

# ST BRIDGET'S OLD CHURCH, BECKERMET, CUMBRIA

## Archaeological Watching Brief



Client: PCC St Bridget's Old Church, Beckermat

NGR: 301503 506071

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## Non-Technical Summary

As part of a programme of renovation work at St Bridget's Old Church, Beckermat, Cumbria, Greenlane Archaeology was commissioned to carry out the archaeological work associated with this. The first phase comprised a desk-based assessment, which was completed in 2011. Following on from this an archaeological watching brief was carried out comprising the recording of features of interest exposed when the external render and roof were removed and monitoring of excavation of trenches for improved drainage. The additional building recording was carried out during September 2013 and the excavation of the drainage trenches was monitored in January 2014.

Removal of the slate roof exposed the roof structure of the nave above the barrel-vaulted ceiling and removal of the render also revealed a number of features of interest, including probable putlog holes in the west gable, a voussoir arch for a wider and taller doorway on the west elevation than the present one, and evidence for several phases of construction in the south side in the form of blocked doorways and windows. It was also apparent that the original wall line had moved outward on the south side and several refitting pieces of decorated stone, comprising parts of a Romanesque font of probable late 12<sup>th</sup> century date, had been used to rebuild it. A number of fragments of broken red sandstone roofing tiles were also present on the wall top but there were no obvious remains of a cross head allegedly incorporated into the east elevation.

Excavation for the new drainage pipes revealed what is probably a grave close to the entrance to the lower graveyard but this feature was not examined as it extended beyond the depth of excavation. A low wall built from large rounded volcanic boulders topped with smaller rounded stones and very loosely filled with smaller rounded and sub-angular stones and bonded with rough lime mortar was recorded slightly to the west of the existing graveyard boundary, and corresponds with the earlier boundary of the oval church yard shown in early mapping. Closer to the church there had obviously been some disturbance, perhaps associated with earlier phases of drainage, but elsewhere thick layers of subsoil containing human bone and other finds of interest were present.

The majority of the finds which were recovered during the watching brief are post-medieval and range in date from the 19<sup>th</sup> century onwards. Of particular interest, however, are the fragments of carved stone, recovered from the subsoil near the south corner of the church, which are much earlier. These are evidently fragments of carved stone crosses and likely to date from the 9<sup>th</sup> to 11<sup>th</sup> century. One fragment is seemingly part of the extant cross in the church yard with an inscription, while the other is apparently the boss from a cross head, perhaps from the other extant cross or from a third, as yet unrecorded, cross.

It is recommended that the fragments of font and of cross be subject to professional conservation and further specialist research in order to enable full publication of the results.

## Acknowledgements

Greenlane Archaeology would like to thank the PCC for St Bridget's Old Church Beckermat for commissioning the project, and Elaine Blackett-Ord and Amy Redman at Blackett-Ord Conservation Architecture for providing information about the building and assistance on site. Special thanks are due to the staff of Atkins and Little for their help and patience on site.

The watching brief was carried out by Dan Elsworth, who also wrote the report. The illustrations were produced by Tom Mace. Jo Dawson assessed the finds, with the exception of the fragments of stone cross, which were examined by Professor Rosemary Cramp (Durham University), the fragments of font, which were assessed by James King (Corpus of Romanesque Sculpture in Britain and Ireland), and the industrial residue, which was assessed by Gerry McDonnell (Gerry McDonnell Archaeometals). The environmental sample was assessed by Laura Bailey (Headland Archaeology), and further thanks are also due to Tim Holden at Headland Archaeology. The project was managed by Dan Elsworth and the report edited by Jo Dawson and Tom Mace.

# 1. Introduction

## 1.1 Circumstances of the Project

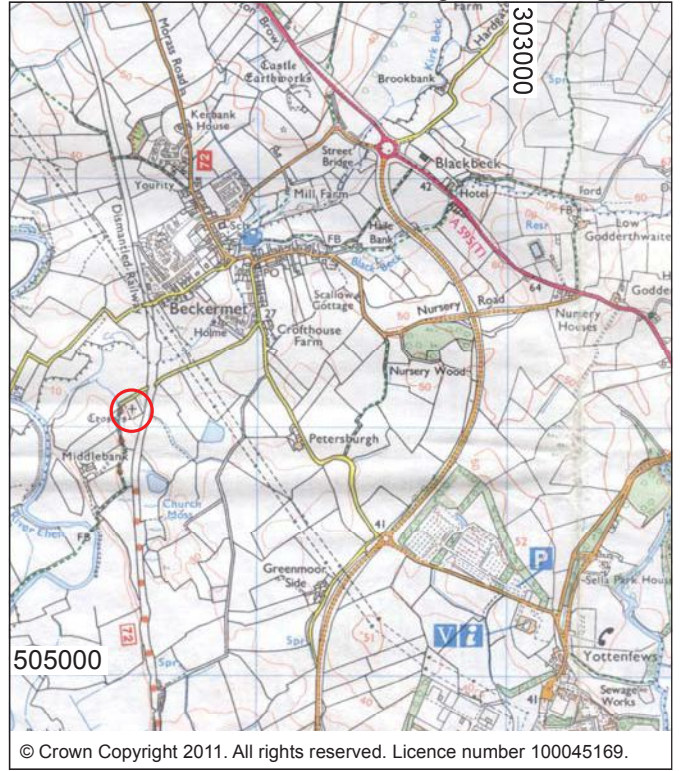
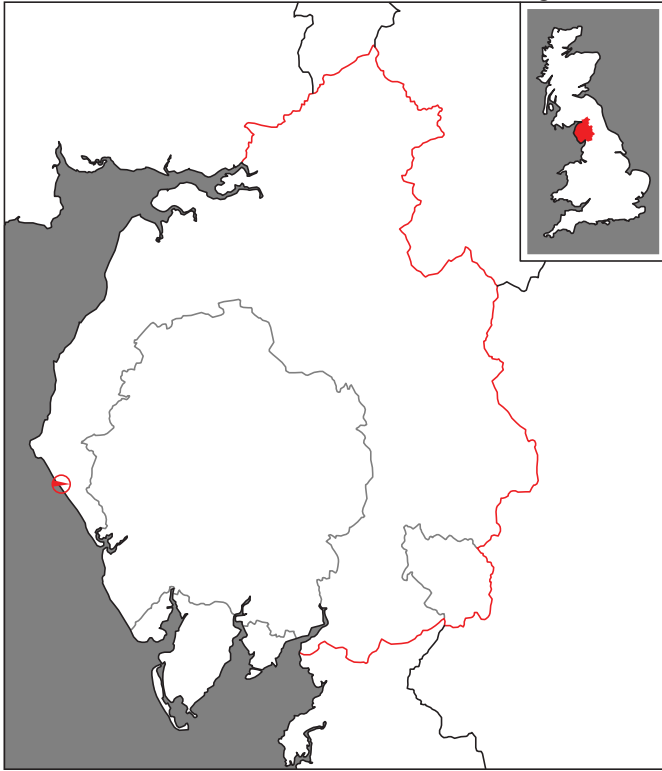
1.1.1 As part of a proposed programme of renovation work, including external re-rendering and the addition of new external drains connecting to a soak away, at St Bridget's Old Church, Beckermeth, Cumbria (NGR 301503 506071) Greenlane Archaeology was commissioned to carry out an archaeological desk-based assessment in order to provide supporting information for an application for grant aid under the English Heritage, Heritage Lottery Fund scheme, which was completed in December 2011 (Greenlane Archaeology 2011). An archaeological watching brief was carried out following the removal of the external render in September 2013 and during the excavation of the drainage trenches in January 2014.

1.1.2 St Bridget's Old Church is Grade II\* listed and famous for the early medieval carved crosses that stand in the church yard (Blackett-Ord 2010, 2), which are Scheduled Monuments (SM No. 23782).

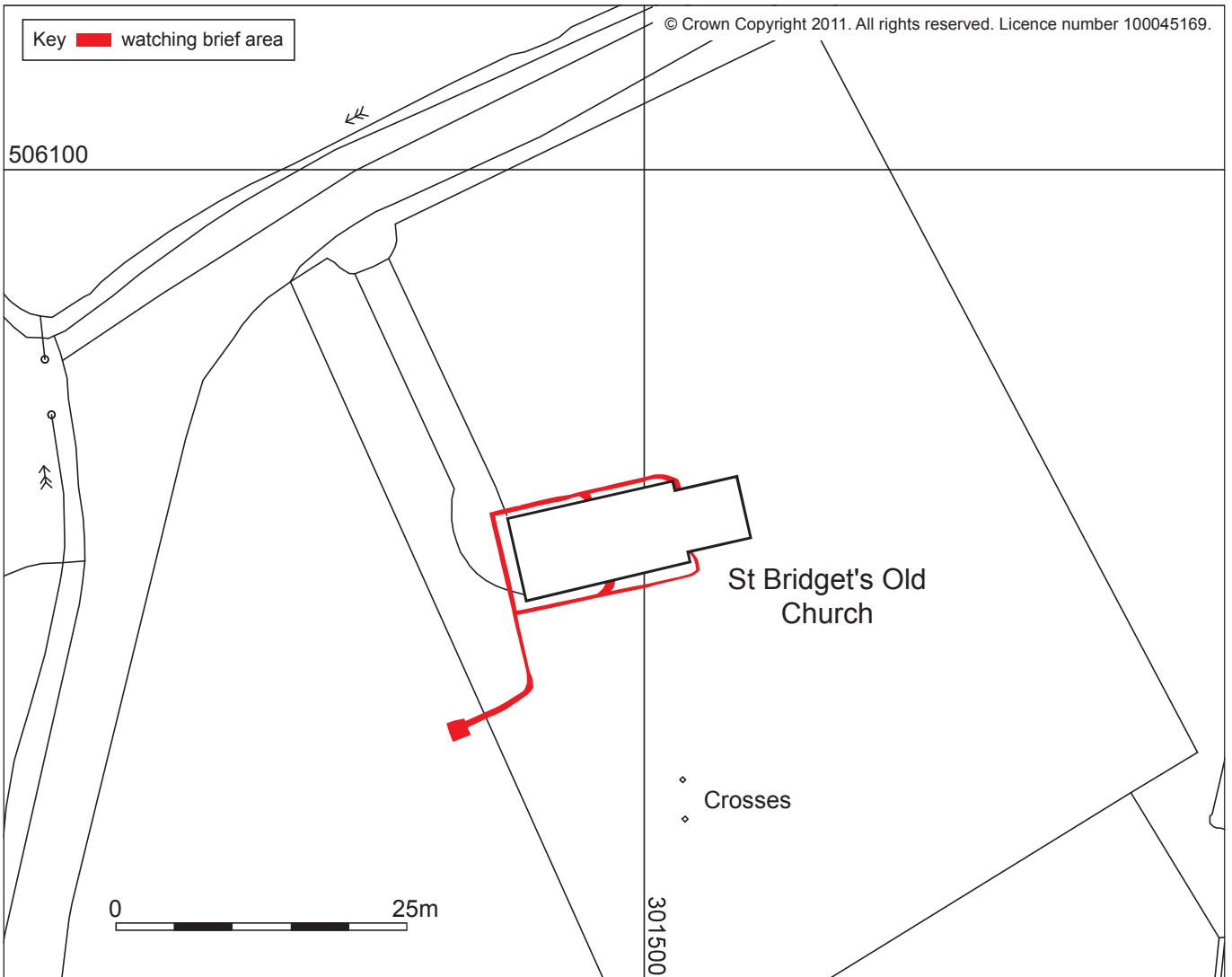
## 1.2 Location, Geology, and Topography

