156	Vault	Brick - 240mm x 110mm x 60mm. Rectilinear brick vault. Mortar bonded.	None	Brick built vault wall - north.	
157	Cut	Rectilinear in plan. Sharp BoS at top of slope, steep to vertical sides. Not fully excavated	N/A	North vault construction cut	17th-18th C?
158	Fill	Compact mid reddish brown sandy silt. Occasional CBM, moderate medium stones.	CBM	Fill of north vault construction cut.	17th-18th C?
159	Cut	Linear in plan, Sharp BoS at top of slope. Steep to vertical sides. Sharp BOS at base of slope.	N/A	Cut of modern trench dug to seal crypt	1960s
160	Fill	Soft light reddish brown silty sand. Frequent large stones, gravestone fragments, charocal, CBM.	None	Fill of 159	1960s
161	Fill	Moderately compact (with loose areas) dark reddish brown sandy silt. 35% rubble, 5% charnel.	None	Deposit likely to represent homogenised intercutting graves. Not fully excavated.	medieval
162	Cut	Grave cut. Only western edge visible. E-W alignment.	N/A	Grave cut	post 1300s
163	Skeleton	Supine. Aligned E-W. Very poor preservation, c.40% complete. Skull crushed flat, arm extends into section so lower arm and hand unrecovered. Grave cut not defined. Left side and lower half of grave truncated by an undefined cut.	Human Bone	Skeleton	post 1300s
164	Fill	Moderately compact mid red brown sandy silt. 10% large stones 0.3m x 0.3m.	None	Grave cut fill	post 1300s
165	Cut	Linear in plan, rounded corners. Slight BoS at top of slope, slight sided, slight BoS at bottom of slope and a flat base. Aligned E-W.	N/A	Grave cut	post 1300s
166	Skeleton	Supine. Aligned E-W. upper body very poorly preserved, lower body moderately well preserved. 20-30% complete.	Human Bone	Skeleton	
167	Fill	Soft mid reddish brown sandy silt. Infrequent small stones.	None	Grave cut fill	
168	Wall	Rough reddish brown sandstone blocks. Varied in size from 270mm x 140mm x 140mm to 520mm x 220mm x 240mm. Dry bonded. 1 - 3 vertical courses.	N/A	Roughly hewn E-W linear wall. No visible cut.	
169	Deposit	Compact mid red brown silty sand. Moderate small stones.	Bone	Thick terrace deposit	

170	Lead coffin	Lead coffin	None	Lead coffin, seen in section 14.	
171	Wall	Sandstone blocks. Avg 380mm x 260mm x 120mm. Roughly hewn on S side, Dressed on N side. Faced to north. Bonded with red/brown sandy silt.	N/A	Northern aisle wall to 1250 - 1270 church.	13th C
172	Wall	Sandstone blocks. Avg 350mm x 350mm x 350mm. Unfinished and uncoursed. Faced to north. Earth bonded,	N/A	Structure forming southern wall of crypt. Also forms foundation for pillars 104, 105.	1300s
173	Deposit	Solid grey white concrete.	None	Concrete layer laid over vault 174.	20th C
174	Wall	Brick vault. Brick dimensions 230mm x 110mm x 60mm. Mortar bonded. Vaulted roof.	N/A	Brick vault. Regularly coursed brick with vaulted brick roof.	17th-18th C?
175	Wall	Roughly hewn sandstone blocks. Dimensions from 930mm x 360mm - 340mm x 280mm. Bonded with lime mortar.	N/A	Linear structure. possibly a step up into the northern aisle.	19th C
176	Deposit	Firm light brown red sandstone blocks.	None	Rubble deposit	
177	Deposit	Firm light brown red sandy mortar. Frequent poorly sorted stone, moderate tile fragments.	None	Levelling deposit related to Victorian floor.	19th C
178	Wall	Roughly hewn sandstone blocks. Dimensions from 770mm x 260mm x 70mm to 350mm x 330mm x 80mm. Aligned E-W.	N/A	Sandstone blocks set into levelling deposit 177.	19th C
179	Deposit	Firm mid reddish brown roughly hewn sandstone blocks.	None	Rough sandstone structural deposit used to fill in gaps above arches of west crypt.	1300s
180	Deposit	Soft mid brown red clay. Not excavated	None	Remnants of clay deposit overlying vault roof.	1300s
181	Brick layer	Brick; 6 bricks seen directly under concrete. Seen in section.	None	Post war brick levelling deposit.	19th C?
182	Wall	Hewn sandstone blocks. 300mm wide as seen in section. Pale brown lime mortar.	N/A	Part of Pillar 103	c. 1390-1450
183	Reference number	Reference number for architectural fragments recovered from excavation through SE window of Wyley crypt.	Architectural fragments	Reference number	
184	Cut	Rectangular in plan with slightly rounded corners. Sharp BoS at top of slope, steep sided. Aligned E-W	N/A	Grave?? cut. Disturbed	medieval
185	Fill	Soft mid red brown silty sand. Moderate stones, frequent slate, infrequent tile and bone.	Bone, CBM, Slate Gravestone. Not retained	Fill of grave - heavily disturbed as evidenced by presence of charnel and gravestone fragments.	medieval
186	Cut	Manhole cut	N/A	Manhole cut	20th C
187	Fill	Manhole fill	None	Manhole fill	20th C



