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**SURVEY AND PETROLOGICAL ANALYSIS AT  
SS PETER AND PAUL'S CHURCH,  
BOURNE,  
LINCOLNSHIRE  
(BPPC08 and BPPC09)**

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Work Undertaken For  
**Matthew Thomas, Architect**  
On behalf of the  
**Parochial Church Council**

June 2009

Report Compiled by  
Paul Cope-Faulkner BA(Hons) AIFA

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**ARCHAEOLOGICAL  
PROJECT  
SERVICES**



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## 1. SUMMARY

*A programme of archaeological recording and petrological analysis was undertaken at SS Peter and Paul's church, Bourne, Lincolnshire. A proposal has been made to make a passage through the north wall of the north tower and it has been suggested that this would involve re-opening a previously blocked entry. In order to determine whether there had been an opening there previously, a programme of survey was undertaken. Sections of the north and south sides of the tower north wall were surveyed and petrological analysis of the stonework was carried out.*

*The church dates from the 12<sup>th</sup> century, while the west end is early 13<sup>th</sup> century and there are additions of 15<sup>th</sup> century date. The north aisle and chancel are 19<sup>th</sup> century as is most of the renovation of the church.*

*The investigations have indicated that there was some form of passage through the wall. Stonework in the southern elevation is mixed, both in terms of coursing and nature of stone. This is in distinct contrast to other parts of the western end of the church, where the medieval masonry is evenly coursed regular ashlar. This indicates that this south side of the tower wall was rebuilt. As part of this reconstruction it is probable that the medieval arcade was reset in its present position. This rebuilding operation is that detailed in a Faculty of 1868 that records reconstruction of the north aisle and re-facing of the north tower. The petrological analysis indicates that this rebuilding reused existing stone.*

*One side of a recess in the northern face of the wall is in near-alignment to a straight join in the south face. The alcove has clearly been cut through the medieval wall and then lined with brick. Moreover, at least some of the stone in the back wall of*

*the recess was inserted as blocking. The straight join in the south face indicates there was an opening through the wall that was subsequently blocked. However, the 1868 rebuilding has obscured the full extent of the opening through the wall.*

*Therefore, the opening appears to have been a post-medieval cutting through the wall, but was blocked before the 1868 rebuild, which erased some of the indications of the extents of the opening.*

## 2. INTRODUCTION

Archaeological Project Services was commissioned by Matthew Thomas, Architect, on behalf of Bourne Parochial Church Council, to undertake a detailed survey of the area of the north tower wall within SS Peter and Paul's church, Bourne, Lincolnshire. This was undertaken to provide information in respect of proposals to insert a passage through the wall to a room on the north side of the church (Fig. 4).

The surveys were carried out on the 18<sup>th</sup>-19<sup>th</sup> November 2008 and 8<sup>th</sup>-9<sup>th</sup> June 2009.

### 2.1 Background

Bourne PCC wishes to build an extension on the north side of Bourne church and provide access to this extension by making an opening through the north wall of the tower. It has been suggested that this proposed entry is in the area of a currently blocked passageway. This will require both planning permission from the local authority and a faculty from the Diocese of Lincoln.

### 2.2 Site Location

Bourne is located 24km southeast of Grantham and 15km northeast of Stamford in the administrative district of South

Kesteven, Lincolnshire (Fig. 1).

The parish church of SS Peter and Paul is located at the centre of Bourne at National Grid Reference TF 0969 1998 (Fig. 2). The church is located adjacent to the Bourne Eau on generally level ground at a height of c. 9.3m OD.

### 2.3 Historical Setting

Bourne is first mentioned in the Domesday Survey of c. 1086. At that time, the principal manor was held by Oger the Breton, with the remaining manors held by Ivo Taillebois, Alfred of Lincoln, Robert of Stafford and Suen and contained a church with a priest, several mills, 30 fisheries, 43 acres of meadow, 60 acres of underwood along with extensive woodland for pannage (Foster and Longley 1976, 14/86; 42/1, 2, 3, 7; 59/7; 67/9).

The mention of a church in 1086 may indicate that there was a Late Saxon Minster church in Bourne (Everson and Stocker 1999, 74).

Soon after Domesday, the various manors of Bourne amalgamated into one and passed to Hugh de Evermue and thence to William de Rullos. Upon William's death the land passed to his son-in-law, Baldwin FitzGilbert (Birkbeck 1970, 11). Baldwin later founded Bourne Abbey in 1138 and is also likely to have constructed Bourne Castle. His endowment to Bourne Abbey included the church and various lands, mills and tithes in Bourne (Roffe 2000; Page 1906, 177).

The Abbey was dissolved in 1536 and the site passed to Sir Richard Cotton in 1592 (Thompson 1913, 332). Abbey House was constructed from the materials of the demolished priory.

A drawing of the church dating to 1819 (reproduced in Birkbeck 1970, opposite

page 12) shows a range of buildings extending north from the church. These are built of limestone ashlar and occupy the position of the claustral range. However, it is probable that these are post-medieval in date and can be related to Abbey House, the post-medieval house that replaced the west range of the priory. The door into the north tower is shown blocked.

A map of 1825 also shows this range of buildings which extend north to the point where Church Walk turns to the west. Apart from occupying the area of the west cloister, nothing of the monastic plan can be ascertained.

A faculty dating to 1868 refers to proposals to rebuild the north aisle wall, the construction of a vestry and organ chamber and refers to alterations regarding the north tower, specifically the opening of 'the arch (now blocked up) into the basement of the north tower. To clean, roof and reface the interior of this tower and fit it with seats for school children...' (LAO FAC Papers 1868/18). An accompanying plan shows the area of new works shaded in pink which includes the base of the tower and the boiler room (referred to as a stokery) to the north with other elements of the proposals (Fig. 3). Furthermore, the walls of the northwest tower are depicted in a darker grey which may suggest the extent of the rebuild in this area. A partial passage is shown from the boiler room into the north wall of the tower and the arch to be opened most probably refers to the west door.

In 1883 a programme of works was undertaken to restore the west end of the church. No faculty details of this work are held by the Lincolnshire Archive Office. However, an account of 1892 records '*The west end of the church has been restored, the large perpendicular west window removed, and the old masonry replaced, and three early English lancet windows restored and filled in with beautiful stained*

glass. The tower was restored and a new corner pillar inserted; the north and east arches opened out, and three new stained glass windows inserted on the south side in 1883, all at the cost and under the supervision of Mr R.M. Mills' (White 1892, 201).

A faculty of 1892 is principally concerned with alterations to the north aisle and lowering of the nave floor. However, reference is made to the ducting of heating pipes beneath the floor which had also to be lowered (LAO FB10/279). This implies an association with the boiler room.

### *Architectural Description*

The architectural description is restricted to the area of the proposed new passage. Much of the architectural notes are taken from Matthews and Traylen (1947).

The west end of the church is in the transitional style from the Norman to Early English dating to between c. 1175 and c. 1210. This is evidenced by the interlacing arcade and pointed arches and foliage designs on some capitals.

The exterior of the tower is decorated with arcades of pointed arches, supported by moulded bell capitals and bases. The door and adjacent stoup are 15<sup>th</sup> century insertions. The three windows in the gable were rebuilt in 1883 by RM Mills as part of his scheme for the restoration of the tower.

The blind arcade within the boiler room is consistent with most interpretations of being the south wall of the parlour, by which the cloister was entered from the outer court (Trollope 1862, ix).

A previous desk-based assessment had suggested that the area of proposed work had been substantially restored during the 19<sup>th</sup> century, perhaps when the west end was refurbished in 1883 or when heating pipes

were inserted in 1892 (Cope-Faulkner 2008, 6).

### **3. AIMS**

The aim of the survey and petrological analysis was to identify those parts of the fabric of the north wall of the north tower which were original and that that were later additions or alterations. Specifically, the objective of the survey was to try to determine:

- Has an opening/passageway ever existed here?
- Where precisely was it located?
- What date was it, and how does it relate to the history of the surrounding fabric?

### **4. METHODS**

Elevations of the north and south faces of the north wall of the north tower were hand drawn at a scale of 1:10 with all stones individually recorded using measured offsets from a level line. In addition, a plan of the north tower area was drawn at a scale of 1:20 using a combination of base lines and EDM measurements.

Photographic recording was undertaken to supplement the drawn record using a digital camera. An index of the photographs was compiled on Archaeological Project Services pro forma recording sheets.

Petrological analysis of stones in different sections of the south wall was undertaken with several sub-samples submitted for thin section analysis.

