



HERITAGE NETWORK



**CHURCH OF ST LAWRENCE**  
**Ardeley, Hertfordshire**

HN634

*Archaeological Monitoring Report*



# THE HERITAGE NETWORK LTD

*Registered with the Institute of Field Archaeologists as an Archaeological Organisation*  
Archaeological Director: David Hillelson, BA MIFA

## CHURCH OF ST LAWRENCE Ardeley, Hertfordshire

HN634

### *Archaeological Monitoring Report*

*Prepared on behalf of Ardeley Parochial Church Council*

*by*

Alison Hudson, B Ed & David Kaye BA PIFA

Report No. 422

*January 2008*

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*The cover photograph shows the Church of St Lawrence Ardeley, looking north west*

## Acknowledgements

The fieldwork for this project was carried out by David Hillelson and David Kaye. The text and illustrations were prepared by Alison Hudson and David Kaye, the report was edited by David Hillelson.

The Heritage Network would like to express its thanks to Helen Weatherall, Marshall Sisson Architects; R.J Pinnock & Sons Ltd; and David Baker, St Albans DAA, for their co-operation and assistance in the execution of this project.

## Summary

<b>Site name and address:</b>	Church of St Lawrence, Ardeley		
<b>County:</b>	Hertfordshire	<b>District:</b>	East Herts
<b>Village/town:</b>	Ardeley	<b>Parish:</b>	Ardeley
<b>Planning reference:</b>	n/a	<b>NGR:</b>	TL 3082 2714
<b>Client name and address:</b>	Ardeley PCC, c/o Marshall Sisson, 56 High St., Hemingford Grey, PE28 9BJ		
<b>Nature of work:</b>	New buttress	<b>Land use:</b>	Churchyard
<b>Site Status:</b>	Listed Building	<b>Reason for investigation:</b>	Faculty jurisdiction
<b>Position in planning process:</b>	n/a	<b>Project brief originator:</b>	St Albans Diocese
<b>Size of affected area:</b>	c.2m <sup>2</sup>	<b>Size of area investigated:</b>	c. 2m <sup>2</sup>
<b>Site Code:</b>	HN634	<b>Other reference:</b>	n/a
<b>Organisation:</b>	Heritage Network	<b>Site Director:</b>	David Hillelson
<b>Project type, methods etc...</b>	Monitoring	<b>Archive Recipient:</b>	Hertford Museum
<b>Start of work</b>	18 May 2007	<b>Finish of work</b>	13 June 2007
<b>Related HER Nos:</b>	4330	<b>Periods represented:</b>	Medieval, Post-medieval
<b>Oasis UID:</b>	heritage1-29884	<b>Significant finds:</b>	Carved stone, Inhumations
<b>Monument types:</b>	Burial – uncertain date; Anglican Church - medieval		
<b>Physical archive:</b>	none		
<b>Previous summaries/reports:</b>	HN report 189, May 2003; HN report 381, November 2006		

**Synopsis:** In response to the requirements of a diocesan faculty, the Heritage Network was commissioned by the Ardeley Parochial Church Council to carry out a programme of archaeological monitoring and recording associated with repairs, including structural work, to the eastern buttress of the south aisle of the Church of St Lawrence, Ardeley.

The first stage of work involved the monitoring of test-pits excavated adjacent to the eastern and western buttresses. The second stage involved the recording of the eastern buttress prior to demolition, and the monitoring of footings for a replacement.

In the course of the demolition of the eastern buttress several phases of construction were observed, the earliest taking the form of a flint and clay foundation on a narrower footprint than the existing structure. This likely to have been replaced by a wider buttress constructed of flint, which was rebuilt in brick in the 18<sup>th</sup> century. None of the phases were integral with the south aisle, and none was bonded to it. The buttress may have been introduced originally when the 15<sup>th</sup> century clerestory was added to the nave.

In the course of the excavation of foundations for the replacement buttress, two adult inhumations were uncovered. Both had been truncated by the construction of the early buttress foundation and are likely, therefore, to predate the 15<sup>th</sup> century.

# 1. Introduction

**1.1** This report has been prepared on behalf of the *Ardeley Parochial Church Council*, as part of a programme of archaeological monitoring and recording of groundworks at the Church of St Lawrence, Ardeley, Hertfordshire. The archaeological fieldwork was undertaken as a condition of the grant of faculty by the Diocese of St Albans and followed the provisions set out in the *Brief for Archaeological Investigation, Recording, Analysis and Reporting* provided by the Diocesan Archaeological Adviser (DAA).

**1.2** The church and churchyard are situated within the village of Ardeley, in East Hertfordshire District, and centred on NGR TL 3082 2714 (Figure 1). The development proposed the removal and replacement of the south-eastern buttress on the exterior of the south aisle of the church.

**1.3** The Church of St Lawrence is a Grade I listed Parish church consisting of a chancel, nave with north and south aisles, and a tower with a spike spire. The present building has work ranging in date from the 13th to the 18th century with evidence for some 19th century restoration.

**1.4** The archaeological investigation has been undertaken in two stages. The first involved the monitoring of four test pits, two excavated adjacent to each of the south-eastern and south-western buttresses to the south aisle. The second involved the monitoring of the dismantling of the south-eastern buttress, and the groundworks associated with its reconstruction.