188	Cut	Irregular in plan. Sharp BoS at top of slope, vertical irregular sides. Aligned NW-SE.	N/A	Construction cut for wall 172.	14th C
189	Cut	Profile not seen but presumed to be linear. Sides 45°. Seen in section.	N/A	Possible/probable construction cut for wall 168.	11th C?
190	Fill	Soft/loose mid grey brown silty sand. 1% charnel, 1% small stones, 1% charcoal flecks.	Pottery	Backfill of construction cut for wall 171. possible redeposited graveyard soil.	c. 1250-1270
191	Cut	Linear in plan (presumed). Sharp BoS at top, vertical sides, smooth BoS at base. Flat base. Aligned E-W.	N/A	Construction cut for wall 171. respects N side of wall 168.	c. 1250-1270
192	Fill	Moderately compact mid reddish brown silty sand. 15% sandstone rubble - blocks up to 200mm x 200mm in size.	None	Final backfill of 191. Possibly derived partly from demolition of 168 and partly from natural geology.	c. 1250-1270
193	Layer	Soft/loose mid reddish brown silty sand. 1% charcoal, 1% small stones.	None	Deposit similar to 190. accumulated against north face of wall 171.	1300s?
194	Layer	Moderately compact mid reddish brown silty sand. 15% mixed rubble.	None	Probably c.1350s levelling deposited when wall 171 fell out of use.	c. 1350s
195	Layer	Loose light brown sand and mortar. <1% small stones.	None	Sandy mortar lens.	
196	Cut		N/A	Construction cut for brick vault 199.	17th-18th C?
197	Fill	Loose light brown sand. Occasional brick fragments, occasional lenses of mid brown clayey silt.	None	Backfill following construction of vault 199.	17th-18th C?
198	Layer	Moderately compact mid red brown silty sand. 10% mixed rubble.	None	Backfill over vault 199	
199	Context Void. Same as 174.				
200	Fill	Loose rubble	None	Fill of vault - associated with collapse of vault in 1961.	20th C
201	Layer	Grey concrete. 40% pebbles average size 0.02m.	None	Concrete laid in 1961	20th C
202	Layer	Compact mid brown silty sand. Frequent bricks, rubble, charcoal.	None	Post war levelling over 207, formed prior to 201.	20th C
203	Cut	Linear in plan, sharp BoS at top and base, concave base.	N/A	Cable Trench	20th C
204	Fill	Sand and concrete backfill in 203.	None	Cable Trench fill	20th C
205	Cut	Linear in plan, sharp BoS at top and base, concave base.	N/A	Cut for rusty pipe	20th C
206	Fill	Sandy rubble backfill in 205.	None	Pipe trench fill.	20th C