### **5. RESULTS**

#### *Description*

The recorded area comprises part of the

north tower of the church. Specifically, the examined areas are the north and south sides of the north wall of the tower, and the connecting section of the western, exterior, face of the tower. A plan was made of the three walls at ground level (Fig. 5). Recording of the elevation on the interior of the tower was undertaken to the height of the first floor gallery, while within the boiler room the elevation was recorded to just above the arcade arches.

Within the north tower

There are two blind arches in the north wall in limestone ashlar. In the fabric surrounding the arches there are at least six distinct styles of masonry, and the mortar bedding is thick and irregular (Fig. 6, Plate 1). This is in marked contrast to the west and south walls of the nave, where the arcades incorporate, and are surrounded by, coursed ashlar blocks set with narrow and even mortar beds (Plate 2).

There is a variation in the lower stone courses below the arches, the western part (shaded grey in Fig. 6) comprising poorly coursed limestone pieces of differing sizes while that to the east is neatly coursed blocks. This change is defined by three stone forming a vertical straight join 0.62m high (Plate 3). Above the height of the straight join the individual stones, and their coursing, are much less regular. Some of the stone is not flush with the wall and a stone beneath the central columns which has a semi-circular profile is possible evidence for re-use.

The column shafts appear to be of sandstone, suggesting that they are replacements. Infill between the two arches is sawn ashlar blocks, likely to be of recent origin. In addition, the sills are chamfered and overlap the column bases (Plate 3), whereas in the arcades in the west and south wall of the church the sills are flat slabs set beneath the column bases (Plate 2). Therefore, the chamfered sills

are also replacements.

The upper infill of the arches, and between them at the same level, is an area of coursed smaller stone. Above the western (left) arch, up to the gallery, is a repair in coursed ashlar blocks. There is a straight join at the eastern end of this and to the east, above the right hand arch, is an area of mixed rubble.

The wall has had various holes drilled through it for electricity cables and heating pipes.

The boiler room

The surveyed section of wall comprises the easternmost two arches of a 13<sup>th</sup> century blind arcade within the boiler room.

The most easterly arch is incomplete due to the insertion of a recess which extends to about 1.07m behind the line of the wall (Fig. 8, Plate 4). This recess is lined and fronted with brick, except for the rear wall which is constructed from large and medium ashlar. Several of the pieces of masonry are set to meet the edges of the recess. The recess does not have parallel sides. While the western wall is straight, the lower part of the eastern wall curves to the west at its southern end. Moreover, the rear wall of the alcove is not square to the sides.

At the base of the recess are surviving remnants of wall core (Plate 5), indicating that the original medieval wall had no passage through it.

The recorded blind arcade retains much of its medieval character though the stonework is occasionally masked by later pointing. The stonework above the arches may be later, dating from the rebuilding of the north tower. Each arch of the arcade has a ledge sill, presumably a seat. The stonework below this level is generally in a poor condition.

### Plan of Relationship between the tower walls

Detailed survey of the north and west walls of the north side of the tower reveals that the various walls are not quite fully square or parallel to each other (Fig. 5).

Projecting the line of the west wall of the recess southward indicates that it would be slightly to the east of the straight join in the north elevation of the tower.

### *Petrological Analysis*

The full petrological report appears as Appendix 1. Eleven samples of stonework from the inside wall of the tower (Fig. 7) were collected and six of these were subsequently thin-sectioned.

Three rock types were identified, one of which was used in the majority of the wall and the second in an area of later repair. The third rock type is finer and was used in the jamb of the blocked opening.

## 6. DISCUSSION

The recorded north internal wall of the tower exhibits a number of elements that are different to other parts of the west end of the church.

The wall incorporates several areas of different coursing and masonry type with irregular mortar bedding. This is in marked contrast to adjacent parts of the church, where intact medieval masonry comprises coursed regular ashlar blocks with narrow mortar beds.

A vertical straight join below the west side of the eastern arch indicates an opening at this point, though there is no matching face to the east. Blocking of this opening is represented by an area of coursed ashlar to the east of the straight join. The upper parts of this potential opening, and its blocking, were probably removed during

the 1868 rebuilding works. Close to the straight join and beneath the blocking there is a duct for the insertion of pipes for the heating system.

In both arches of the north internal wall there is a sloping sill. The blind arches south of the west door to the north tower have no sloping sill, instead having a shelf composed of either one or more ashlar blocks.

The column bases and capitals of the arches are clearly part of the overall medieval design for the interior of the church, though the shafts are replacements. In light of the nature of the rest of the wall, the arcade must have been re-set during the rebuilding of the northwest tower.

Petrological examination of stone from the wall indicated that one section of the masonry, just below the gallery, is a recent patch. However, much of the remainder of the elevation is comprised of stones with a uniform lithology, including blocks that are clearly not original medieval work (the chamfered arcade sills). This suggests that there was reuse of medieval masonry in later repairs/reconstruction and that, for the most part, stone from the same quarries were used in the medieval and later building operations. As a result, the petrological examination did not provide any indications of stone differentiation between original medieval work and later alteration (other than the latest patch below the gallery).

In summary, therefore, the varied nature of masonry types, together with their fairly uniform lithology, suggests that much of this elevation of the north wall of the tower was rebuilt making use of existing stone. This is likely to have occurred when the north tower was rebuilt in 1868. It would appear that, as a result of this reconstruction work, the medieval arcade was reset in the wall using new sills, and



that upper parts of the indications of an opening through the wall were effaced. As a result of this rebuild there is little, if any, medieval masonry remaining *in situ* in the north wall of the tower.

Further indications of an opening through the wall are provided by the inserted niche in the boiler room. This is clearly not original as it is lined with brick, cuts through the medieval blind arcade and still retains wall core at its base. Additionally, several of the stones in the back wall meet the sides of the niche. This implies that these stones are blocking and that the niche previously extended further to the south.

The 1868 faculty plan shows the niche, though it is not clear if this means the recess was extant, or proposed, at that time.

Projecting the line of the west wall of the recess southwards shows that it runs slightly to the east of the straight join evident in the north wall of the tower. However, the recess is lined with brick, which is not present in the tower elevation. If the thickness of the brick skin is taken into account, then the alignment of the stone wall behind the brick would very closely line up with the straight join.

Overlaying both elevations shows that the floor in the boiler room is some 0.15m below that within the north tower area. Also, the arches of the boiler room arcade are lower than those within the church (Figs. 9 and 10).

Superimposing the elevation drawings shows the arcades overlapping. While this would seem to argue against an entry through the arcades, this overlapping is due to the recess being angled, and not square, to the walls (Figs. 5 and 3).

It seems probable that a passage existed

and it may have been to provide access from the church to Abbey House, which lay in this vicinity. If so, it is likely to date from the late 16<sup>th</sup> century. The opening was blocked on the church side by 1868 when there was a substantial rebuild of the north tower. This rebuild, and the re-setting of a medieval arcade, seems to have erased some of the indications of the opening within the tower, though a section of straight join in the lower wall indicates one side of this entry. Moreover, this straight join is close to the alignment of the west side of the recess in the boiler room. The course of the passage was re-used around 1892 for the insertion of heating ducts beneath the floor of the church.

## 7. CONCLUSIONS

A programme of recording and petrological analysis was undertaken at SS Peter and Paul's Church, Bourne. This was to investigate whether a proposed passage through the north wall of the west end was a re-opening of an earlier entry or not.

The investigation has shown that some form of gap, indicated by a straight join, had been cut through the medieval wall, but the opening was later blocked. The closure of this gap had occurred by 1868 when rebuilding of this part of the church resulted in the upper part of straight join being erased.

As a result of the 1868 rebuilding there is little, if any, medieval masonry remaining *in situ* in the north tower north wall. It is highly probable that the blind arcade, while medieval in origin, was reset in the wall during the 1868 reconstruction.

## 8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Mr M

Thomas for commissioning the fieldwork and analysis on behalf of the Parochial Church Council. Access to the church and boiler room was kindly given by the Rev. C Atkinson. Thanks are also due to the Diocesan Advisory Committee archaeologist, Naomi Field, for advice and comments. Gary Taylor coordinated the project and edited this report along with Tom Lane. Jenny Young, the South Kesteven Planning Archaeologist, kindly permitted access to the parish files and library maintained by Heritage Lincolnshire. Thanks are also due to the staff of Lincolnshire Archives Office.