1.2.1 St Bridget's Old Church, sometimes known as the 'Low Church' (Hyde and Pevsner 2010, 149), is located approximately 0.5 km south of the village of Beckermeth. Beckermeth is situated in a shallow, curving valley on the West Cumbria coastal plain between Seascale and Egremont (Figure 1), approximately 3km north of the Sellafield nuclear reprocessing plant, at approximately 30m above sea level (Ordnance Survey 2011). The coast is dominated by shingle beaches and intertidal sand and mudflats with sections of salt marsh, sand dunes and sandy beaches, but further inland the area is a medium-scale pastoral landscape of undulating or gently rolling topography with views of the Irish Sea to the west and framed by the Cumbria High Fells to the east (Countryside Commission 1998, 25 and 27).

1.2.2 The area is geologically predominated by Triassic age Mercia mudstones and Sherwood sandstones to the east (Moseley 1978, plate 1). The solid geology has, in turn, been sculpted by glacial activity and the overlying drift deposits of the West Cumbria Coastal Plain tend to be formed by glacially derived boulder clay (till) with, in places, sand and gravel (Countryside Commission 1998, 27).



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Figure 1: Site location



## 2. Methodology

### 2.1 Introduction

2.1.1 Relevant elements of the desk-based assessment (Greenlane Archaeology 2011) which was carried out prior to the watching brief are incorporated into this report (see *Sections 3*). This report is intended to supplement the earlier desk-based assessment.

### 2.1 Watching Brief

2.1.1 Following removal of the external render and roof slates a number of features of interest were revealed, and this were recorded as part of the watching brief in order to provide an 'as existing' record of the structure. This in affect comprised an archaeological building recording and was therefore carried out to English Heritage Level-2 type standards (English Heritage 2006), which is a relatively low level of investigation intended to record the form, function and phasing of the building, without incorporating in detail the results of the desk-based assessment. In addition, the watching brief monitored the excavation of new drainage trenches placed along the north, west, and south sides of the church, which linked to an extension to the south connecting to a soakaway, using a small-size tracked mechanical excavator, which totalled approximately 25.6m<sup>2</sup>. Features of interest were subsequently cleaned by hand and recorded relative to the known location of nearby buildings and other structures that were evident on the site plans and Ordnance Survey maps. All aspects of the archaeological recording were carried out according to the standards and guidance of the Institute for Archaeologists (IfA 2008a; 2008b) and Greenlane Archaeology's own excavation manual (2007). The underlying deposits and features were recorded in the following manner:

- **Written record:** descriptive records were made using Greenlane Archaeology *pro forma* record sheets;
- **Photographs:** photographs in both colour print and colour digital format were taken of all archaeological features uncovered during the groundworks, as well as general views of the site, the surrounding landscape, and working shots. A selection of the colour digital photographs is included in this report. A written record of all of the photographs was also made using Greenlane Archaeology *pro forma* record sheets;
- **Drawings:** floor plans, a cross-section, and external elevations were produced through the hand-annotation of printed plots of site drawings supplied by the client (originally produced by Blakett-Ord Conservation Architecture). In addition, a trench plan and section were drawn by hand on site. The final drawings produced comprise:
  - i. floor plans at a scale of 1:100;
  - ii. external elevations at a scale of 1:100;
  - iii. a cross-section through the church at a scale of 1:50 (although this was subsequently modified using a more detailed architect's drawing);
  - iv. a location plan showing the area of excavation and features revealed at scale of 1:100;
  - v. part of the trench section at a scale of 1:20.

### 2.2 Finds

2.2.1 **Processing:** all of the artefacts recovered from the watching brief were washed, with the exception of metal and glass, which were dry-brushed. They were then naturally air-dried and packaged appropriately in self-seal bags with white write-on panels.

2.2.2 **Assessment and recording:** the finds were assessed and identified in the first instance by staff at Greenlane Archaeology. The finds were recorded directly into the report finds catalogue (*Appendix 3*).

2.2.3 The carved stone cross fragments were assessed by Professor Rosemary Cramp, and the fragments of stone font were assessed from photographs by James King.

## 2.3 Environmental Samples

2.3.1 A single environmental sample of c1 litre was taken from the base of wall **110**. The aim of the environmental work was to assess the presence, preservation and abundance of any environmental remains and to establish if the sample contained material suitable for Accelerated Mass Spectrometry (AMS) radiocarbon dating.

2.3.2 **Processing:** the sample was processed in house by Greenlane Archaeology using flotation techniques with 500µm and 250µm meshes used to separate the flot, and a 1mm mesh used for the retent. The flot and retent were then naturally air dried. The flot was sent for palaeoenvironmental assessment to assess the presence, preservation and abundance of any environmental remains in the sample, and to establish the palaeoenvironmental potential of the site. In addition, ecofacts recovered from the retent were also sent for specialist assessment.

2.3.3 **Assessment and recording:** the sample was analysed using a stereomicroscope at magnifications of x10 and up to x100 where necessary. Identifications, where provided, were confirmed using modern reference material and seed atlases including Cappers *et al* (2006). Any charred plant remains were recorded using a simple four-point scale as follows: + = rare, ++ = occasional, +++ = common, ++++ = abundant. The content of the retent was recorded on *pro forma* record sheets, and this information is summarised in *Appendix 5*, together with the results of the flot analysis. No suitable material for AMS (Accelerated Mass Spectrometry) radiocarbon dating was recovered from the sample.

2.3.4 The slag and slag residues collected from flot and retent of the environmental sample were assessed by Dr Gerry McDonnell following guidelines issued by English Heritage (Jones 2001, 7). The slags were visually examined and classified based on morphology. In general they are divided into two broad groups. First is the diagnostic ferrous material which can be attributed to a particular industrial process; these comprise ores and the ironworking slags, i.e. smelting and smithing slags. In general slag is described as smithing slag unless there is good evidence to indicate that it derived from the smelting process. The second group are the non-diagnostic slags, which could have been generated by a number of different processes but show no diagnostic characteristic that can identify the process. The residue classifications are defined in *Appendix 3*. None of the material is likely to be viable for radiocarbon dating. The count and weight of each slag type present was also recorded. A sample was also analysed using X-ray fluorescence (XRF) (for a full methodology see *Appendix 4*). The instrument used was a Bruker S1 Turbosdr hand-held XRF instrument operating at 40kV. Samples were analysed for 30 live seconds and a normalised composition was determined using a bespoke Bruker Fundamental Parameters Programme (R-Alloys FP). The 'interior' and 'exterior' face of each sample was analysed.

## 2.4 Archive

2.4.1 A comprehensive archive of the project has been produced in accordance with the project design and current IfA and English Heritage guidelines (Brown 2007; English Heritage 1991). The paper and digital archive and a copy of this report will be deposited in the Cumbria Record Office in Whitehaven on completion of the project. In addition, a paper copy will be provided to the client and one will be retained by Greenlane Archaeology. A digital copy of this report will be provided for Cumbria County Council Historic Environment Service for placement in the Historic Environment Record. And a digital record of the project will also be made on the *Online Access to the Index of Archaeological Investigations* (OASIS) scheme.

### 3. Desk-Based Assessment

#### 3.1 Introduction

3.1.1 A desk-based assessment was initially compiled as part of the project (Greenlane Archaeology 2011), comprising a general history of the site and the historic landscape that makes up the study area as well as identifying sites and areas of archaeological interest of specific relevance to the church. The information compiled as part of this report is repeated here out of a sense of completeness, so that the results of the watching brief can be seen in their historical and archaeological context.

#### 3.2 Map and Image Regression

3.2.1 **Donald's map, 1774:** St Bridget's Church is marked on Donald's map of 1774 to the east of the Ehen River, south of Black Beck, but scant detail can be discerned about the structure (Plate 1).



Plate 1: Extract from Donald's map of 1774

3.2.2 **Tithe Map, 1848:** the tithe map (CRO(W) YPR 9/52 1848) shows the north end of the church and churchyard in more detail, which is located on the south-east side of a track to Middlebank that passes by the north and west sides of the church (Plate 2). The church and track are depicted twice on the same map; the second depiction is shown to the right of the other at a reduced size. A second track is shown to pass the south side of the church on a north-east/south-west alignment, but this track is not shown on any of the later maps. Very little land is shown on the tithe map and the area of the church was evidently not subject to tithes. The details from the accompanying apportionment book (CRO(W) YPR 9/52 1844) for the nearest plots to the church are recorded in Table 1:

Number	Owner	Occupier	Description
9	Hannah Jane and Sarah Brocklebank	Clemet Rothery	Church field, part of Estate at Great Beckermets
31	Isaac Lowe	Robert Selkirk	Church field and part of the Estate called Middlebank
38	William Shepherd	William Shepherd	Spolgill, part of Estate in Great Beckermets

**Table 1: Summary of the owners and occupiers, recorded in the Tithe Award, 1848**

3.2.3 **Ordnance Survey, 1867:** the 1: 10,560 scale Ordnance Survey map shows the location of the church, which is clearly labelled 'St Bridget's Church', and the extent of the graveyard, which is enclosed (Plate 3). The locations of two crosses are also clearly marked to the south and a slightly meandering footpath leads north-east from the west end of the church to the track. A field boundary is also shown to the east side of the graveyard which was not shown on the earlier tithe map.