207	Layer	Compact mid red/brown sandy silt. 8% mortar flecks, occasional charcoal flecks, occasional brick fragments.	None	Make up for Victorian floor. Upper surface very compact. Imprint of tiles frequently evident.	19th C
208	Cut	Loose mid grey sand. 30& rubble	N/A	Backfill following layer of concrete repair to vault 199 after collapse caused by concrete lorry.	20th C
209	Deposit	Firm mid red brown sandy silt. Moderate poorly sorted stone.	None	Victorian levelling deposit.	19th C
210	Deposit	Soft mid yellow sand. Frequent small stone, infrequent tile.	None	Victorian levelling deposit.	19th C
211	Deposit	Soft mid brown grey silt. Infrequent small stones.	None	Victorian levelling deposit.	19th C
212	Deposit	Soft mid yellow sand. Frequent small stone, infrequent tile.	None	Victorian levelling deposit.	19th C
213	Deposit	Friable mid red brown silty sand. Frequent small/medium stones. Infrequent tile.	None	Victorian levelling deposit.	19th C
214	Reference number	SF8 - coin	None	Reference number for small find 8.	
215	Cist	Hewn sandstone blocks. Range in size from 430mm x 300mm to 800 x 430mm.	None	Sandstone blocks, forming a cist. Would have supported a gravestone which may have been moved before bombing. Covered by melted lead from the roof.	17th - 18th C?
216	Lead deposit	Solid grey lead.	None	Melted lead deposit covering grave cist 215.	1940s
217	Structure	Brick - 210mm x 100mm x 70mm. Sandstone cladding - randomly placed undressed sandstone avg 250mm x 250mm. Garden wall. Semicircular in plan. Faces E through to W. mortar bonded.	N/A	20th C Planter - said to contain un-urned cremated remains. Soil retained.	late 20th C
218	Structure	Brick - 210mm x 100mm x 70mm. Sandstone cladding - randomly placed undressed sandstone avg 250mm x 250mm. Garden wall. Semicircular in plan. Faces E through to W. mortar bonded.	N/A	20th C Planter - said to contain un-urned cremated remains. Soil retained.	late 20th C

219	Structure	Brick - 210mm x 100mm x 70mm. Sandstone cladding - randomly placed undressed sandstone avg 250mm x 250mm. Garden wall. Semicircular in plan. Faces E through to W. mortar bonded.	N/A	20th C Planter - said to contain un-urned cremated remains. Soil retained.	late 20th C
220	Structure	Brick - 210mm x 100mm x 70mm. Sandstone cladding - randomly placed undressed sandstone avg 250mm x 250mm. Garden wall. Semicircular in plan. Faces E through to W. mortar bonded.	N/A	20th C Planter - said to contain un-urned cremated remains. Soil retained.	late 20th C
221	Deposit	Compact mid red brown silty sand. Compacted areas forming sandstone.	None	Geology	
222	Fill	Moderately compact mid red brown silty sand. Occasional compacted areas forming sandstone.	None	Backfill of construction cut 191. redeposited natural.	13th C
223		Hole roughly chipped into the N wall of the cathedral.	None	Put log hole possibly associated with scaffold erection during latest phase of cathedral. OR may relate to underground vault structure.	1390?
224	Deposit	Deposit of molten lead, fallen from roof	None	Deposit of molten lead that fell from the roof of the cathedral during the 1940's bombing	1940
225	Structure	Victorian tile floor in the central and western parts of the site	N/A	Victorian tile floor in the central area of the Cathedral and made up of plain black and red tiles	19th C
226	Deposit	Post war levelling deposit	Bolts and Nails, recovered. Glass, metal, wood and burnt material. not retained.	Post war levelling deposit	20th C
227	Layer	Bedding layer for Victorian tiles		Appears to be bedding layer for Victorian tile floor (surface has been smoothed). Surface stained grey by ash.	19th C
228	Fe in (136)	Iron within (136)		Iron within (136). Rectangular in shape, except the end which form into two prongs, broken on its eastern end. Looks to have a hinge in the middle of it	1940