**1.5** The aim of the monitoring and recording programme has been to record the south-eastern buttress prior to its demolition, to record any architectural features exposed in the course of demolition, and to record the location, extent, date, character, condition, significance and quality of any surviving archaeological remains which were exposed in the course of the groundworks. Particular interest has been expressed in the identification of evidence that will help increase the understanding of the building and its churchyard, and will facilitate the future study and interpretation of the church.

**1.6** The present report provides a record and interpretation of the data collected. The documentary archive will be deposited with Hertford Museum. This includes:

- the present report
- field record cards
- medium format black and white negatives and contact sheets (recording the demolished buttress)
- 35mm colour slides, black and white negatives and contact sheets, and digital photographs (recording the groundworks)

**1.7** It is intended that a note detailing the specific findings of the project should be submitted for publication in *Hertfordshire Archaeology* and that details of the recorded mass-dials should be submitted to the British Sundial Society for inclusion in their database.

## 2. Fieldwork

### *TOPOGRAPHY AND GEOLOGY*

**2.1** The site is located on a plateau between the 120 and 125m contours and lies on the eastern side of the village of Ardeley to the south-east of Ardeley Brook.

**2.2** The drift geology of the site is classified as slowly permeable calcareous and non-calcareous clayey soils of the Hanslope association (411d) over Chalky Till (SSEW 1983). The natural subsoil is characterised on the present site as firm yellowish brown sandy clay (10YR 5/4) with chalk flecks.

### *METHODOLOGY*

**2.3** No *Project Design* was requested for the present project. All work followed the provisions of the published DAA brief, and was carried out in accordance with current standards and guidelines published by English Heritage, the Institute of Field Archaeologists and others.

**2.4** The timetable for the fieldwork followed the client's groundwork schedule. A series of visits was undertaken to record the exploratory test pits in advance of the main project, record the buttress as existing, and monitor the groundworks.

**2.5** All potential archaeological features and deposits were sampled to ascertain their nature, depth, date, and quality of preservation and the spoil was inspected for archaeological artefacts.

### *RESULTS*

#### *Test Pits*

**2.6** As part of advance exploratory works carried out in November 2006, two test pits were hand excavated by contractors adjacent to the eastern buttress of the south aisle, and two adjacent to the western buttress.

**2.7** The eastern buttress, which is constructed of flint, was observed to extend to a depth of c.0.2m below the existing ground level in Test Pits 1 and 2 (Figure 2; Plates 1a & b). No foundation was observed, the buttress appearing to rest on a layer of buried topsoil. The southern wall of the south aisle was observed in Test Pit 1 to rest on a footing constructed of flint and clunch, which extended to a depth of c.0.5m below the existing ground level, and stepped out by 0.3m. This footing was cut into the natural clay. The buttress appeared not to have been tied in to the aisle wall.

**2.8** The foundations of the western buttress and aisle wall were observed in Test Pits 3 and 4 (Figure 2; Plates 1c & 1d). Both were formed of flint and clunch, and included some re-used dressed stone. They were observed extending to a depth of c.0.4m below the existing ground level, and cutting into the natural clay. Once again, this buttress appears not to have been tied in to the aisle wall.

2.9 No archaeological cut features or deposits were observed.

### *Record of Eastern Buttress*

2.10 The exploratory works highlighted the need for the complete rebuilding of the eastern buttress to the south aisle. On this basis, a photographic record of the buttress was made, on medium format black and white film supported by digital media, before the start of demolition (Plates 2a-c).

2.11 The base of the buttress, measuring 0.91m wide and 1.51m deep, was constructed of rendered flint rising 0.68m from the existing ground level to a chamfered stone offset of 0.08m. Above this, the buttress reduced to 0.74m in width, and rose to a maximum height of 4.58m in two stages defined by weathering formed of limestone slabs (possibly reused gravestones).

2.12 The buttress was covered in a cement render on the south and east faces, with the exposed west face exhibiting a block of flint masonry adjacent to the aisle wall above the offset, measuring approximately 1.00m high and 0.75m wide, surrounded by a facing of tumbled red brick. As the buttress was demolished, the core was shown to be formed of loosely laid red brick. The flint masonry appears to form part of an earlier buttress, but, like the structure as a whole, it was not bonded to the aisle wall, and it overlay the aisle wall's offset foundation course. There was a gap between the buttress and the face of the south aisle which had been filled with a cement mortar.

2.13 Once the buttress had been demolished, the clunch quoin stones of the south-east corner of the south aisle were revealed, as were traces of lime render adhering to the wall. The south face of three of the clunch quoin stones revealed incised mass-dials in different styles (Figure 4; Plate 3).