**Plate 2 (left): Extract from the Tithe map of 1848**

**Plate 3 (right): Extract from the Ordnance Survey map of 1867**

3.2.4 **Ordnance Survey, c1867:** the 1: 2,500 scale Ordnance Survey map is undated but is probably about the same date as the 1: 10,560 scale map. Both maps show the same detail (Plate 4; cf. Plate 3).

3.2.5 **Ordnance Survey, 1899:** by this time the enclosed area of the graveyard has been extended to form a larger rectangular area, which extends from the track to the south-east, with a rounded edge at the south-west corner (Plate 5). The footpath from the west end of the church now leads north-west in a more direct route to the track to the north of the church. The location of the crosses is unchanged, although a large north/south aligned section of a railway (?) embankment now cuts the boundary to the east side of the church.



Plate 4 (left): Extract from the Ordnance Survey map of c1867



Plate 5 (right): Extract from the Ordnance Survey map of 1899

### 3.3 Site History

3.3.1 **Prehistoric Period (c 12,000 BC – 1<sup>st</sup> century AD):** while there is some limited evidence for activity in the county in the period immediately following the last Ice Age, this is typically found in the southernmost part on the north side of Morecambe Bay. Excavations of a small number of cave sites have found the remains of animal species common at the time but now extinct in this country and artefacts of Late Upper Palaeolithic type (Young 2002). The county was also clearly inhabited during the following period, the Mesolithic (c8,000 – 4,000 BC), as large numbers of artefacts of this date have been discovered during field walking and eroding from sand dunes along the coast, but these are typically concentrated in the west coast area and on the uplands around the Eden Valley (Cherry and Cherry 2002).

3.3.2 In the following period, the Neolithic (c4,000 – 2,500 BC), large scale monuments such as burial mounds and stone circles begin to appear in the region (Hodgson and Brennand 2006, 45), the closest example to Beckermet being the stone circle at Grey Croft at Seascale (Fletcher 1957), now a short distance south of the Sellafield nuclear power station. One of the most recognisable tool types of this period, the polished stone axe, is also found in large numbers across the county, having been manufactured at Langdale (Hodgson and Brennand 2006, 45), and there have been finds of this period from the area around Beckermet (Beckermet Local History Group 2009, 11). The most significant site of this period from the immediate vicinity of the church is Ehenside Tarn (now called Braystones Tarn), at which, during drainage operations in the late 19<sup>th</sup> century, well preserved remains including hearths, platforms, and timber objects as well as stone axes and a polishing stone were found (Darbishire 1874). Unfortunately, the site was not recorded in great detail at the time and few if any of the finds were preserved, but the site shows the potential in the general area. During the Bronze Age (c2,500 – 600 BC) monuments, particularly those thought to be ceremonial in nature, become more common still, and it is likely that settlement sites thought to belong to the Iron Age have their origins in this period (see below). Stray finds of Bronze Age date are found across the county, although not apparently in great numbers in the vicinity of Beckermet (OA North 2004). Sites that can be specifically dated to the Iron Age (c 600 BC – 1<sup>st</sup> century AD) are typically very rare in the region, and these are not well represented in the area around Beckermet or the west coast of Cumbria in general. A possible hillfort has been recorded in an aerial photograph at Dobcross Hall, some distance to the south (Higham 1986, 129 and 131). There is, however, likely to have been a considerable overlap between the end of the Iron Age and the beginning of the Romano-British period; it is evident that in this part of the country, initially at least, the Roman invasion had a minimal impact on the native population in some areas (Philpott 2006, 73-74). It is interesting to note, however, that excavations carried out in the 1950s at Caernarvon Castle, which

is thought to be medieval in date and is situated a short distance to the north of Beckermets, discovered at least one beehive quern (Beckermets Local History Group 2009, 23), a object typically of Iron Age or even Roman date, which would suggest this site had a long period of use.

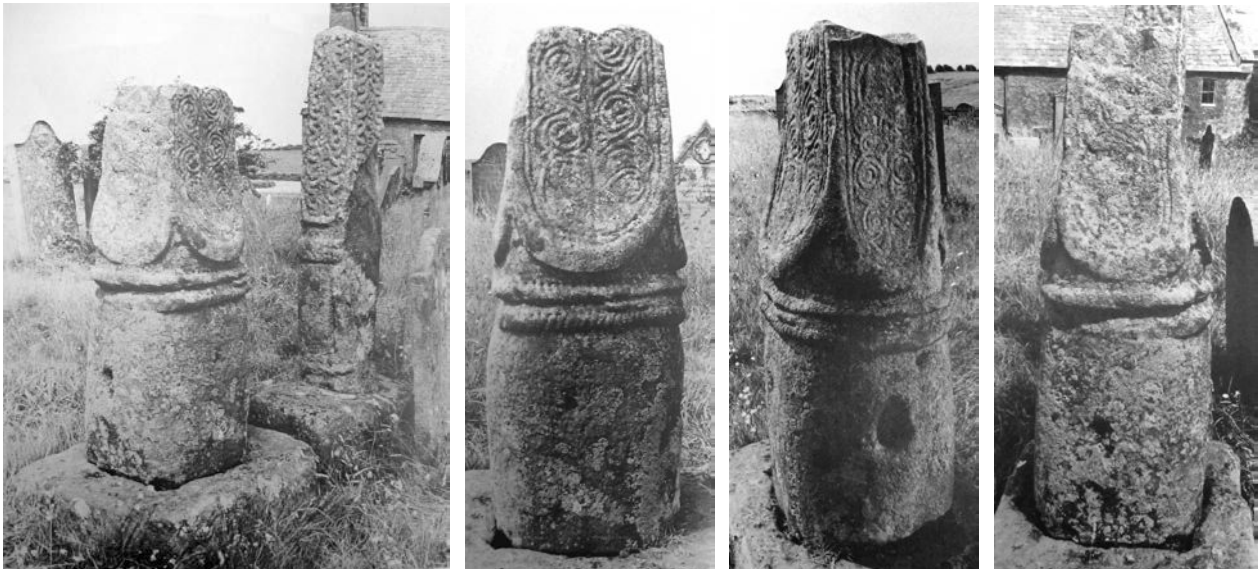
**3.3.3 Romano-British to Early Medieval Period (1<sup>st</sup> century AD – 11<sup>th</sup> century AD):** there is some evidence for Roman activity in the area around Beckermets, and it has been suggested that it may be the site of a lost Roman fort, but other than find spots of Roman pottery and Roman coins in the area, there is no physical evidence to support this theory (Beckermets Local History Group 2009, 11). The possibility has been suggested that Caernarvon Castle is Romano-British (Parker 1903, 218) or perhaps an Anglian burgh (Parker 1904, 154-161). Six pairs of granite hand querns and fragments of others had been discovered during ploughing at the site before 1904 (*ibid*), which again suggest an early date (see also Section 3.3.2 above). Caernarvon Castle is situated close to High Street (Parker 1904, 154), which is thought to have been a Roman road, which crossed the Ker Beck at Street Bridge in Beckermets (Beckermets Local History Group 2009, 11). WG Collingwood suggested that the name 'Caernarvon' originally applied to the whole of the Beckermets area, with the present name being applied in the Norse period and meaning 'the mote hill of the beck' (Parker 1904, 154). In the cultural-historical tradition of his day, Parker envisioned a '*remote race calling the strong-hold Caernarvon; the newcomers calling it Bekkjar-met; a third race levelling it there [the le Flemings] and styling themselves "of Beckermets"*' (Parker 1904, 161). Elsewhere the name Beckermets is said to derive from the 'meeting of the becks' (specifically Kirk Beck and Black Beck), or 'the stream where the hermit lives' (Beckermets Local History Group 2009, 7) or 'Hermit's Beck' (Fair 1951, 94), but written as an inversion compound: 'beck of the hermit' (Armstrong *et al* 1950, 338).

**3.3.4** The Church itself is situated atop a mound, which might suggest it was a pre-Christian site of some significance (Beckermets Local History Group 2009, 11, 25, although it is not clear why this is considered the case), while the oval churchyard suggests the church itself has a British or 'Celtic' origin (see O'Sullivan 1985, 31-32). The dedication also suggests an early date of establishment: '*Saint Bridget, or Saint Bride, was an Irish saint who lived in the sixth century and the foundation [of the church] is undoubtedly very ancient*' (Parker 1904, 145). The lower fragments from two stone crosses are located in the churchyard to the south side of the church, where they may originally have served as a marker (suggested by Fair 1951, 91; e.g. Edwards 2009) and they were likely laden with symbolic meaning, each of which is fixed in a large flat stone (Jefferson 1842, 307-308; see Plate 6 to Plate 13). They are first recorded in their present position in 1816 (Bailey and Cramp 1988, 54). Jefferson provides an early detailed description of their appearance:

*'The lower part of each is round, the upper part is square; one of them, five feet eight inches high, is ornamented with the double gilloche... the other with an elegant double scroll, enriched with foliage on the east side: and on the west, are the remains of an inscription, apparently Saxon'* (Jefferson 1842, 308).