## 9. PERSONNEL

Project Coordinator: Gary Taylor  
 Building Recording: Paul Cope-Faulkner, Ross Kendall, Steve Malone, Jeffery Nicholls  
 Photographic reproduction: Sue Unsworth  
 Illustration: Paul Cope-Faulkner  
 Analysis and reporting: Paul Cope-Faulkner

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## 11. ABBREVIATIONS

- APS      Archaeological Project Services
- IfA      Institute for Archaeologists
- LAO      Lincolnshire Archive Office

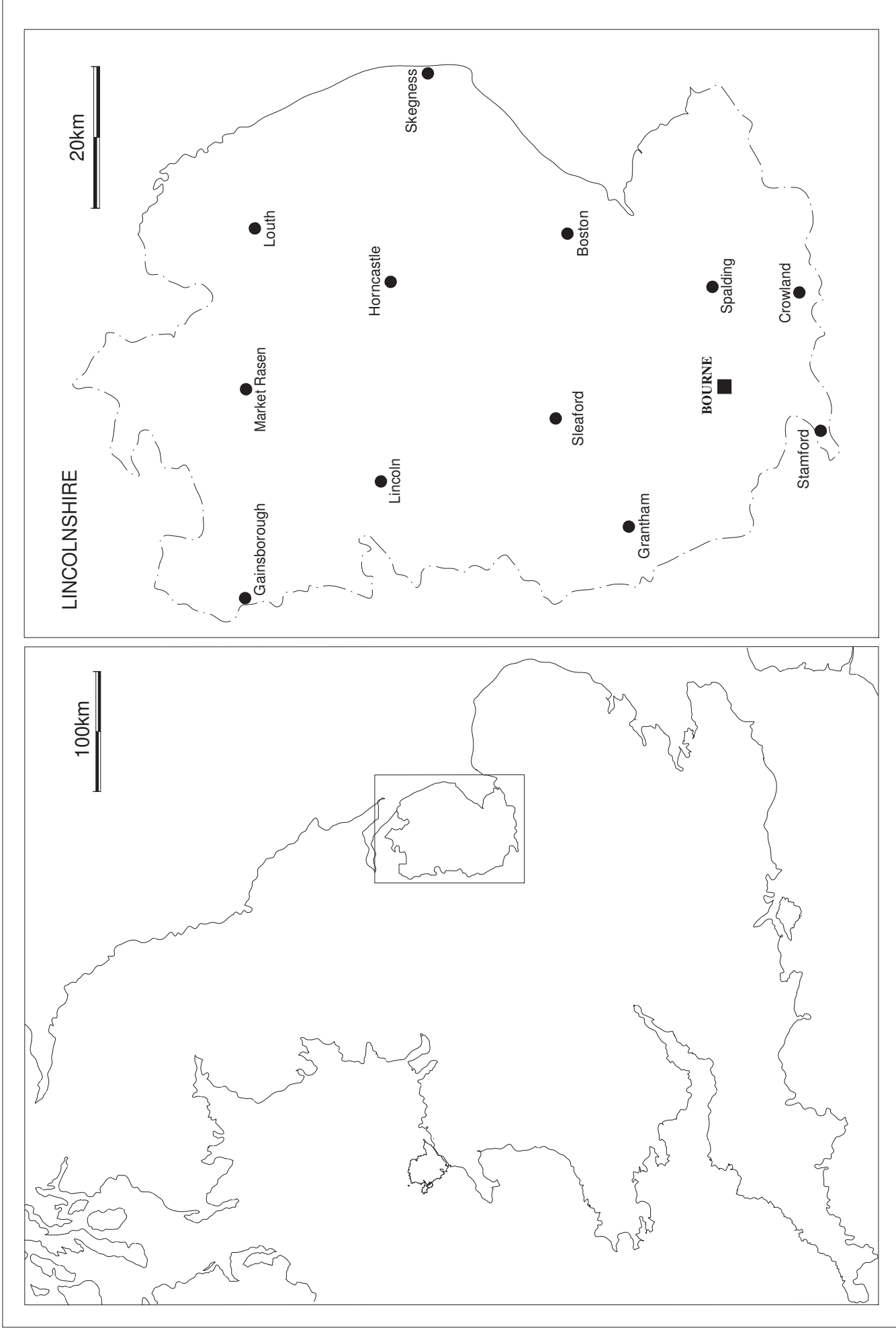



Figure 1 - General location plan



 SS Peter and Paul's Church

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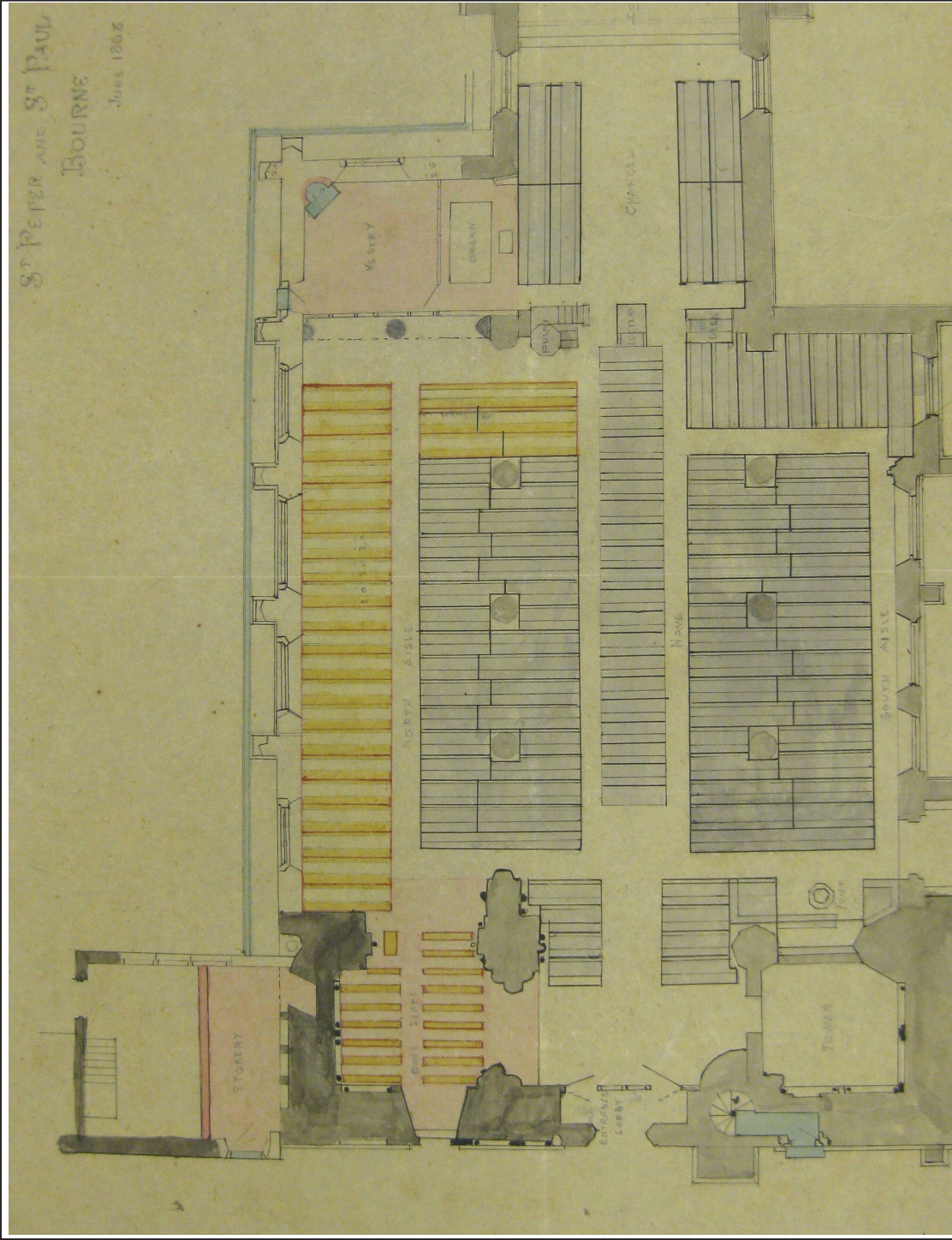
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Project Name: SS Peter and Paul's Church, Bourne		
Scale 1:10,000	Drawn by: PCF	Report No: 51/09

Figure 2 - Site location plan



Pink = appears to be new build  
Yellow = newly installed pew  
Light blue = insertion/extension  
Dark Grey = rebuild  
Light Grey = untouched