229	Structure	Brick Vault	N/A	Brick vault located in the western drainage trench. It has been heavily truncated by the construction of a manhole and a cable trench which has collapsed the east side of the vault. It has been backfilled after the damage and levelled. Originally was below floor layers.	17th-18th C?
230	Fill	Modern rubble backfill of collapsed vault	None	Modern rubble backfill associated with cable trench and manhole. Filling the vault 229 in order to secure the collapsed part of the vault	20th C
231 Same as 180.	Surface	Brick surface	None	Brick surface which has been laid down abutting the eastern part of the floor 225, normally where that tile floor steps down, (as seen elsewhere). This overlies the tile floor that is stepped down. It is likely that this was to do with the construction of the air raid shelter entrance which is located southeast, the steps of which are located directly south of 231. Same as 181.	1940
1/01	Surface	Light grey stone slabs.	None	Stone slab surface	20th C
1/02	Deposit	Compact light yellow brown sand.	None	Post-war bedding layer for 1/01	20th C
1/03	Deposit	Moderately compact red/brown sand	None	Modern deposit found beneath stone slabs.	20th C
1/04	Deposit	Very hard light grey white concrete.	None	Post-war concrete layer laid above similar concrete layer 1/19.	20th C
1/05	Deposit	Compact light brown sand/mortar. Moderate to frequent stone.	None	Possible post war levelling deposit	20th C
1/06	Deposit	Very hard dark grey tar/bitumen	None	Tar/bitumen layer. possible sealant layer.	20th C
1/07	Deposit	Hard light orange red large stone/mortar.	CBM. Not retained.	Victorian levelling deposit made up of a large stone, roof tiles and mortar.	19th C
1/08	Fill	Soft mid grey yellow silty sand. Moderate charcoal flecks.	None	Fill of small, shallow Victorian pit	19th C
1/09	Cut	Irregular in plan, slightly rounded corners. Sharp BoS at top, moderate at base, steep sided. flat base.	N/A	Small Victorian pit cut into wall 1/10.	19th C

1/10=172	Wall	Roughly hewn stone - max 500mm x 370mm. No bonding material.	N/A	E-W orientated wall - northern cathedral wall.	
1/11	Cut	Linear in plan. Unexcavated.	N/A	Wall cut. Not excavated	
1/12	Wall	Roughly squared stone 260mm x 310mm. Mortar bonded. Orientated N-S.	N/A	Western wall of crypt. Abuts wall 1/10.	
1/13	Cut	Linear in plan. Unexcavated.	N/A	Wall cut. Not excavated	
1/14	Deposit	Soft mid orange red clay. Infrequent small stones.	None	Clay deposit	
1/15	Deposit	Soft mid orange red sandy silt. Moderate to frequent small stones.	None	Accumulation deposit	
1/16	Deposit	Compact mid brown orange silty sand. Frequent tile, frequent mid-size stone	CBM. Not retained.	Victorian levelling deposit. Overlies medieval features and deposits.	19th C
1/17	Fill	Soft dark grey sandy silt. Large stone blocks throughout.	None	Modern vent cut fill	20th C
1/18	Cut	Linear in plan. Unexcavated.	N/A	Cut for modern concrete vent.	20th C
1/19	Deposit	Very hard white grey concrete.	None	Concrete capping laid after removal of rubble from 1940 bombing.	20th C
1/20	Deposit	Soft black silty ash.	Other.	Dumped deposit of burnt material. Not in situ burning.	19th C
2/01	Surface	Stone paving slabs	None	Modern Paving Slabs	20th C
2/02	Deposit	Compact light greyish brown sand	None	Bedding layer for 2/01	20th C
2/03	Deposit	Concrete	None	Post war capping	20th C
2/04	Deposit	Concrete	None	Post war capping	20th C
2/05	Deposit	Bitumen surface	None	Post war bitumen surface.	20th C
3/01	Surface	Stone paving slabs	None	Modern Paving Slabs	20th C
3/02	Deposit	Very compact dark grey black bitumen	None	Bitumen sealant	20th C
3/03	Deposit	Compact sand, mixed with concrete.	None	Modern make up layer for 3/01	20th C
3/04	Deposit	Very compact pale brown sand and mortar.	None	Modern make up layer for 3/01	20th C