- The upper dial is located 1.32m (4'4") above the existing ground surface and is formed of an incised upright semi-circle, 0.18m (7") in diameter, with a central hole for a gnomon. Incised radii link the gnomon hole with pock marks and break the semi-circle into twelve sub-divisions. In the lower quadrant, additional intermediate pock marks have been added to each sub-division. Crudely carved Roman numerals are still just visible carved around the outside of the dial.
- The middle dial is located 1.14m (3'9") above the existing ground surface and is smaller and simpler than the upper example. It is formed of an incised circle, 0.09m (3½") in diameter, with a central hole for a gnomon. Incised radii link the gnomon hole with indistinct pock marks and break the circle into twelve sub-divisions. Faint traces of crudely carved Roman numerals are just visible at the top of the dial.
- The bottom dial is located 0.87m (34") above the existing ground surface and is very crudely rendered. It is formed of an incised upright sub semi-circle, 0.20m (8") in diameter, with faintly incised lines breaking the face into sub-divisions. The right-hand edge is weathered or broken and the full extent of the carving is uncertain. No gnomon hole is visible and it is unclear whether the radii were originally linked to pock marks. No numerals are apparent.

*New Footings*

**2.14** The footings trench for the replacement buttress measured 1.55 by 1.30m and had a maximum depth of 0.9m below the existing ground surface (Figure 3). The stratigraphy consisted of a single layer of brown (10YR 4/3) silty clay to a depth of 0.8m. The footings for an earlier structure, probably another buttress, were observed within the trench on a smaller footprint than the demolished buttress. They measured 0.75 by 1.15m and extended from the south eastern corner of the south aisle wall with the northern edge lying flush against the south aisle wall overlying the wall's offset foundation course. The footings were of flint mixed with yellowish brown (10YR 5/8) sandy clay and extended to a depth of 0.8m. No dateable evidence was observed or recovered.

**2.15** Two burials were identified in the footings trench, both having been truncated by the previous building work (Figure 3; Plates 4a & b)). The affected skeletal material was cleaned, recorded and removed prior to being re-interred elsewhere in the churchyard. No dateable artefacts were observed or recovered in association with the burials.

- Burial [01] was 0.8m below the existing ground surface and measured 1.35 by 0.4m. The skeleton was articulated and in a fair condition although most of the left hand side had been truncated by the earlier buttress footing. Fusion of the epiphyses had taken place in the observed long bones suggesting that the individual was an adult. The sex was indeterminate as both the pelvis and skull had sustained considerable damage. The skeleton was in a supine position and orientated east-west. No grave cut was visible within the trench.
- Burial [02] was 0.6m below the existing ground surface and was largely disarticulated and fragmented, having been heavily truncated by the earlier buttress footing. Some of the bones are likely to have been redeposited. The bone was in fair condition and most probably adult. Due to the incompleteness of the burial, it was not possible to determine sex. There was no visible grave cut.

Skeleton	Type	Description	Dimensions (m)		
			Length	Width	Depth
01	Burial cut	Adult skeleton, articulated, fragmented, bones in fair condition. Left Clavicle, arm, hand and leg missing also majority of vertebrae. Skull and pelvis incomplete. No grave cut visible.	1.35	0.4	0.8
02	Burial cut	Adult skeleton, disarticulated, fragmented possibly redeposited. Bones in fair condition. No grave cut visible.	>0.4	>0.3	0.6

### 3. Discussion

**3.1** The earliest part of the church of St Lawrence is recorded as being the nave which dates to the 13th century or earlier. The south aisle is early 14th century but re-roofed in the 15th century when the clerestory was added to the nave. The existing buttresses are recorded as being 18th century on the basis of the tumbled brickwork (IoE Listing; Page, 1912).

**3.2** The observations made in the course of the present project suggest that a series of buttresses have occupied the eastern end of the south aisle, evidence for the earliest being in the form of a footing of compacted flint and sandy clay on a smaller footprint than the later, recently demolished buttress. The presence of flint masonry in the structure of the later buttress suggests that the earliest example was replaced by a wider structure, but the extra width was not supported by an extended foundation. This phase was substantially rebuilt in red brick of 18<sup>th</sup> century date, again without the support of additional foundations, and subsequently repaired on a number of occasions using cement based mortar and render.

**3.3** The demolition of the buttress has exposed the extreme eastern end of the southern elevation of the south aisle and its foundation courses. This has demonstrated that the buttress was not part of the original 14<sup>th</sup> century design for the south aisle, as the earliest foundation overlies the foundation course for the south aisle. Furthermore, it is clear that none of the phases of the buttress was ever tied into the masonry of the south aisle, and they appear to have contributed little to its structural stability. It is possible that the buttresses to the south aisle were introduced following the 15<sup>th</sup> century improvements, out of concern for the effect that the additional clerestory might have had on the structure.

**3.4** The excavation for the foundations of the replacement buttress revealed the truncated remains of two adult inhumations of indeterminate sex at 0.6m and 0.8m below the existing ground surface. The burials occupy a popular position on the south side of the church, but neither included any artefacts which might indicate their date. Nevertheless, both burials had been severely truncated by the footings of the earliest buttress which are pre-18<sup>th</sup> century and likely to be post-15<sup>th</sup> century in date.

**3.5** The removal of the buttress revealed three mass-dials incised into the south face of three of the clunch quoin stones at the south-east corner of the south aisle. According to the British Sundial Society, which is compiling a gazetteer of such carvings, mass-dials (or scratch dials) are medieval in date and were usually located near to the main door or to the priest door of the church, at about chest height. Precise dating is difficult but, in general, the simpler the design, the earlier the dial. The presence of pock marks and numerals suggest a later date for the upper dial, possible 15<sup>th</sup> or 16<sup>th</sup> century. It is probable that these dials are not in their original locations, however. It is not uncommon for dials to have been repositioned in the course of rebuilding works and this would explain why the upper and lower dials appear to be positioned on their sides.