Archaeological Project Services

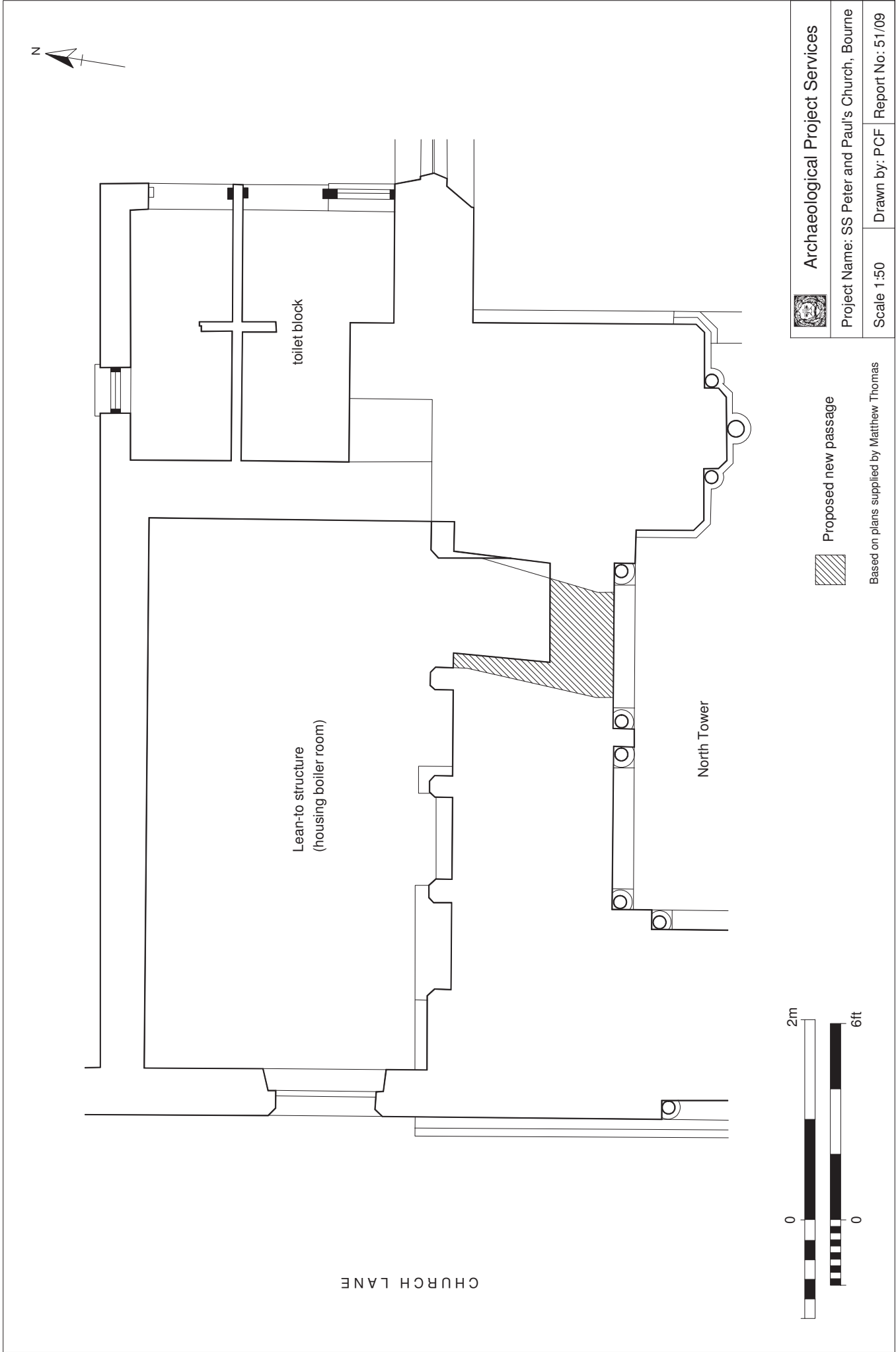
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Drawn by: PCF

Report No: 51/09

Figure 3 - Plan of the church showing the proposed works of the 1868 faculty



Archaeological Project Services

Project Name: SS Peter and Paul's Church, Bourne

Scale 1:50

Based on plans supplied by Matthew Thomas

Drawn by: PCF

Report No.: 51/09

Figure 4 - Plan showing the proposed works

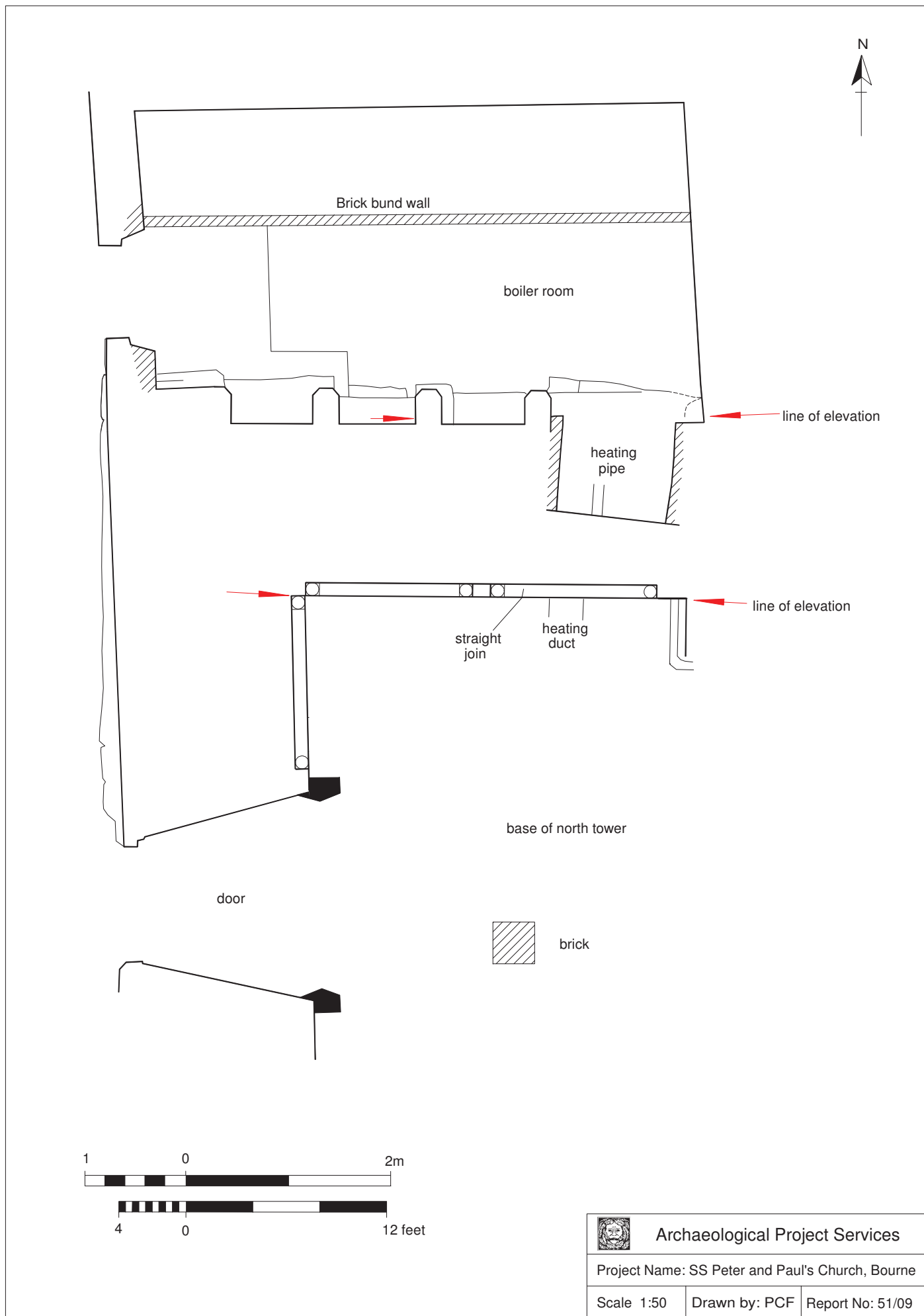
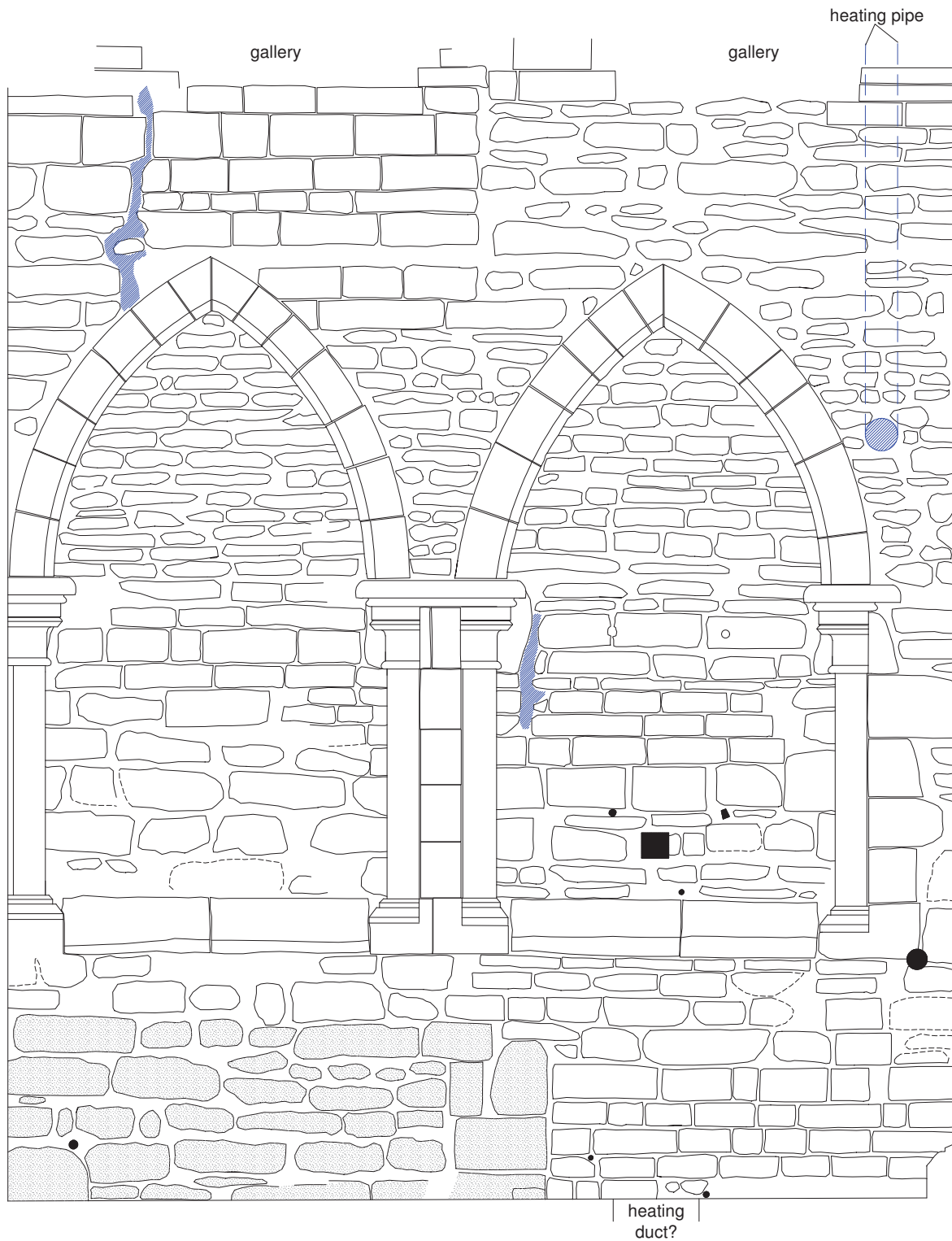