**3.3.5** Collingwood states that their form, '*being cylindrical below and square in section above*', is similar to the Pillar of Eliseg near Valle Crucis Abbey in Denbighshire, Wales, and is of a type chiefly found in Cheshire and Staffordshire but also in Ireland and Scotland (Collingwood 1899, 26). The similarity of form of the Pillar at Eliseg and the cross-shafts at Beckermets has been restated elsewhere (e.g., Edwards 2009, 155). Bailey and Cramp name the crosses Beckermets St Bridget 1 and Beckermets St Bridget 2 (Bailey and Cramp 1988, 54-57). Beckermets St Bridget 1 is the older and shorter of the two, and stylistically dates to the second quarter of the ninth century; Beckermets St Bridget 2 is located further to the north and dates from the late 10<sup>th</sup> to early 11<sup>th</sup> century (*ibid*). The Scheduled Monuments information records that the two high cross shafts survive reasonably well and display good and unusual examples of Late Anglian (between about 700 and 870 AD (Collingwood 1915, 129)) and Anglo-Scandinavian (10<sup>th</sup> to 11<sup>th</sup> century) art styles, suggesting that the church was a pre-Conquest centre of ecclesiastical importance, possibly with links to south-west Scotland as well as further south in England and conceivably further afield via coastal trade (Bailey and Cramp 1988, 11). The plaits exhibited by 10<sup>th</sup> century or Viking Age ornaments are simpler than the intricacies of the interlacing knots characteristic of earlier Anglian crosses (Collingwood 1915, 129). Bailey and Cramp (1988) go into considerable detail about the 'Beckermets St Bridget' crosses; the plain and slightly tapering base of the Beckermets crosses is the most common pre-Conquest type (Bailey and Cramp 1988, 13); the round-shaft derivative of

Beckermet Saint Bridget 1 is an influential type in the Viking period (Bailey and Cramp 1988, *op. cit.*); the bush scroll motif is typical of Anglian-period ornament (Bailey and Cramp 1988, 15), and the contoured interlace moulding of the Beckermet school is of the Viking period (Bailey and Cramp 1988, 36, 38). To an extent, the ornamental vocabulary of the Beckermet school then betrays 'either direct Scandinavian influence [as the ultimate source], or more likely, an indirect impact via Manx carvings' (Bailey and Cramp 1988, 40). Indeed, it has been suggested that the relative crudeness of the school of West Cumberland crosses stretching down the coast from Aspatria to Beckermet may indicate 'a school of native carvers...taking inspiration from the work of more highly trained sculptors, but doing their work according to their own ideas and interpretation' (Fair 1951, 91; see also Hyde and Pevsner 2010, 20). Like other such carvings in the north of England, they would have been produced in the immediate locality and their position to the south side of the church is also fairly typical (Hyde and Pevsner 2010, 18), although the cross-shaft of Beckermet St Bridget 1 does not belong with the socket in which it leans (Bailey and Cramp 1988, 55) and may represent another cross (Fair 1951, 94). The location of a third carving (Beckermet St Bridget 3) of an unknown date is recorded in the early 20<sup>th</sup> century (Bailey and Cramp 1988, 172; they give Parker 1926 as the first record, but this is actually the second edition of his publication first made in 1904, see below). Unfortunately, no illustration survives for this cross-head, which is said to be located under the roughcast covering the east wall of the chancel, although this claim was based on information provided by 'the late W Dixon, Market Place, Whitehaven' rather than direct observation (Parker 1904, 145).



**Plate 6 (left): Beckermet St Bridget 1 in the foreground and Beckermet St Bridget 2 (Bailey and Cramp 1988, pl. 41)**

**Plate 7 (centre left): Broad east face of Beckermet St Bridget 1 (Bailey and Cramp 1988, pl. 42)**

**Plate 8 (centre right): North and east face of Beckermet St Bridget 1 (Bailey and Cramp 1988, pl. 43)**

**Plate 9 (right): Narrow south face of Beckermet St Bridget 1 (Bailey and Cramp 1988, pl. 44)**



Plate 10 (left): Broad west face of Beckermest St Bridget 1 (Bailey and Cramp 1988, pl. 45)

Plate 11 (centre left): Detail of the west face Beckermest St Bridget 1a (Bailey and Cramp 1988, pl. 46)

Plate 12 (centre right): Transcription of the carving on the west face (Bailey and Cramp 1988, 55, figure 10)

Plate 13 (right): North and west faces of Beckermest St Bridget 2 (Bailey and Cramp 1988, pl. 51)

3.3.6 Collingwood produced a tracing of the inscription, which was published in 1915 (Plate 14). He and Rogers suggest the inscription is probably Gaelic (presumably of an Irish, Scottish or Manx derivation, perhaps most likely the latter), taking it to mean:

'(This cross was)  
 Made for  
 John mac Cair-  
 bre gone to  
 rest in the keeping  
 of Christ. Be gracious  
 to him, O Christ !' (Collingwood 1899, 31).

However, various other translations in several different languages (suggested as Latin, Runic, Pictish or 'Keltic') have been offered for the inscribed text, which is in a form of lettering not found anywhere else in Cumbria and considered illegible, although there may be similarities with inscriptions from Whitby and Dewsbury, Yorkshire, and from Falstone, Northumberland (summarised in Bailey and Cramp 1988, 55). The various elements present at the site - the form of the graveyard, the dedication, and the presence of the early crosses, have led to the suggestion that it was originally established as a monastic site, perhaps as early as the 7<sup>th</sup> century AD (Beckermest Local History Group 2009, 23). The presence of further early cross fragments at the nearby St John's church, Beckermest, has even prompted speculation that they represent a double foundation, similar to that at Whitby, one site a monastery the other a nunnery (*ibid*, citing Knowles 1880, 143).





**Plate 14: Tracing of the inscribed panel on the cross-shaft (Collingwood 1915, plate facing page 130)**

3.3.7 **Medieval Period (late 11<sup>th</sup> – 16<sup>th</sup> century):** Caernarvon Castle was part of the manor held by Michael le Fleming as the fee of the Barony of Egremont, and it is thought to have been the site of a Norman castle (Beckermeth Local History Group 2009, 12-13). When the le Flemings moved to Coniston, they are thought to have pulled down the house and sold the materials (*ibid*). The church of St Bridget certainly has at least medieval origins; it is recorded from at least 1160, when it was appropriated by Calder Abbey (Parker 1904, 145), until the Dissolution (Jefferson 1842, 306-307). The Church is thought to have been rebuilt in the 13<sup>th</sup> century (Beckermeth Local History Group 2009, 23; Parker 1904, 145). After the Dissolution the Parish was left nearly destitute as the revenues of the Church were granted instead to the Flemings of Rydal (Parker 1904, 145).

3.3.8 The Historic Environment Record lists a nearby deserted medieval settlement (HER no. 1293), which is reported by the Medieval Village Research Group (RCHME 1994). The village is not mentioned in the Lay Subsidy Rolls of 1334/36 but is apparently mentioned in a 13<sup>th</sup> century source which, unfortunately, is not cited in the HER. There were apparently no traces of the village visible by 1980 and its previous extent is unknown (*ibid*).

3.3.9 **Post-Medieval (16<sup>th</sup> century – present):** the early industrial development of the region was stimulated by the mining of coal and iron ore and the iron and steelmaking industries (Countryside Commission 1998, 29). This development was facilitated by the construction of the railways in the 18<sup>th</sup> and 19<sup>th</sup> centuries, but industrial decline and the depletion of the coal resource caused the once thriving villages to decline (*ibid*). More recently the region has become a hub of chemical industry, power generation and nuclear reprocessing; the nuclear power station at Calder Hall was constructed in the early 1950s, and the nuclear waste reprocessing plants at Windscale, later to be renamed Sellafield, were established in subsequent decades and visually dominate the landscape of the coast in the southern half of the area (Countryside Commission 1998, 25, 29).

3.3.10 The post-medieval history of St Bridget's Old Church was initially not promising; its isolated position and poor state of repair meant that the notion of demolishing it and rebuilding it on a new site was raised by at least 1794 (CRO(W) DBT/13/105/2 1794). The suggestion was met with objection from the parishioners, a legal opinion was taken on whether demolition was acceptable (*ibid*), and this plan was evidently never carried out. It would be almost another half century before the new St Bridget's

church, designed by Edmund Sharpe, was erected at Calder Bridge in c1840-42 (Hyde and Pevsner 2010, 217) once the 'Old Church', as it would become known, was deemed not convenient for the parishioners (Jefferson 1842, 309). The 'new church' however did not completely replace the Old Church, which continued to be extended and have rates collected throughout the 1860s and 70s (CRO(W) YPR 9/14 1864-1887) and still has a small congregation (Blackett-Ord 2010, 2).

3.3.11 Jefferson records in 1842 that the 'Old Church' consisted of a nave and chancel and had a bell-turret, carrying two bells, above the entrance at the west end (Jefferson 1842, 307-308). The south porch had been removed by this date and there was formerly a door in the south side of the chancel but this had been blocked, as had the windows of the two round-headed lights, each under square dripstones (*ibid*).

3.3.12 The graveyard enclosure was extended to provide additional burial spaces in 1864/5 (Beckermest Local History Group 2009, 25) and there exist a number of miscellaneous papers relating to the churchyard at the Old Church, held at the County Record Office in Whitehaven, including an account of fees to Messrs Mounsey, dated 1865, for the '*additional burial ground required to be purchased and consecrated at Beckermest Church ... following instruction for deed of conveyance of the ground. The Bishop having fixed the 14<sup>th</sup> [September] for the consecration of the ground*' (CRO(W) YPR9/40 1865-1974). The land for this enlargement had evidently been acquired by 14<sup>th</sup> May 1864; the church rate book describes it as 'the low church yard' and lists the people paying the rates towards it and a list of bills paid includes those for taking down the 'old fence' and forming new walls, digging foundations, materials and so forth (CRO(W) YPR 9/14 1864-1887). In 1866 funds were acquired by subscription for re-roofing the church, it being '*in a most dilapidated condition*', and further rates were gathered in 1868 for repairs and again in 1870 (*ibid*). Furthermore, in 1877 specifications were drawn up between Reverend Arthur Lofllie and Joseph Geldart, a joiner of Calder Bridge, for re-flooring and reseating the Old Church as follows:

- I. The soil to be excavated to a depth of one foot*
- II. Need to be best pitch pine, no less than 5" by 6' 6" long*
- III. Boarding "one inch" "white flooring"*
- IV. The old pews to be used as far as they go*
- V. 30 new seat ends to be painted with one coat*
- VI. The joists to rest upon stones at both ends*
- VII. Drystone walls to be built to support the soil underneath the flags of the arch*
- VIII. Six metal ventilators to be placed in the floor' (CRO(W) YPR 9/21 1877).*

3.3.13 Other repairs include the renewal of a window, probably carried out in c1879 (CRO(W) YPR 9/23 c1879), but the records are otherwise confused by the presence of two churches dedicated to St Bridget! By 1904 the Church is said to have had '*a rather melancholy appearance, as if aware of its deserted condition [and] almost disused save for funerals*' (Parker 1904, 145). Parker goes further to describe the interior as 'depressing' (*ibid*).