#### **CONFIDENCE RATING**

**3.6** In the course of the fieldwork, weather and ground conditions were generally acceptable for the identification of potential features and deposits, and for their investigation. There are no other circumstances which would lead to a confidence rating for the present project which is less than High.



## 4. Schedule of Site Visits

Date	Staff	Hours	Comments
1/11/2006	DGK	5	Monitor test pits
18/5/2007	DJH	2	Record buttress
13/06/07	DGK	8	Monitor excavation of new buttress footings

## 5. Sources Consulted

### INTERNET

British Sundial Society: <http://www.sundialsoc.org.uk/>

Ecclesiological Society: <http://www.ecclsoc.org/>

National Monuments Record: <http://www.imagesofengland.org.uk/>

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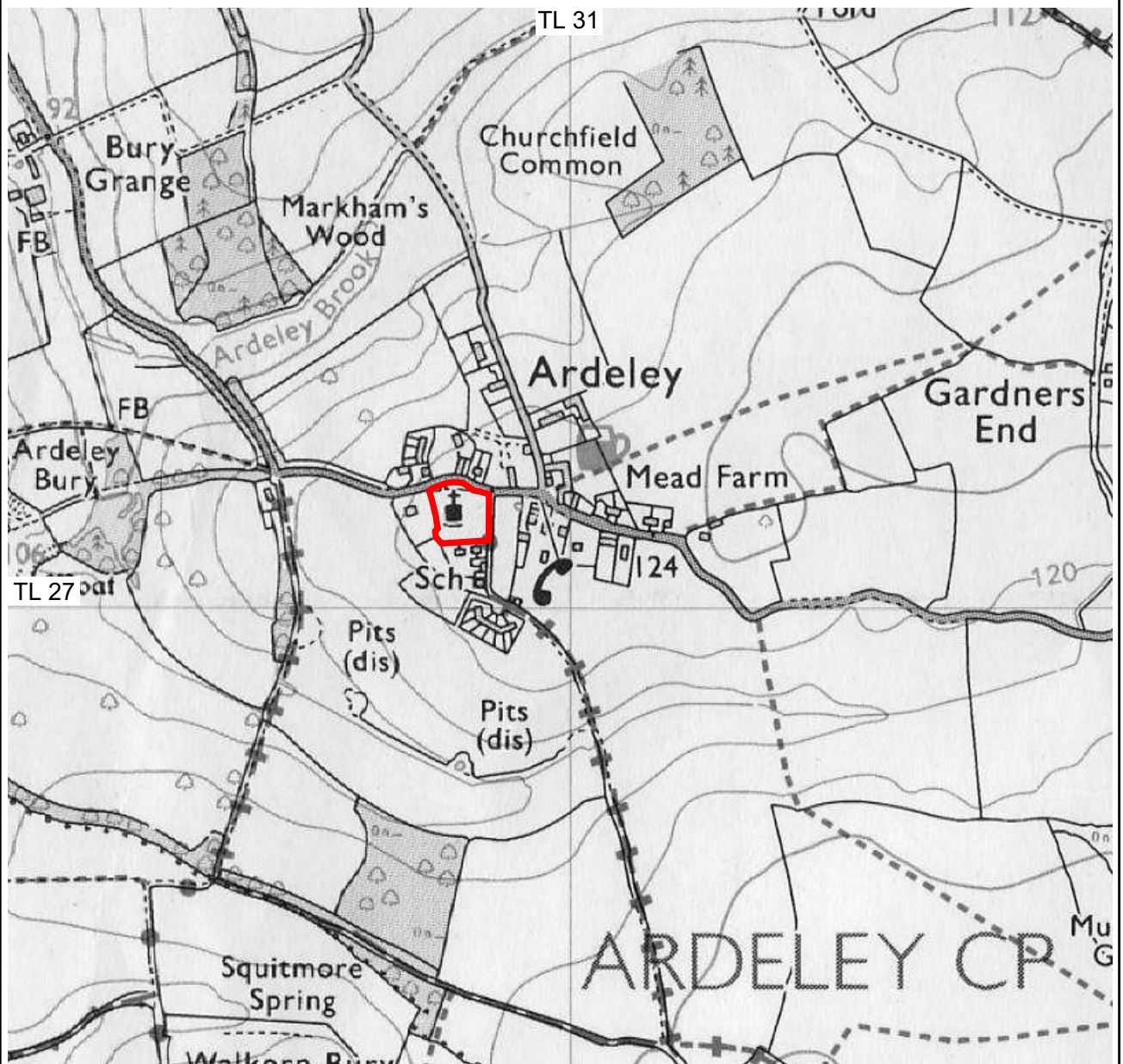
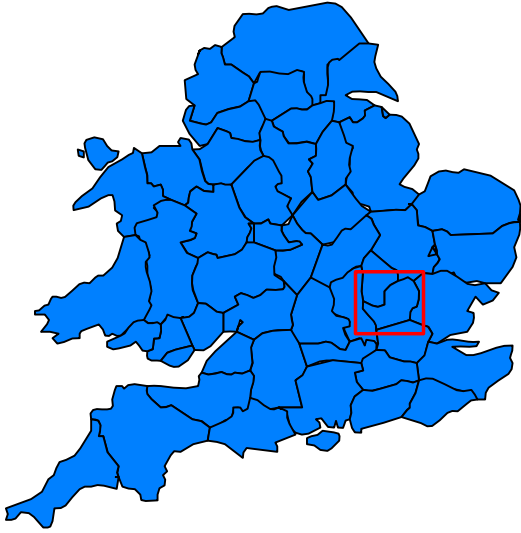
## 6. Illustrations & Plates