Figure 5 - Survey plan, showing location of the drawn elevations

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E



Possible original masonry

modern mortar infill

modern cables etc



Archaeological Project Services

Project Name: SS Peter and Paul's Church, Bourne

Scale 1:20

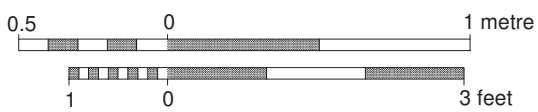
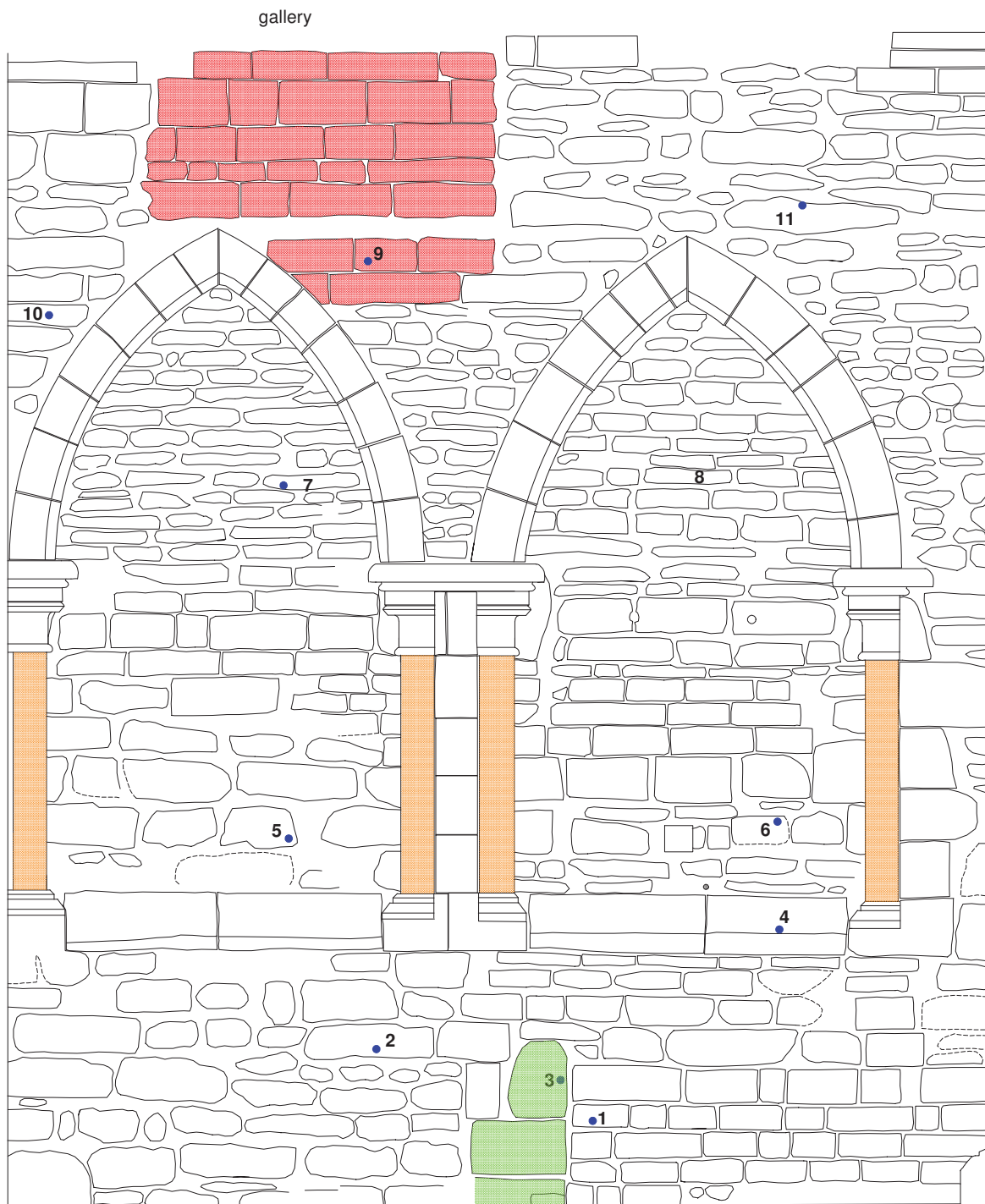
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Figure 6 - Elevation: interior of the north tower



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- Sample location
- Rock 1
- Rock 2
- Rock 3
- replaced shafts