3.3.14 Correspondence held at the County Record Office dated to 1952 details the enquiries made about scheduling the Crosses in accordance with the provisions of the Ancient Monuments Act 1931 (CRO(W) YPR9/40 1865-1974). The monuments were included in the Schedule on 30<sup>th</sup> December 1952 and the Scheduled area was revised in June 1995 and is maintained under the Ancient Monuments and Archaeological Areas Act 1979, as amended. The church is now Listed Grade II\*.

## 4. Results

### 4.1 Watching Brief

4.1.1 **Building Recording:** the removal of the slate from the roof revealed a number of features of interest, although the roof of the chancel had been recovered by the time the watching brief took place. The roof structure of the nave comprises five trusses all of standard tie beam type with a collar, although the tie beam has been cut through in each case to allow the addition of timber framing for the barrel-vaulted ceiling, above which are additional angled braces between the principal rafters and collar (Figure 6; Plate 15), which were presumably added to provide extra support after the tie beams were cut. There are two purlins per pitch and probably a diagonally-set ridge purlin. All of the timber forming the original trusses, purlins and even rafters is apparently hand-finished and peg-jointed, although some of the rafters are evidently Baltic timbers (Plate 15). The timbers relating to the barrel-vaulted ceiling are all machine sawn. At the wall top it is apparent that the original wall line had moved outward on the south side at least, as the tipping line of the original internal plaster could be seen. The gap created by this had been filled on the north side with additional masonry to make the wall vertical, and the barrel-vaulted ceiling was set against this. Amongst this additional masonry were several refitting pieces of decorated stone, evidently part of a single sculpture that had been broken up and used as building material (see Section 4.2.2 below). Several of these were removed on levelling up the wall top and retained although some remain built into the wall (Plate 16 and Plate 17; Figure 4). On the north side, and to a lesser extent the south side, a number of fragments of broken up red sandstone roofing tiles were present on the wall top, several with obvious peg holes (Plate 18), and one even with a wooden peg remaining.



Plate 15: Exposed roof showing truss and rafter with Baltic marks



**Plate 16 (left): Top view of piece of sculpted stone left in place on the south side**

**Plate 17 (right): Side view of the same piece of sculpted stone left in place on the south side, and the original plastered face of the wall**



**Plate 18: Stone roof tiles exposed on the north side**

4.1.2 Removal of the render revealed a number of further features (Figure 2; Figure 3). The west gable had two small holes near the top, approximately 0.1m – 0.15m square, one on either side, roughly blocked with looser, that are probably putlog holes. Above the central doorway was a rough voussoir arch of edge-set pieces of red sandstone (Plate 19) and it appears that the present door was situated inside a wider opening, all of which is indicative of there having originally been a wider and taller doorway with a round head, over-light or similar feature (Figure 2; Plate 19), although the voussoir arch could simply be a relieving arch.



**Plate 19: Voussoir arch in the west elevation**

4.1.3 Removal of the render from the south elevation revealed a considerable number of features revealing what appear to be several phases of construction (Figure 2; the fabrics representing the different phases are labelled 1-4). The earliest is represented by a single course of large dressed ashlar blocks (**1**) projecting from the line of the centre of the elevation, at the south-east corner of the nave (Plate 20 and Plate 21). These are notably different in character to the other stonework on site and underlie the rest of the wall. The second phase comprises smaller blocks, although still dressed (**2**), which extend from on top of the earlier phase and also project from the main wall line (although not by as much as Fabric **1**), possibly continuing as a plinth to the west, although this had been cut where a grave slab was formerly positioned. Within this fabric is a window on the east side with two lights with rounded heads divided by a stone mullion and blocked with stone (Plate 22); a further very plain small window to the east is probably a later addition. To the west are the partial remains of a doorway with ashlar quoins, which is blocked with stone (Plate 23). The upper part of this is truncated by the third phase of construction, which comprises much rougher and irregular stonework (**3**). The chancel is constructed from relatively large dressed blocks (**4**), similar in character to **2**. Within the chancel is a window, originally of two lights with cusped heads (now missing the dividing mullion) and dressed quoined surrounds, which has been blocked with stone, one piece of which is dressed and has a roll moulding on one side (Plate 24). To the west of this is a blocked doorway, with flat stone lintel and dressed quoins all of which are finished with a stop chamfer (Plate 25). These appear to be contemporary, although a similar, partially truncated window to the west in **3** appears inserted. Below the chancel window there is an area of possible rebuild, or perhaps blocking for an originally larger opening, within which several pieces of dressed stone with a roll moulding have been reused (Plate 26). Just below ground level, where the footings had been exposed, between the blocked door and possible rebuild was a stone with a possible inscription. Although difficult to identify with any certainty it appeared to comprise the characters 'HAI' in very simple form (Plate 27). Within the nave were two further windows with dressed square surrounds and three-light leaded casements, both of which were evidently inserted and one of which cut through the earlier cusp-headed window.



**Plate 20 (left): Large dressed blocks projecting from below the south-east corner of the nave, viewed from the south-west**



**Plate 21 (right): Large dressed blocks projecting from below the south-east corner of the nave, viewed from the south**



**Plate 22 (left): Blocked two light mullion window, south elevation of the chancel in Fabric 2**



**Plate 23 (right): Blocked doorway and projecting wall line representing Fabric 2, south elevation of the chancel**



**Plate 24 (left): Blocked two-light window with cusped heads, south elevation of the chancel**



**Plate 25 (right): Blocked doorway with ashlar stop-chamfered surround, south elevation of the chancel**



**Plate 26 (left): Re-used pieces of dressed and worked stone below the blocked window, south elevation of the chancel**



**Plate 27 (right): Possible inscription at the base of the south elevation of the chancel**

4.1.4 The east elevation had been largely repointed by the time the watching brief took place, although it was apparent that it was relatively plain, and no obvious remains of a cross head were present as had previously been suggested (see *Section 3.3.5*). It is finished with a plinth, with a dressed ashlar top band. The central window is an obvious late addition, with dressed square surrounds (in the same style as those elsewhere) and mock medieval tracery. A single piece of dressed stone was evident south of the centre, with a single line of beading (Plate 28), but it was not clear what this might be part of. In

addition, one of the quoins on the south side was especially large and had a pecked finish, although it was not clear if this was of any significance.



**Plate 28: Moulded stone in the east elevation of the chancel**

**Plate 29: Masonry projecting from the east side of the north elevation**

4.1.5 The north elevation was much less complex than the south. On the west side of the chancel there was a short section of projecting masonry (Plate 29), perhaps evidence for a former wall line, and the nave has a proper plinth unlike the south side. An early window perhaps mullion in form but apparently plainer than those to the south was present on the east side of the nave (Plate 30), but was cut by a later window with dressed square surrounds and there was another of these to the west. Between them were three small square holes, typically 0.1m square and either empty or filled with a rounded stone, which were presumably former putlog holes (Plate 31).



**Plate 30 (left): Blocked window truncated by extant window in the north elevation of the nave**

**Plate 31 (right): Putlog hole in the north elevation of the nave, filled with a rounded stone**



4.1.6 **Drainage trenches:** the excavation for the drainage comprised interconnecting trenches along the north and south sides of the church connecting to a trench along the west end, which then led south before turning west again to a soakaway in the lower part of the churchyard (Figure 5). Initial work comprised the hand excavation of short 'spurs' from each of the down pipes (Plate 32), connecting them to the main drain, while the remaining excavation was carried out using a mini excavator fitted with a toothless ditching bucket. There was typically a thin layer of topsoil and turf across the site, up to 0.2m thick, although much thinner nearer the church. In each of the initial spurs, which were typically little more than 0.4m deep, a homogenous deposit of wet dark reddish brown-black clay-silt containing 20-30% rounded and angular cobbles, of both volcanic stone and local red sandstone, was encountered (**100**). This was very loose and contained a variety of finds, many obviously quite modern, and was only encountered within 1m of the church walls (Plate 33). In Spur 2 the plinth at the base of the wall was also exposed (Plate 34).



Plate 32 (left): Spur to downpipe at the east end of the south section showing dark deposit **100**

Plate 33 (right): Spur 1, south side of nave



Plate 34 (left): Spur 2, north side of nave



Plate 35 (right): Drainage trench along south side of nave

4.1.7 Beyond and below this was a homogenous subsoil, typically a mid-orange brown sandy clay with 5% sub-angular cobbles, typically in the local red sandstone but also volcanic types. On the south side this was seen to be typically 0.5m thick (**101**) and containing larger quantities of human bone (which was not retained) (Plate 35). On the north side there was a thin layer of loose dark grey-brown gravel 0.1m thick below the turf (**102**) on top of the subsoil equivalent to **101**, which was stonier and firmer (**103**) (Plate 36). Along the west side this subsoil (**105**), was essentially the same as **103**, although it extended to a depth of at least 0.8m and a possibly *in situ* skull was present at the base (see Figure 5). Where it extended away from the church to the south the subsoil was the same again (**106**) (Plate 37), although with a concentration of fragments worked stone including two pieces of early cross (see Section 4.2.2) as well as at least one other fragment worked stone, which was not retained (Plate 38 and Plate 39). Apparently cutting through the subsoil and into the natural deposits below within the southern section was a parallel-sided cut approximately 0.5m wide and orientated east/west (**112**), most probably a grave (Plate 40). The fill (**111**) comprised a dark grey brown sandy clay with a small amount of rounded gravel; this feature was not examined as it extended beyond the depth of excavation. Below the turf and topsoil forming the top of the ramp was a low wall orientated north/south and constructed from large rounded volcanic boulders at the base, with smaller rounded stones on top forming an outer skin, the centre was very loosely filled with smaller rounded and sub-angular stones and bonded with rough lime mortar (**110**) (Figure 7; Plate 41). This structure was butted by subsoils **106** and **109** to the east and west respectively; **109** comprising a mid brown sandy clay, with small amounts of rounded gravel, only 0.5m thick. Underlying the wall was a thin layer of dark greyish or orange-brown sandy gravel with 20% rounded cobbles (**108**), which seems likely to form an initial layer of natural material on at least the south-west side of the drumlin on which the church sits. Below this, and observed to the north-west of the church and in the soakaway was a firm orange clay natural (**104**), although above these deposits there was a sandy clay subsoil (**107**) essentially the same as **109**.