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Plate 4a .....	Skeleton [01] and early buttress footings
Plate 4b .....	Skull fragments from Skeleton [02]

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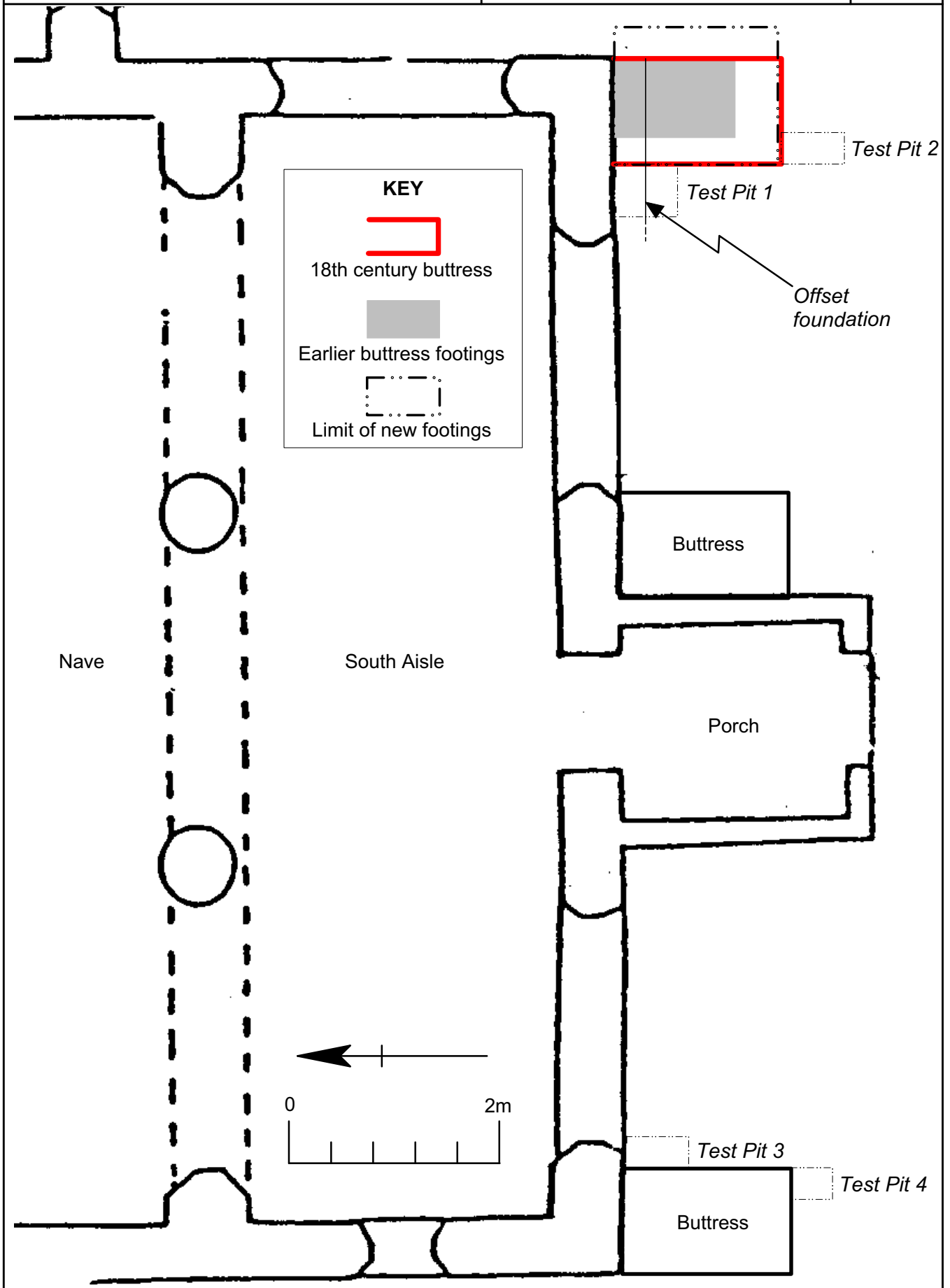