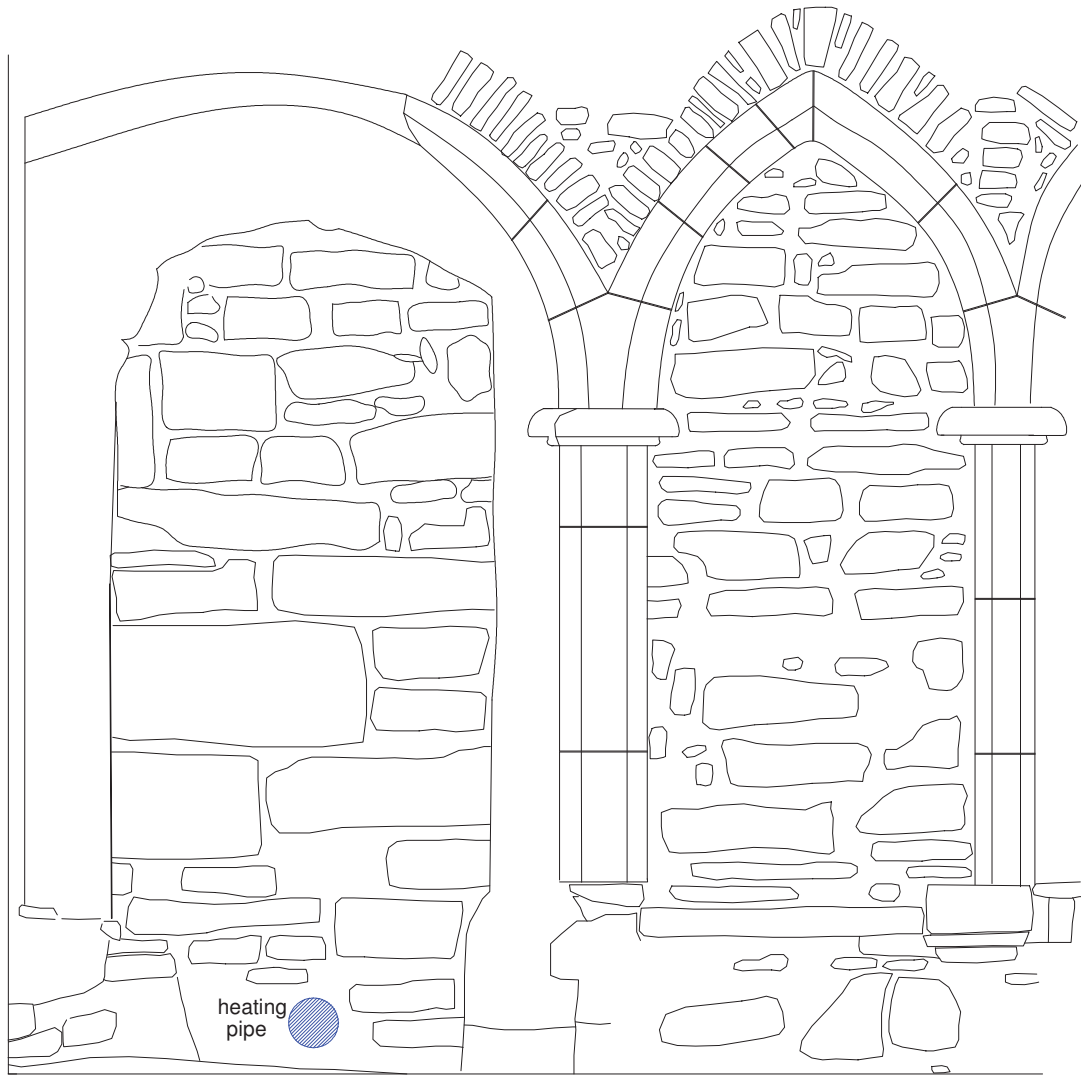
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Figure 7 - Elevation showing stone sampling points and petrological detail

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W




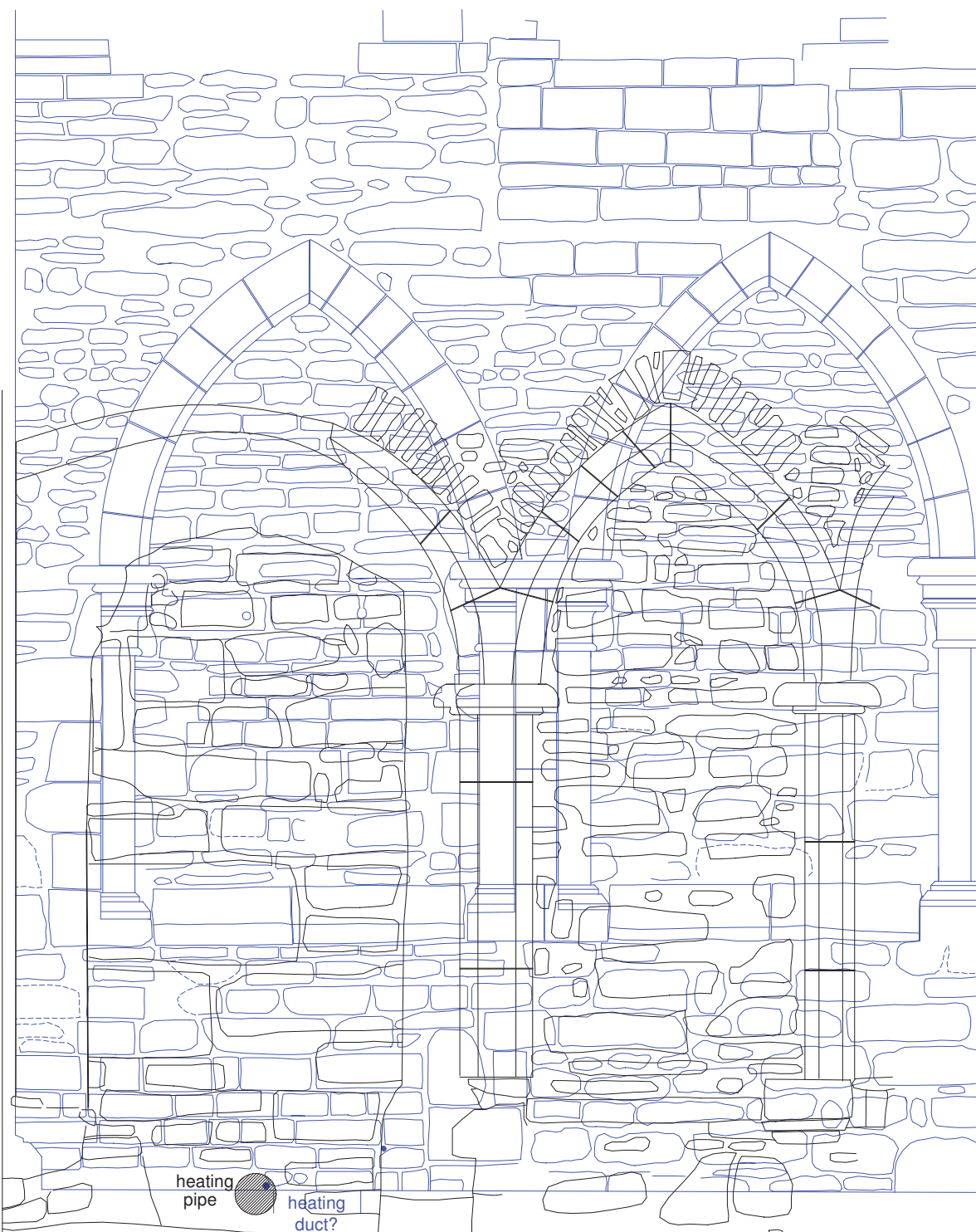
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Figure 8 - Boiler room wall elevation