**Plate 36 (left): Drainage trench along the north side of the nave**



**Plate 37 (right): Drainage trench along the west side of the nave and continuing to the south**



**Plate 38 (left): Dressed piece of stone found in 106 but not retained, 'front' view**



**Plate 39 (right): Dressed piece of stone found in 106 but not retained, 'rear' view**



Plate 40 (left): Feature 112, a probable grave in the southern section of the drainage trench

Plate 41 (right): Wall 110 below the ramp

## 4.2 Finds

4.2.1 **Introduction:** a total of 52 finds were recovered during the watching brief, comprising largely glass, metal and pottery finds, but also including a small quantity of bone, plastic, and stone objects. The majority of these are post-medieval in date and range in date from the 19<sup>th</sup> century onwards, although the date of some objects is uncertain, and the fragments of stone cross are likely to date from the 9<sup>th</sup> to 11<sup>th</sup> century. A complete catalogue of the finds is presented in *Appendix 3*.

4.2.2 **Stone:** four stone objects were recovered from context 106 (south side) comprising a possible whetstone, a red sandstone perforated roof tile fragment, and two pieces of what are evidently fragments of stone cross. One of these is a thin fragment of red sandstone, one face finished with a spiralled 'bush scroll' (Plate 42) decoration essentially identical to that on one of the two crosses still standing in the churchyard (Beckermest St Bridget 1; Bailey and Cramp 1988, 54-56), the rear face essentially flat where it has been sheared off a larger piece (Plate 43), and the side seemingly with diagonal chisel-lines (Plate 44). The second is also dressed red sandstone, although seemingly paler in colour, comprising a domed form with radiating lines meeting at a central circle (Plate 45), and appears to be the boss from the centre of a cross head, with the rear essentially flat where it too has been sheared off a larger piece (Plate 46 and Plate 47). Whether it belongs with one of the two standing crosses or another, previously unknown, is uncertain. It is worth noting, however, that Beckermest St Bridget 2 was described in 1904 as being of a 'whiteish sandstone' (Parker 1904, 146).



Plate 42 (left): Fragment of cross decorated with spiralled 'bush scroll', front face

Plate 43 (centre): Fragment of cross decorated with spiralled 'bush scroll', rear face

Plate 44 (right): Fragment of cross decorated with spiralled 'bush scroll', side



**Plate 45 (left): Cross boss with radiating lines, front face**

**Plate 46 (centre): Cross boss with radiating lines, rear face**

**Plate 47 (right): Cross boss with radiating lines, side**

4.2.3 In addition, 13 fragments of carved red sandstone, covered with remains of lime mortar and possibly limewash and so stained white, were recovered built into the top of the nave wall adjacent to the south end of the second truss from the west. Approximate refitting of these carried out at the time of discovery revealed that these were pieces of a single font of Romanesque style, most probably dating from c1170-1200 AD (James King pers comm.). It is octagonal in plan, with the majority of the base missing, although part of the internal bowl is present, coming to a rounded top with a flat rim, scored with a mason's mark in the form of a 'W'. The rim has a lip to hold a cover and the side panels are decorated with scrolled vines and foliage (Plate 48 and Plate 49).



**Plate 48 (left): Fragments of font approximately refitted shortly after discovery**



**Plate 49 (right): Fragments of the top edge of the font refitted shortly after discovery**

4.2.4 **Post-medieval pottery:** only five fragments of fairly typical domestic ware were recovered from the site, all of which date from the 19<sup>th</sup> to 20<sup>th</sup> century, including four fragments of a white earthenware saucer sponge-printed black with a painted yellow rim (from context **100**, spur 1) and another fragment of white earthenware hollow-ware with a blue painted line (from context **107**).

4.2.5 **Post-medieval glass:** 10 fragments of post-medieval glass were recovered all together from contexts **100** (spur 1), **101** (south side), **103** (north side), and **109**. This includes fragments of colourless window pane glass, a fairly modern colourless bottle fragment, and an un-diagnostic green bottle neck fragment all of which are post-medieval in date.

4.2.6 **Animal bone:** two fragments of bone were recovered from context **103** (north side). One was an unfused long bone of a small, juvenile mammal, in fair condition, and the other fragment was not identified. A further small mammal bone was recovered from context **100**.

4.2.7 **Metal:** a total of 28 fragments of metal and metal alloy objects was recovered, all of which is thought to be post-medieval to modern in date. This includes 21 iron objects, including nails, horseshoe, cast pipe / gutter and plate fragments from contexts **100** (spur 1 and east spur, north side), **101** (south side), **103** (north side), **105** (west side), and **106** (south side), an iron fitting fixed into an aperture with lead from context **103** (north side), four pieces of aluminium, including foil and a screw top lid from context **100** (spur 1) and ring pull fragments from context **103** (north side), and two George V pennies from context **107**, dated 1920 and 1921. Most of the iron finds are difficult to identify or are clearly post-medieval in date. The nails are all likely to be post-medieval in date (Bodey 1983).

4.2.8 **Plastic:** a modern plastic lid was recovered from context **100** (spur 1).

### 4.3 Environmental Samples

4.3.1 A large amount of terrestrial snail shell was recovered from both the flot and retent of the single sample that was taken from context **110** (*Appendix 5*), but given the modern root matter and excellent condition of the shells, it is likely that they are of recent rather than archaeological origin. Heavily fragmented bone from an unidentified small mammal, probably rodent, was recovered from the retent and it is likely this is also recent. Cinders and coal fragments were also recovered from both the flot and retent. No remains suitable for AMS dating were recovered.

4.3.2 **Slags and residues:** residues collected from the flot and retent of the sample taken from context **110** included iron fragments and clinker (a high silica residue from burning, which may include burnt fragments e.g. of bone). The retent from the sample contained magnetic material that appeared to be mostly fragments of corroded metal. There was one fragment of possible smithing slag but it is too small to be certain of the identification. There was also one piece of white slate like stone. The flot contained c10 fragments of black coloured clinker. The fracture surface showed a vesicular structure. A sample was analysed by hand-held XRF and showed that the major element present was calcium with some iron silicon, phosphorus and sulphur present (*Appendix 3*). It is possible that it is burnt bone or similar mineral material. A small fragment was heated but it did not combust and hence must be wholly inorganic, i.e. mineral. This material is unlikely to be viable for radiocarbon dating.