Site Location

Scale 1:10 000

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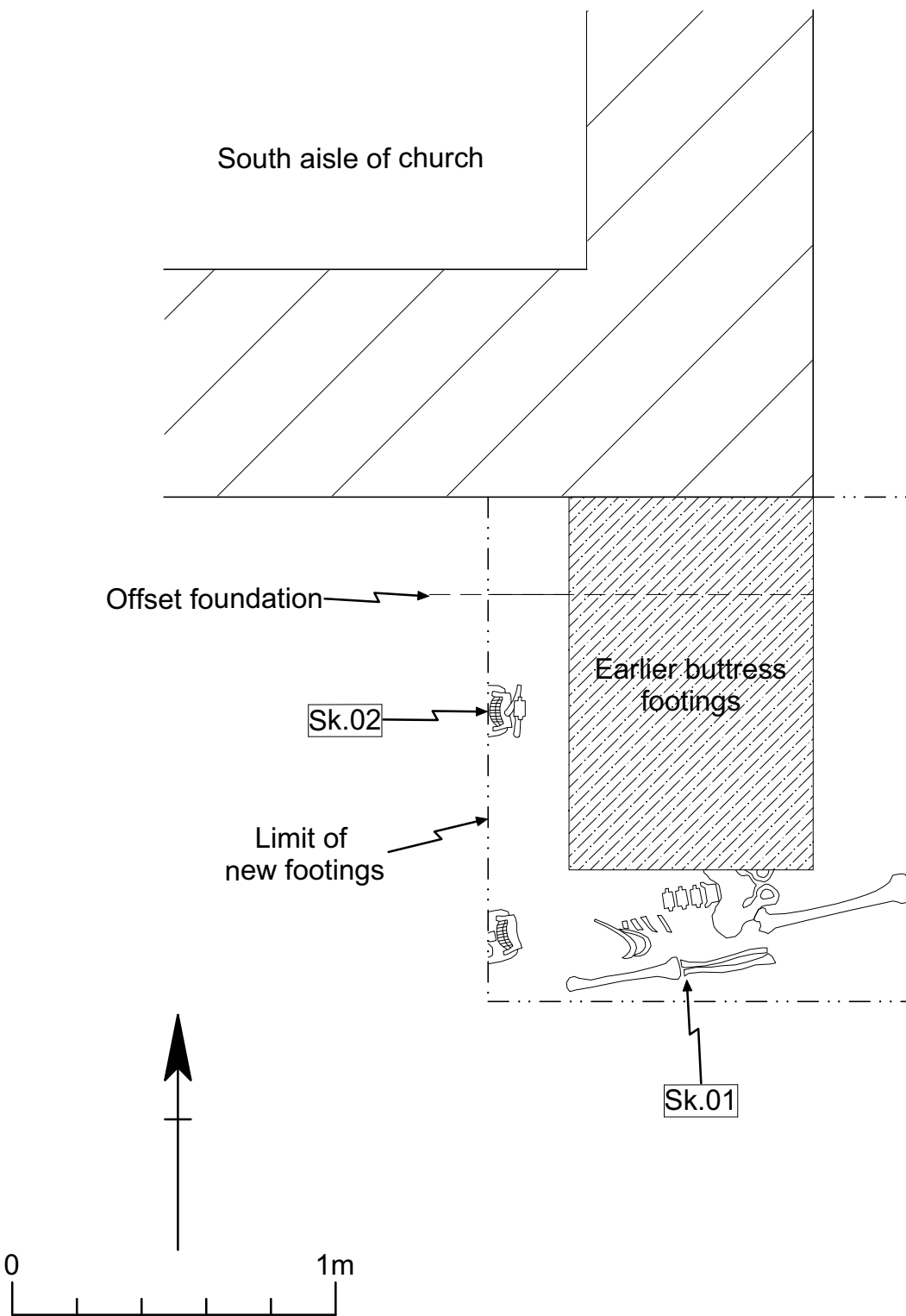
Figure 1



Site Layout

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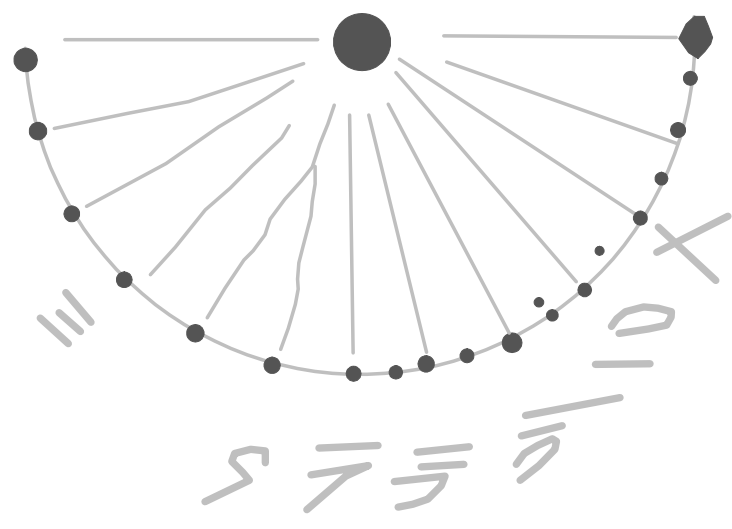
Figure 2