3/05	Structure	Reddish brown sandstone.	None	Sandstone block, possibly S wall of crypt.	
3/06	Layer	Compacted mid dark brown sandy silt. Frequent rounded stones.	Glass, metal, CBM	Levelling layer for 3/03	20th C
3/07	Layer	Very compact mid reddish brown silty sand. Frequent medium stones.	None	Earth bonding material for wall 3/05	
3/08	Layer	Soft black charcoal. Frequent stone.	CBM, burnt mat. Not retained.	Burnt Layer	19th C
3/09	Cut	Sub-rectangular in plan. Aligned E-W. Not excavated.	N/A	Possible grave cut	
3/10	Deposit	Soft mid reddish brown silty sand. Sub angular/ rounded stone.	Bone, glass, metal CBM	Backfill	
4/01	Structure	Stone paving slabs	N/A	Modern Paving Slabs	20th C
4/02	Deposit	Compact light greyish brown sand	None	Bedding layer for 4/01	20th C
4/03	Deposit	Concrete capping	None	Concrete capping associated with post-war resurfacing	20th C
4/04	Deposit	Concrete capping	None	Concrete capping associated with post-war resurfacing	20th C
4/05	Deposit	Concrete capping	None	Concrete capping associated with post-war resurfacing	20th C
4/06	Deposit	Concrete capping	None	Concrete capping associated with post-war resurfacing	20th C
4/07	Deposit	Bitumen surface	None	Bitumen sealant	20th C
4/08	Structure	Reddish brown sandstone block. Squared.	None	Possible vault wall stone.	
4/09	Deposit	Very hard reddish bedding layer.	None	Bedding layer for tile floor 4/10	
4/10	Structure	Tile - Chequered red and black.	N/A	Chequered tile floor.	
4/11	Fill	Moderately compact (with loose areas) mid reddish brown silty sand. 5% sandstone average size 250mm x 250mm. 20-30% chamel.	Bone	Backfill of grave 4/14	
4/12	Wall	Roughly hewn sandstone blocks 340mm x 200mm x 300mm max. Random courses, faced to N. Earth bonded - reddish brown silt.	N/A	Southern wall of Wyley crypt.	12th- 13th C



4/13	Cut	Linear in plan. Sharp BoS at top, vertical sides, flattish base. Aligned N-S	Bone, CBM	Grave cut or cuts, not clearly defined.	
4/14	Cut	Sharp BoS at top and base. Moderately sloping sides. Flat base. Aligned N-S	N/A	Victorian or later cut; unknown purpose.	
4/15	Fill	Loose mid brown silty sand. 5% CBM, 15% small pebbles.	None	Fill of 4/14	
4/16	Deposit	Friable black charred wood.	None	Burnt and crushed wood likely to relate to WW2 destruction of cathedral.	
4/17	Deposit	Compact mid grey brown silty sand. 30% stone/CBM rubble.	None	Backfill of 4/14 or levelling of hollow.	
4/18	Deposit: Same as 161.	Moderately compact mid orange brown sandy silt. 10% sandstone fragments 150mm x 100mm x 100mm. Same as 161	None	Grave soils Same as 161.	
4/19	Deposit	Loose mid grey sand. 60% gravel, rubble and CBM.	None	1960s disturbance associated with laying of concrete capping to crypts.	
4/20	Deposit	Moderately compact mid reddish brown silty sand. 10% small pebbles.	None	Make up for concrete	