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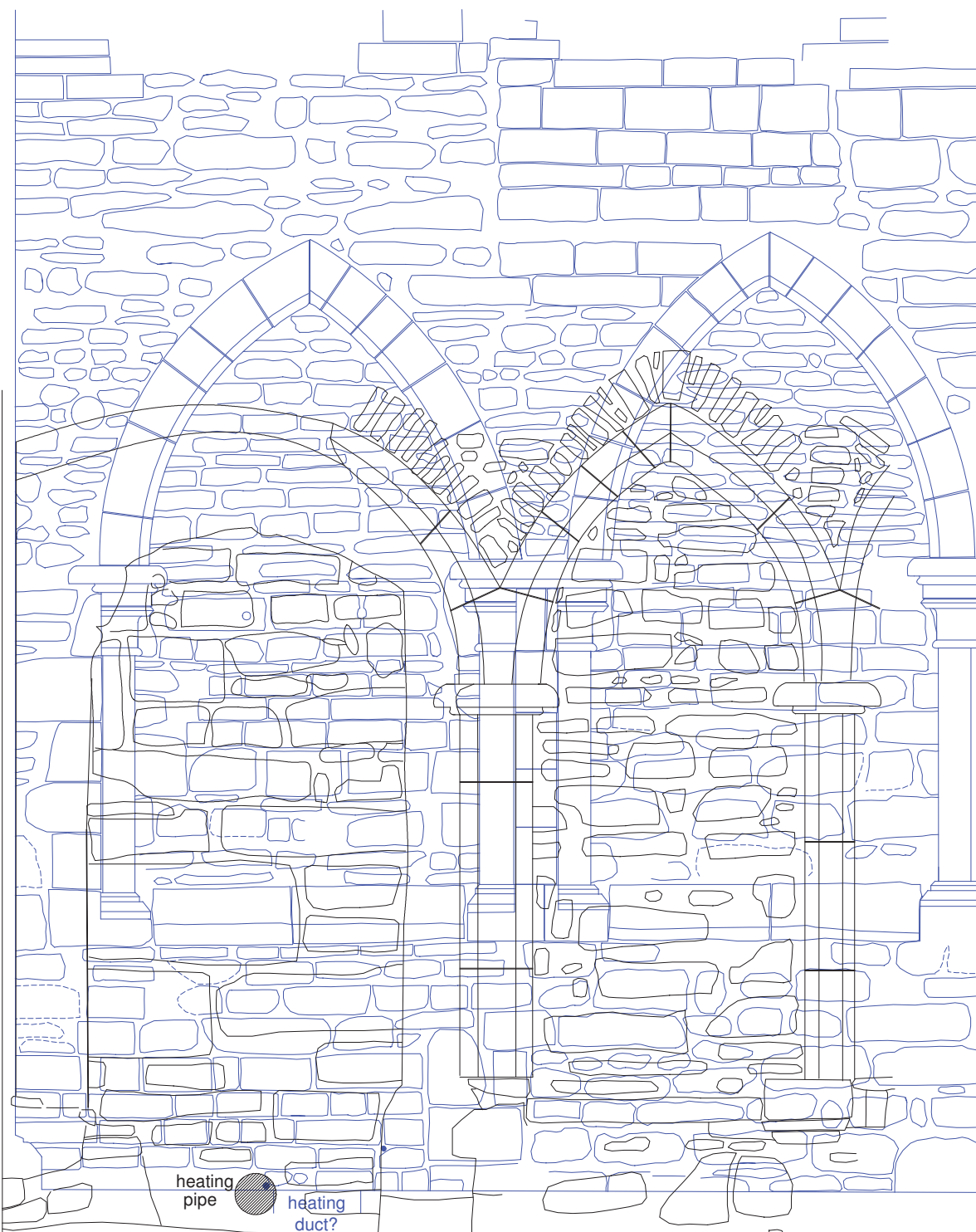
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Figure 9 - Superimposed elevations looking south

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W




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Figure 10 - Superimposed elevations looking south



Plate 1 Blind arcade in north wall of tower



Plate 2 Blind arch located beneath the southwest tower, showing squared shelf of ashlar and different stonework for comparison



Plate 3 Detail of lower part of arcade, showing inserted chamfered sill and straight join



Plate 4 Recess cut through arcade in boiler room



Plate 5 Detail of recess base, showing original wall core cut through by pipe duct

# Appendix 1

## Introductory note

In comparing the drawing showing the sample locations, and the descriptions of where the stonework was examined, an error has been identified. Dr Vince's plan shows a sample from the western (left) chamfered sill, but there are no samples described as taken from that location. Additionally, Dr Vince described one of the samples as coming from an area that does not show any sample locations on the plan. This anomaly cannot be rectified. However, the petrological analysis indicated that there are only three stone types, with the majority of the wall being of one particular stone. Both of these erroneous samples come from the major part of the wall that has this uniform lithology. Therefore, although there is an error which cannot be corrected it is considered that the overall results and conclusion of the petrological examination is not compromised but remains valid.

## PETROLOGICAL EXAMINATION OF STONWORK AT BOURNE ABBEY CHURCH, BOURNE, LINCOLNSHIRE

*By Alan Vince*

## Abstract

That part of the west end of Bourne Abbey church being recorded by Archaeological Project Services in November 2008 was examined by the author to see if the stone could be identified. This was achieved by taking 11 samples, examining these at x20 magnification in the office and following this by the selection of six samples for thin section analysis. The sections were produced at the University of Manchester and stained using Dickson's method (Dickson 1965). This distinguishes ferroan calcite (stained blue) from non-ferroan calcite (stained pink) and dolomite (unstained). The thin sections suggest that only three stone types were used and of these only two were common. Rock 1 is a coarse-grained pellite with coral, bivalve and punctate brachiopod shell, of which the second and third have been partially replaced by fine-grained light brown micrite. Rock 2 (only one piece seen) is a fine-grained limestone and rock 3 (quite common but all in one area) is a finer variant of rock 1. Rocks 1 and 3 are very similar to Middle Jurassic rocks outcropping to the west of Bourne.

## Introduction

The west end of the abbey church at Bourne is a 13<sup>th</sup> century structure which appears to have been the starting point for a rebuilding of the whole church. However, that rebuilding never took place and the nave piers are clearly the originals of c.1138. The only later medieval features noted by the author in a quick inspection were niches, added by doors on the west and south sides of the church, presumably once holding statues. By the early 19<sup>th</sup> century, the church was in a poor condition and several etchings show the west end in a partly ruinous state. During that century, however, the church was renovated and parts of the 13<sup>th</sup> century work shown as ruinous are now restored.

Archaeological Project Services was commissioned by the church to undertake a stone-by-stone survey of one wall of the church which possibly was rebuilt in the 19<sup>th</sup> century. There is a further possibility that this wall is a blocked doorway. As part of an upgrade of a 19<sup>th</sup> century toilet and boiler block attached to the northwest corner of the church, the architect has suggested cutting an access through this wall, in the area of the possible blocked doorway.

The author was asked to undertake a quick survey of the wall to see if there was any difference in the source or character of parts of the wall which it is claimed are 19<sup>th</sup> century infill and original 13<sup>th</sup> century work.

The survey involved the collection of 11 samples of stone, chosen to represent the various blocks of stonework in the wall. These were all examined in Lincoln and six were chosen for thin section.

## Results

### Stone Lithology

Only stone from the wall being recorded by Archaeological Project Services was sampled. However, visual comparison makes it clear that the 12<sup>th</sup> century nave pillars have a similar or finer-texture than the 13<sup>th</sup> century wall work whereas the 14<sup>th</sup> century statue niches are made from a coarser, more shelly, peloidal limestone whilst the 19<sup>th</sup> century work is made from a fine-textured oolitic limestone with few shells or iron-rich pellets.

Rock 1: Samples 1-2, 4-8 and 10-11 are all very similar in appearance. They are all peloidal limestone with rare punctate brachiopod shells, sparse bivalve shells and sparse oolitic brown iron-rich pellets. Thin-sections were made of four examples (samples 1, 2, 8 and 10).

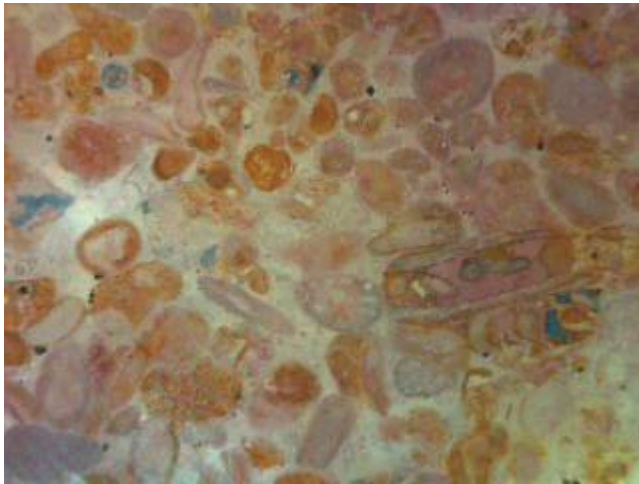


Figure 1

The following inclusions were visible in thin section:

Pellets.

Coral.

Bivalve shell.

Punctate brachiopod shell.

Echinoid shell.

The pellets and shell fragments are coated with micrite.

The groundmass consists of sparry calcite, some ferroan and some non-ferroan.

Rock 2: Sample 3 is much finer in texture than any of the other samples. It is suggested here that it comes from an earlier phase and was reused alongside roughly finished infill. None of the other stonework in the wall has such a fine texture, even the *in situ* carved stones (which all appear to be Rock 1).



Figure 2

The following inclusions were visible in thin section:

Bivalve shell.

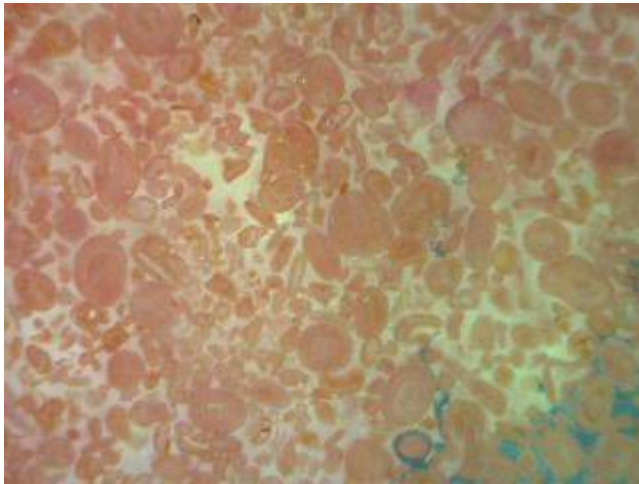
Ostracod shell.