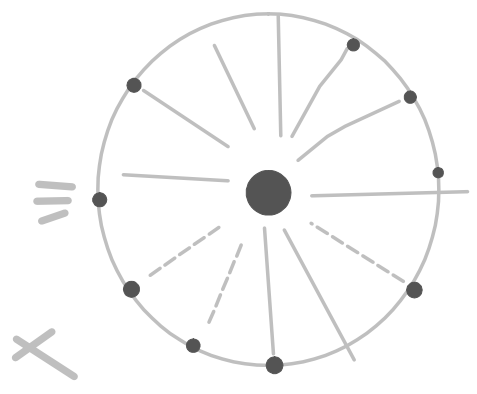
Location of recorded features

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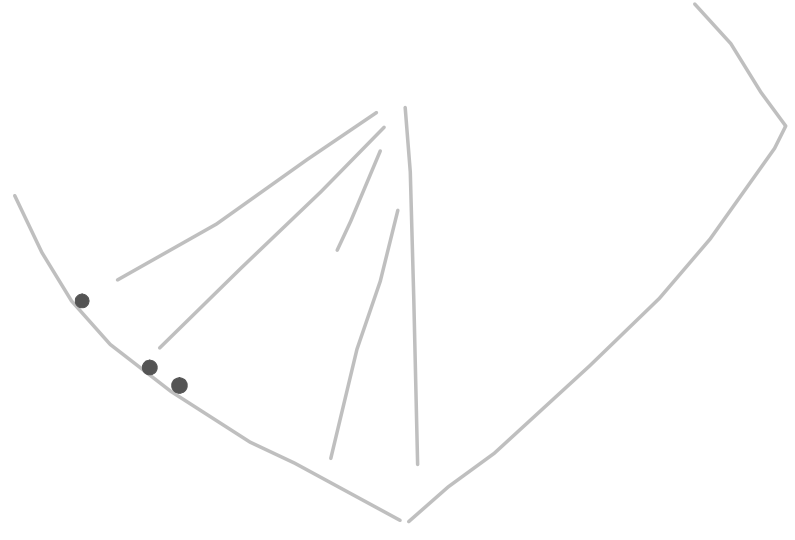
Figure 3



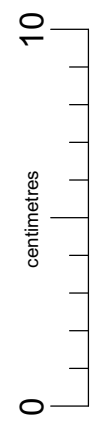
Top Dial



Middle Dial



Bottom Dial



Mass-dials at south-east corner of south aisle



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Plate 1a: Test pit 1



Plate 1b: Test pit 2



Plate 1c: Test pit 3



Plate 1d: Test pit 4





Plate 2a: West Face



Plate 2b: South Face



Plate 2c: East Face

Eastern buttress to south aisle: elevations



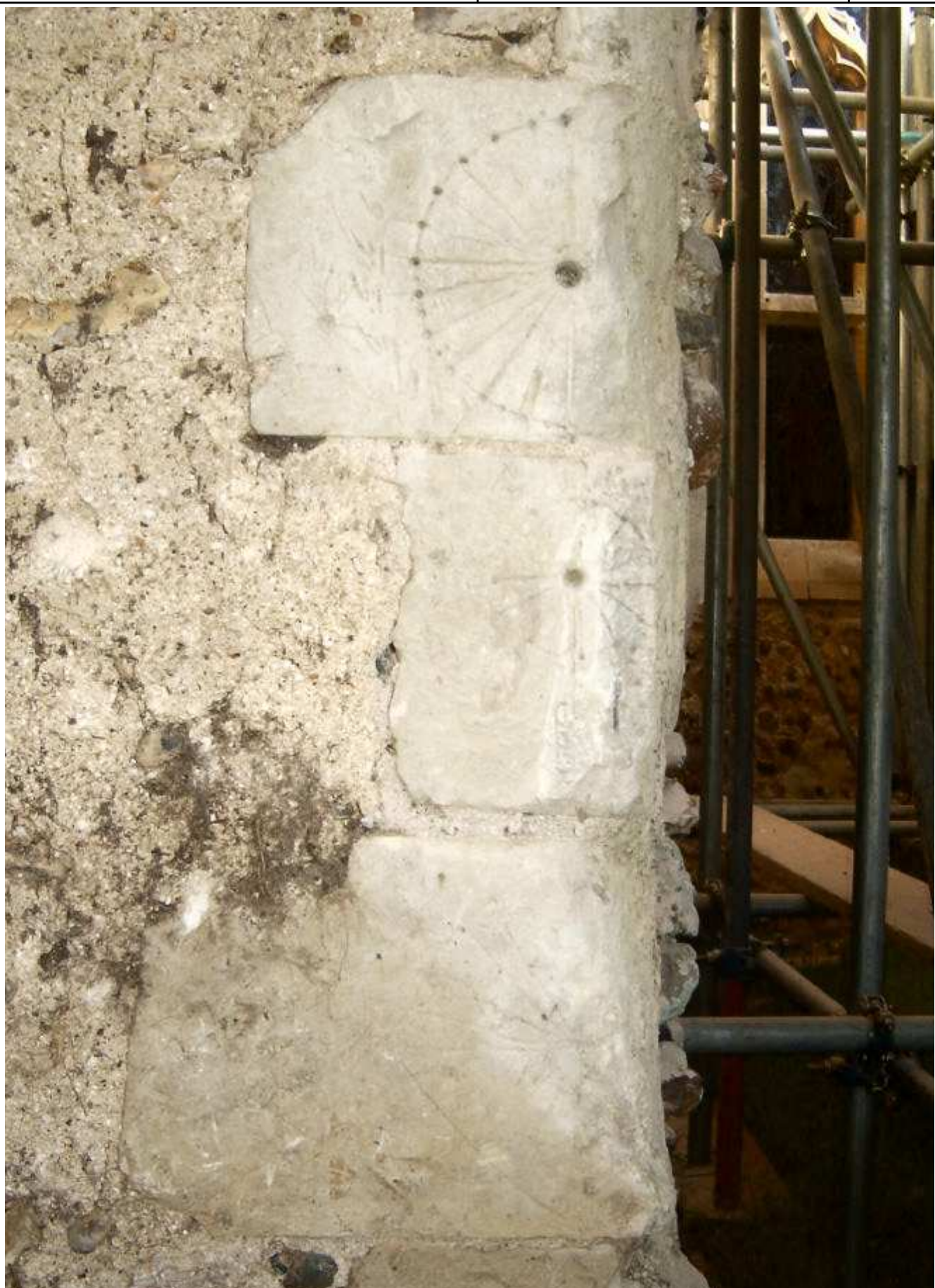
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Scale 1:25