**APPENDIX F. Finds Photos**



**Plate 29.** Carbonised Bible Pages (Cntxt 226)



**Plate 30.** Cistercian Cup (Cntxt 108)



**Plate 31.** Medieval Floor Tile (Cntxt 241)



**Plate 32.** Medieval Floor Tile (Cntxt 241)





**Plate 33.** Lock and Key (Cntxt 226)



**Plate 34.** Victorian Floor Tiles (Cntxt 125)

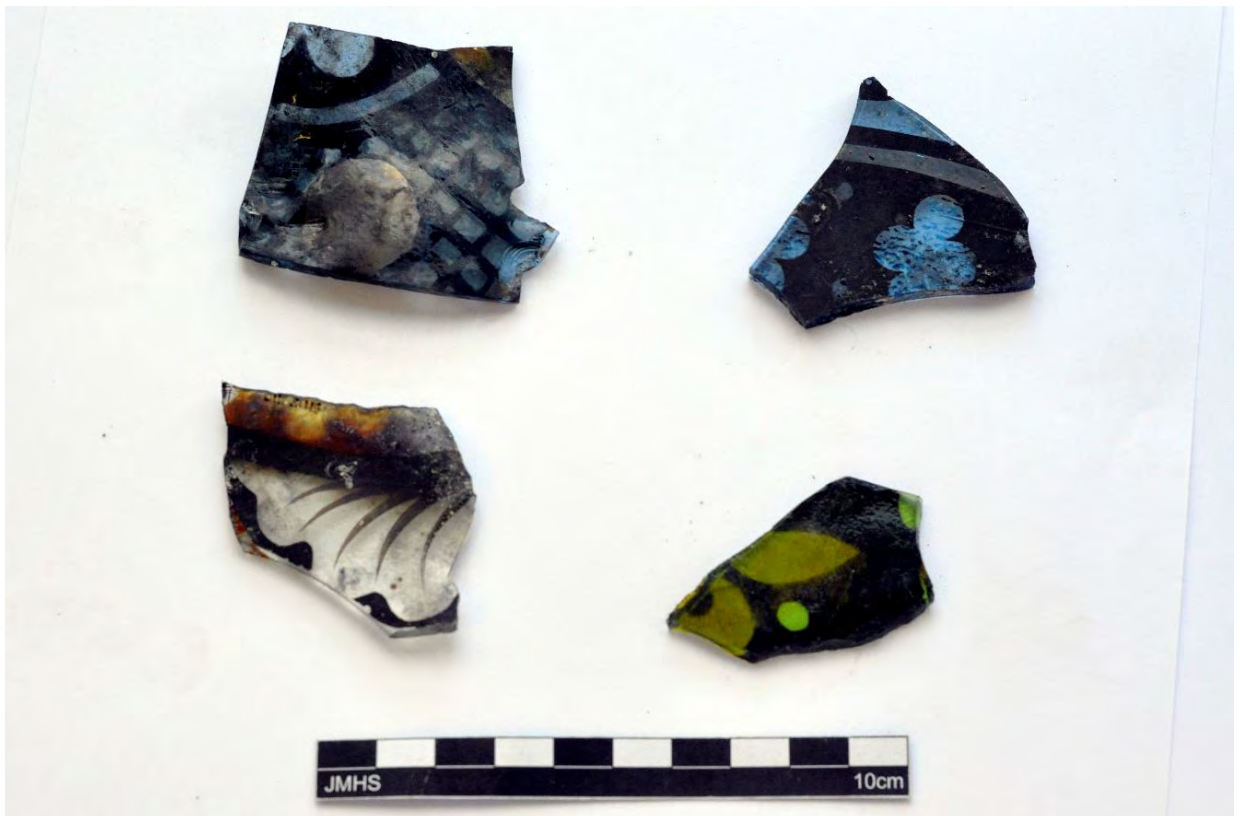


**Plate 35.** Selection of Roof Bolts and Nail (Cntxt 226).





**Plate 36.** Victorian Window Glass (Cntxt.226)



**Plate 37.** Victorian Window Glass (Cntxt 226)