Coral.

The groundmass consists of sparry ferroan calcite.



Rock 3: Sample 9 is of similar texture to the major group (Rock 1) but lacks the shell and iron-rich oolitic grains. It is more similar visually to material used in definite 19<sup>th</sup> century work.



*Figure 3*

Ooliths. Up to four layers of oolite built up over various cores, mostly biological in origin (e.g. shell). All grains less than 0.5mm across.

Shell (completely altered to micrite), up to 0.5mm long.

The groundmass consists of sparry non-ferroan calcite.

#### Stone Source

The most likely source of Rock 1 is the upper part of the Lincolnshire Limestone (Kent 1980, 48-9). Rock 3 probably comes from a similar source, and is similar in the low amount of visible sparry calcite cement to stone from Ketton. Rock 2 is much finer-textured although still oolitic. Assuming the pre-13<sup>th</sup> century date assigned here is correct, the stone is likely to be either of local origin or perhaps brought to the site via water transport either from somewhere else on the fen edge or possibly further afield.

As far as the interpretation of the stratigraphic sequence is concerned, the important point is that rock 3 is limited to an area which forms a clear patch, different in block size and regularity from the remainder.

## **Appendix One**

### List of samples

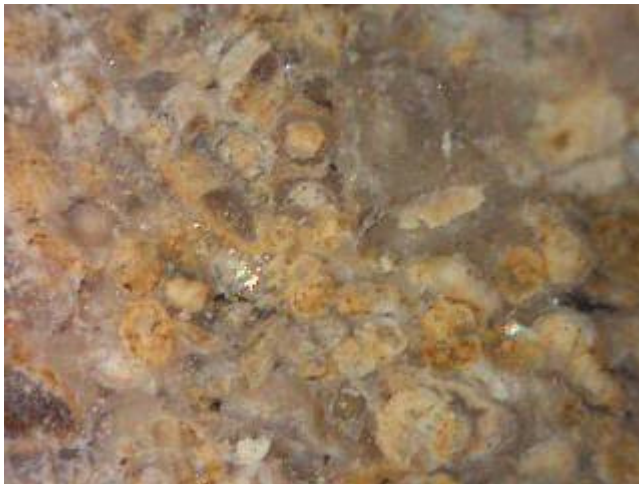
The precise location of each sample is marked on a photocopy of the Archaeological Project Services stone-by-stone drawing. They were chosen to cover the various structural elements of the wall, and to test any difference between the supposed original work and backfilling of a doorway.

1. Taken from the right hand (i.e. more easterly) block of stonework below a chamfer course.



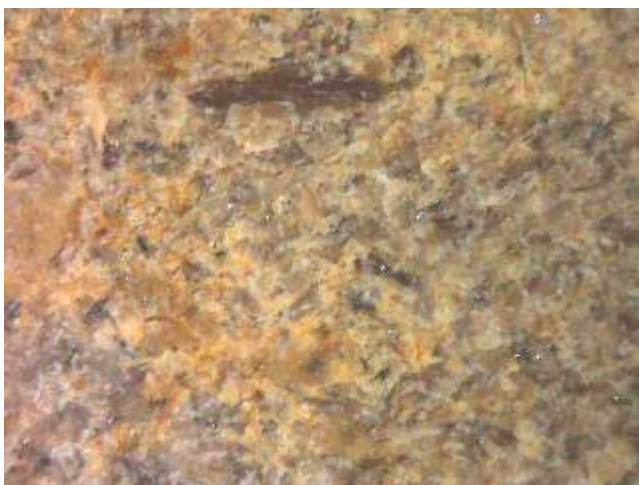
*Figure 4 (sent for TS, sample V5154). Field of view for this and other macro-photos = c.3.4mm wide.*

2. Taken from the left hand block of stonework below the chamfer course.



*Figure 5 (sent for TS, sample V5155)*

3. Taken from a block of stonework interpreted by the architects as the faced stonework forming the left hand side of a blocked doorway.



*Figure 6 (sent for TS, sample V5156)*

4. Taken from the chamfer course, within the area of the supposed blocked doorway.



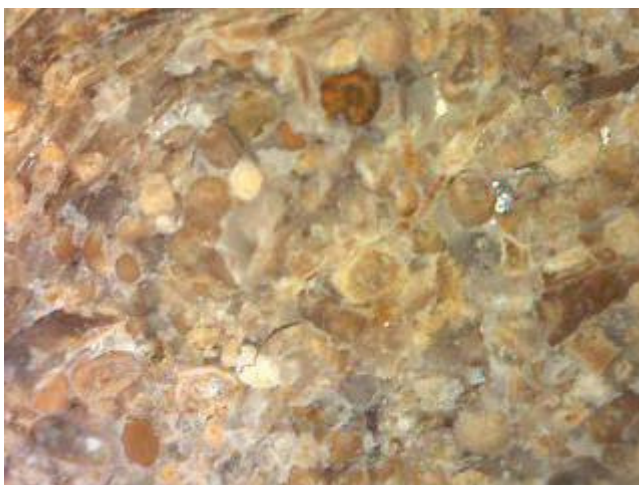
*Figure 7*

5. Taken from the block of masonry above the left hand part of the chamfer course



*Figure 8*

6. Taken from the block of masonry above the right hand part of the chamfer course and within the area of the supposed blocked doorway.



*Figure 9 (sent for TS, sample V5157)*

7. Taken from the upper part of the masonry block to the left, i.e. above sample 5 and below sample 9.



*Figure 10*

8. Taken from the upper part of the masonry block to the right, i.e. above sample 6 and below sample 11. Again, within the supposed area of door blocking.



*Figure 11*

9. Taken from a patch of more regular-shaped stonework below the more westerly window and gallery opening. This appears to be a repair patch inserted into the wall, and cutting areas 10 and 11.



*Figure 12 (sent for TS, sample V5158)*

10. Taken from a patch of stonework to the left of the patch from which sample 9 was taken.



*Figure 13*

11. Taken from a patch of stonework to the right of the patch from which sample 9 was taken. This should be above any blocking.



*Figure 14*

### **Bibliography**

Dickson, JAD, 1965 A modified staining technique for carbonates in thin section, *Nature* **205**

Kent, P, 1980 *Eastern England from the Tees to the Wash* British Regional Geology

The Alan Vince Archaeology Consultancy, 25 West Parade, Lincoln, LN1 1NW  
<http://www.postex.demon.co.uk/index.html>

A copy of this report is archived online at;

<http://www.avac.uklinux.net/potcat/pdfs/avac2008125.pdf>

## Appendix 2

### GLOSSARY

<b>Ashlar</b>	Masonry of large blocks worked to even faces and square edges.
<b>Early English</b>	Division of English Gothic architecture dating from <i>c.</i> 1190-1250.
<b>Medieval</b>	The Middle Ages, dating from approximately AD 1066-1500.
<b>Nave</b>	Body of a church west of the crossing or chancel, where the congregation sat.
<b>Norman</b>	Architectural style current in the 11 <sup>th</sup> -12 <sup>th</sup> centuries. Also known as Romanesque.
<b>Perpendicular</b>	Division of English Gothic architecture in use from <i>c.</i> 1350 - <i>c.</i> 1530.
<b>Post-medieval</b>	The period following the Middle Ages, dating from approximately AD 1500-1800.
<b>Saxon</b>	Pertaining to the period when Britain was occupied by peoples from northern Germany, Denmark and adjacent areas. The period dates from approximately AD 450-1066.
<b>Shaft</b>	The trunk of a column.
<b>Straight join</b>	Regular vertical junction between two sections of walling that shows one part was butted against the other.

## Appendix 3

### THE ARCHIVE

The archive consists of:

- 2 Daywork record sheets
- 1 Photographic record sheet
- 4 Sheets of scale drawings

All primary records and finds are currently kept at:

Archaeological Project Services  
The Old School  
Cameron Street  
Heckington  
Sleaford  
Lincolnshire  
NG34 9RW

The ultimate destination of the project archive is:

The Collection  
Art and Archaeology in Lincolnshire  
Danes Terrace  
Lincoln  
LN2 1LP

Accession Number: 2008.71

Archaeological Project Services Site Code: BPPC 09

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

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