Plate 2





Mass-dials at south-east corner of south aisle

Scale 1:3

Plate 3





Plate 4a: Skeleton [01] and early buttress footings

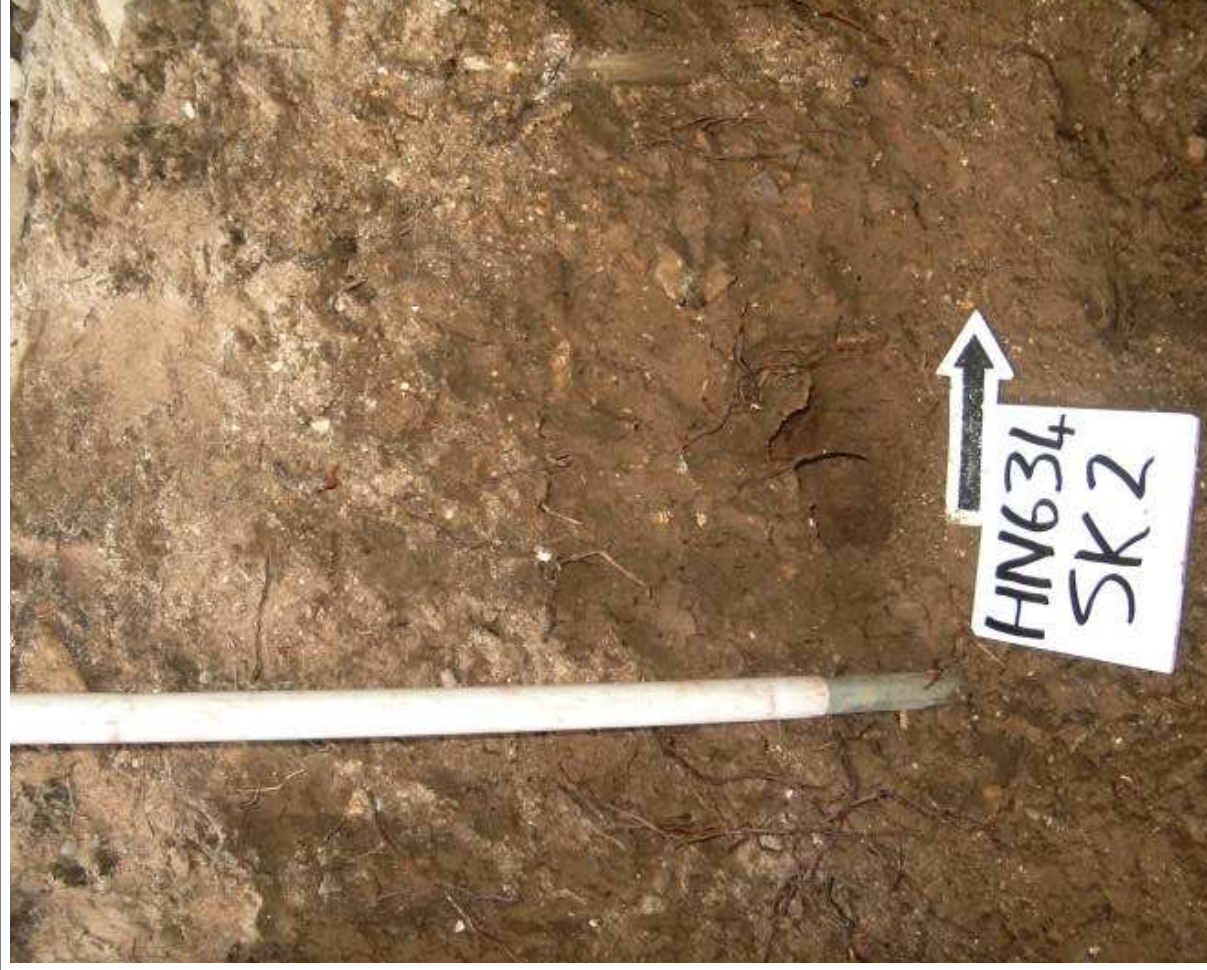


Plate 4b: Skull fragments from Skeleton [02]