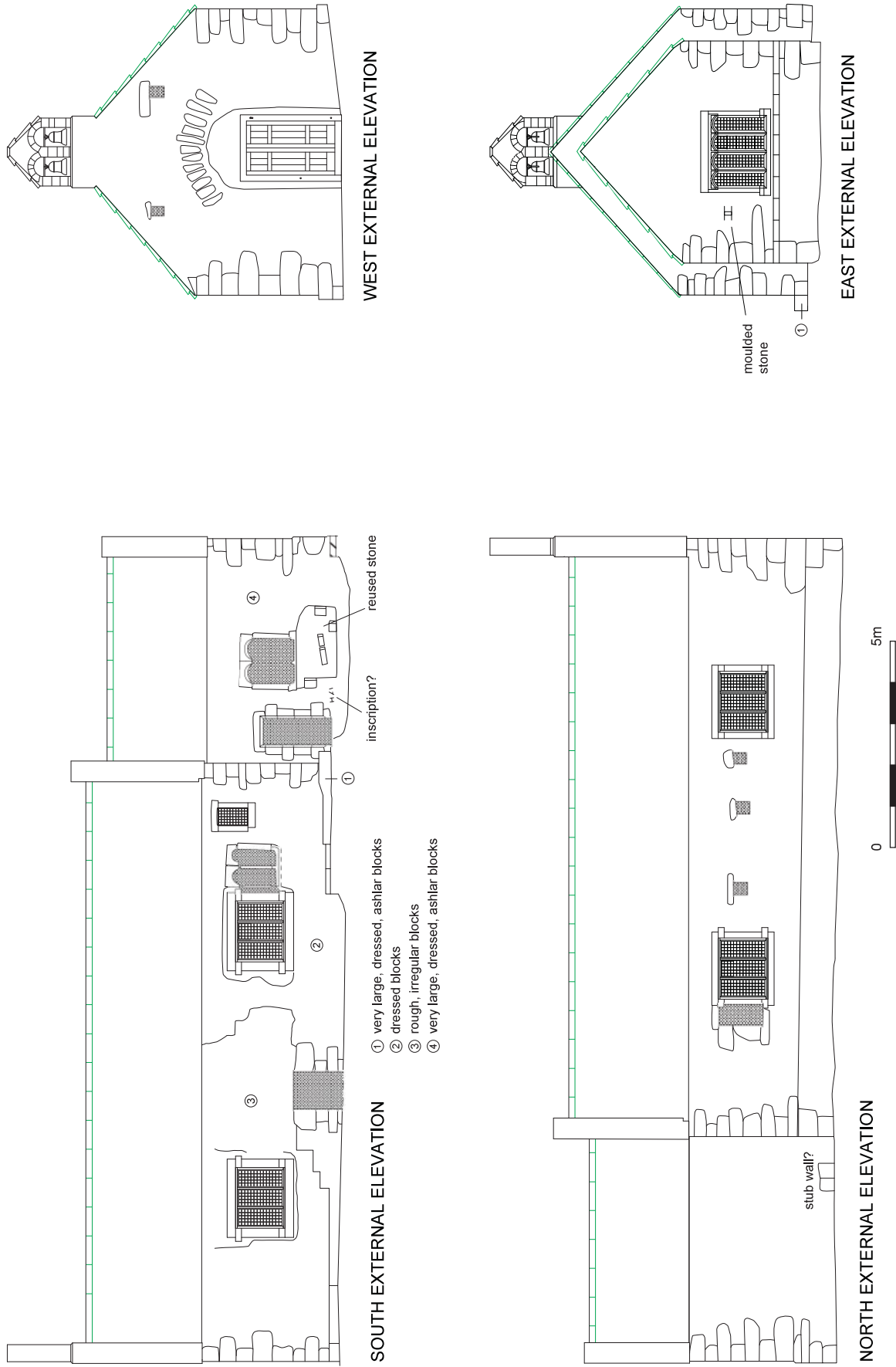


Figure 2: External elevations



Figure 3: Ground floor plan



Upper level plan

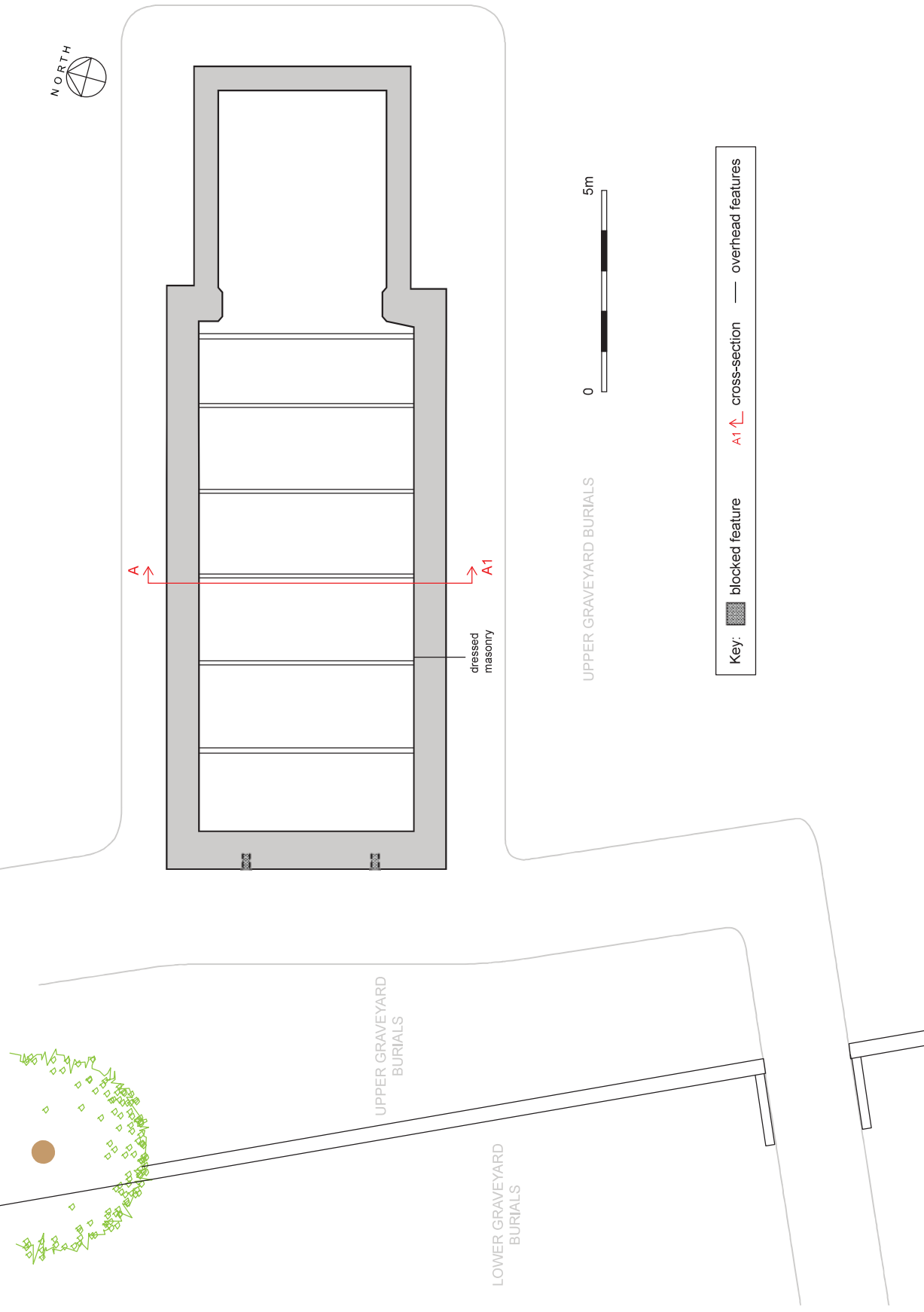


Figure 4: Upper level plan

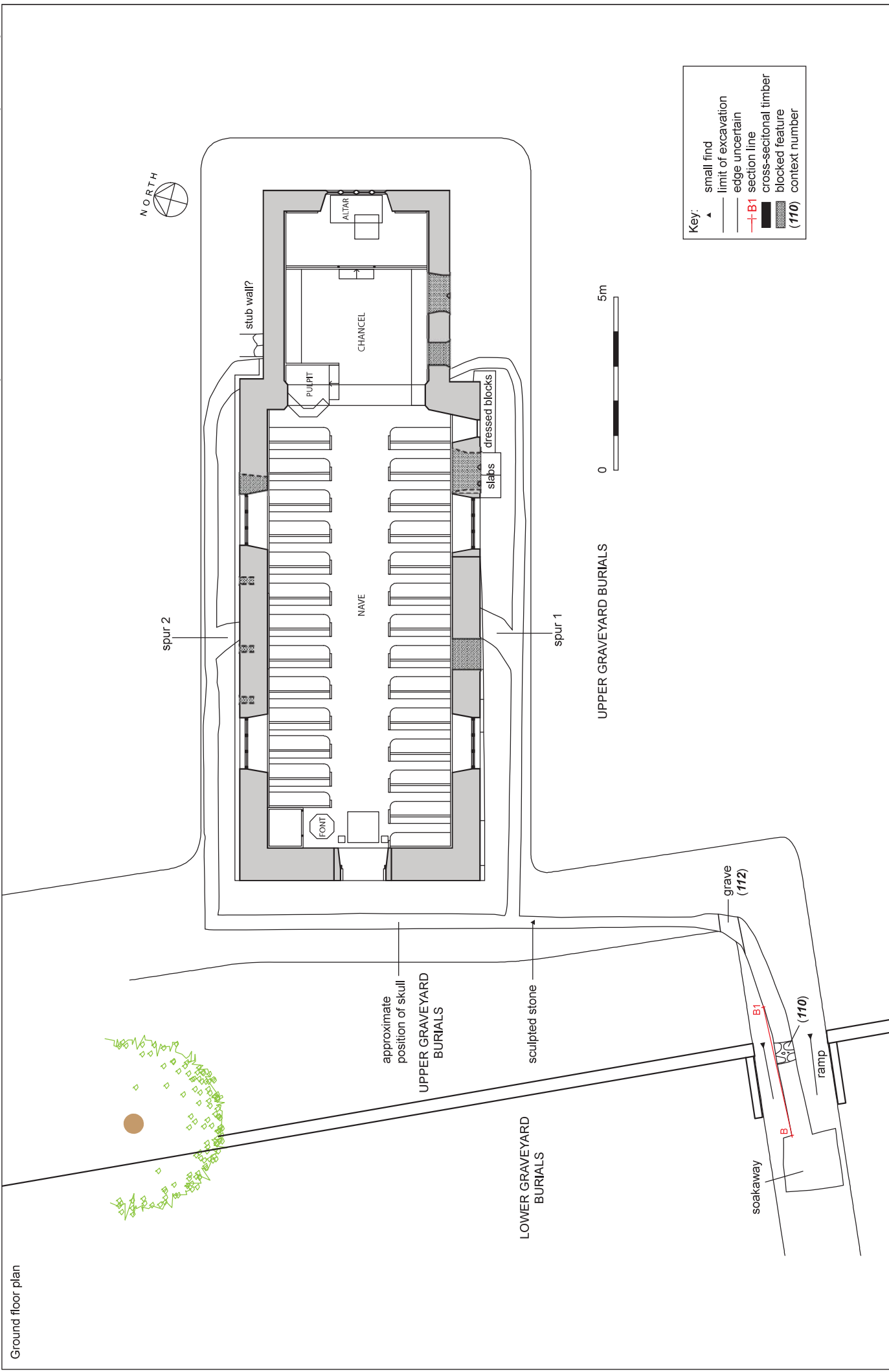


Figure 5: Trench plan

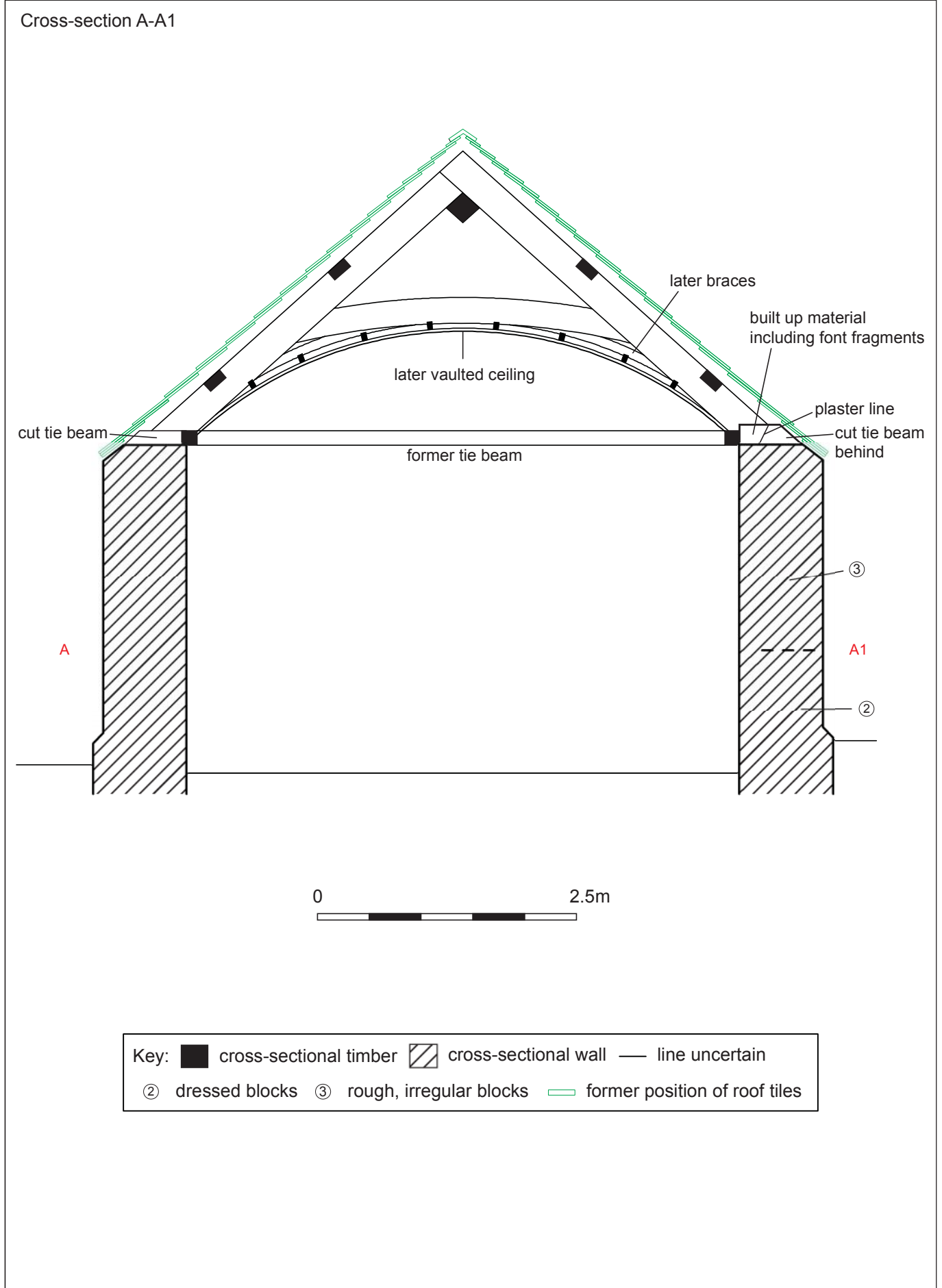


Figure 6: Cross-section A-A1

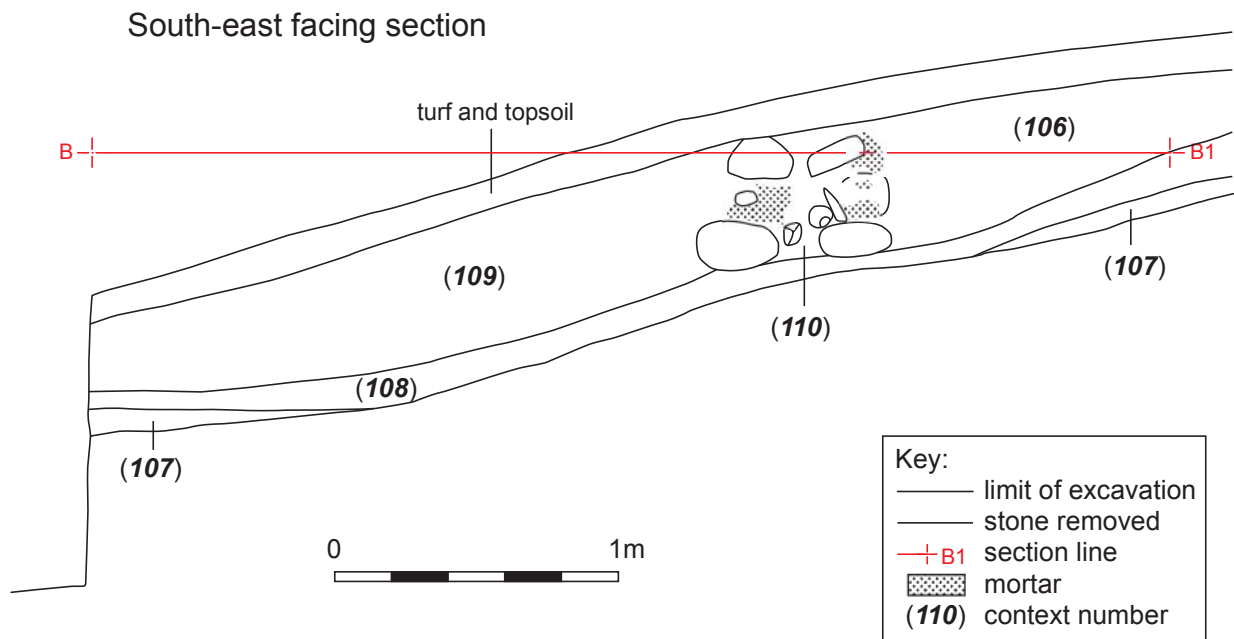


Figure 7: Trench section B-B1

## 5. Discussion and Conclusion

### 5.1 Discussion

5.1.1 **The church building:** following the removal of the roof and external render the roof structure of the nave and various features in the external elevations of the church and elsewhere were recorded. These show four phases of development of the church, some of which can be dated based on stylistic elements and through reference to documentary sources, others only through reference to other phases.

5.1.2 **Phase 1 (early medieval – 12<sup>th</sup> century?):** the earliest section of the building appears to comprise the small area of large dressed blocks, comprising only a single course, projecting beneath the south-east corner of the nave (Fabric 1). This phase is essentially impossible date, nor is it possible to determine the form of the building that they relate to. The style of the stonework is notably different to the rest of the building, and it is possible that the apparent wall line projecting from the north side of the chancel relates to the same phase. In any case, this phase clearly pre-dates Phase 2 and so probably relates to an earlier part of the medieval period, perhaps belonging to the 12<sup>th</sup> century as suggested in the earliest records of the site, or an early medieval building. The presence of such a structure, in perhaps the 8<sup>th</sup> to 10<sup>th</sup> century, can only be surmised by the existence of the two standing sections of cross, as well as the presence of two additional fragments found during the watching brief (see *Section 5.1.6* below). The possible inscription exposed in the south wall of the chancel is probably entirely natural, perhaps resulting from glacial activity, or even much later graffiti, but it has a passing resemblance to the text in early medieval, so-called Class 1, memorial stones, which are typically found in Wales (Dark 1992; although at least one inscription in the same general style is recorded from Cumbria, at Old Carlisle; Petts 2003, 153). Although these normally comprise rows of horizontal text on an upright stone, text written horizontally along it is also known (Thomas 1971, 110). If it was part of one of these, re-used in the later building, it would arguably suggest even earlier activity at the site, perhaps in the 5<sup>th</sup> to 7<sup>th</sup> century (Dark 1992, 51).

5.1.3 **Phase 2 (13<sup>th</sup> century?):** the removal of the render revealed elements of the building (Fabrics 2 and 4), which contained windows with cusped heads (which according to Jefferson originally had drip moulds; see *Section 3.3.11* above), a blocked doorway into the nave, and a blocked doorway into the chancel with a chamfered surround. Stylistically these elements are quite plain, but are likely to be later medieval in date, and perhaps correspond to the 13<sup>th</sup> century date for the church that has been suggested previously. This element also incorporates dressed fragments of presumably earlier material, including the possible inscription already mentioned, the moulded fragment in the east end of the chancel (possibly earlier presumed to be part of a cross), and the fragments below the window in the south side of the chancel, although these could represent a later period of repair.

5.1.4 **Phase 3 (18<sup>th</sup> – early 19<sup>th</sup> century):** the style of the roof is suggestive of an 18<sup>th</sup> or even early 19<sup>th</sup> century date of remodelling of the building, which corresponds with Fabric 3. This seems to correspond to a quite extensive piece of rebuilding, with the south side of the nave largely taken down and rebuilt, although some remained, while the north side was seemingly completely rebuilt. The church was possibly also extended to the west (with the bell cote added), the slight bend in the wall perhaps a result of retaining original fabric to the east. The doorway in the south side of the chancel and the windows on the south side were blocked (before 1842 according to Jefferson, who also notes that a south porch was removed). The east end clearly had a much larger door at this time, or a door with an overlight and the roof was perhaps finished with sandstone flags, if not in this phase then earlier.

5.1.5 **Phase 4 (late 19<sup>th</sup> – early 20<sup>th</sup> century):** the documentary sources show that a number of changes were made to the church at the end of the 19<sup>th</sup> century, primarily the 1860s and 1870s, although it would appear that other changes were also made that are not seemingly recorded. The present vaulted roof was evidently constructed, which required the cutting of the tie beams and insertion of new braces. The tops of the walls were probably rebuilt to enable this, incorporating, on the south side of the nave, fragments of a smashed up Romanesque font. This was necessary because the tops of the walls were apparently leaning outwards; why this was happening is not clear. It is possible that it was due to the weight of the stone roofing material, more likely it was caused by the cutting of the tie beams,

but this would suggest that this had been done considerably prior to the installation of the vaulted ceiling, in order to allow time for it to have moved. In either case, the use of pieces of a seemingly deliberately smashed medieval font seems remarkable at that date. The current windows were also no doubt added at this time, in some cases cutting through earlier ones, and the west doorway was reduced in both height and width with the addition of the present square surround. The external face of the church was also finished with concrete roughcast render; this would appear to have been carried out by at least 1904 (Parker 1904, 145).

**5.1.6 The grave yard:** the watching brief demonstrated that immediately alongside the church the ground is quite disturbed, perhaps on account of ongoing problems with drainage resulting in waterlogging and the addition of material intended to improve the surface. The subsoil found across much of the area contained earlier finds, including some such as nails and fragments of stone roof tile that no doubt relate to previous phases of renovation, as well as two important fragments of early stone cross (see *Section 5.1.7* below), and it is likely that this deposit has been reworked over a long period. Beneath this subsoil two probable graves were revealed, both of which are likely to be relatively early as they are not marked by gravestones. Of particular interest was the discovery of the earlier churchyard wall, essentially below the line of the current wall dividing the higher and lower graveyards. Although not readily dateable the documentary sources demonstrate that it went out of use in the late 1860s. The presence of large amounts of lime mortar bonding the wall together does not necessarily aid with dating as it was used for a long period and there is unfortunately no dating evidence from the sample so there is little to determine the original date of construction. Beyond this wall, to the west, it was noticeable that only relatively late finds were present, including two 1920s pennies.

**5.1.7 Finds – the building:** the unexpected discovery of the remains of a stone font carved in Romanesque style and of probable late 12<sup>th</sup> century date, is extremely significant, especially as there is seemingly no prior record of its existence at the site. An account of fonts in the local area notes the presence of a much plainer example at St Bridget's Old Church Beckermest in 1890, considered to date to the late 18<sup>th</sup> century (Wilson 1890, 338 and 343), and Parker too describes it as 'a commonplace 18<sup>th</sup> century type, a square pillar with larger square foot and head, in the last a very small bowl' (Parker 1904, 146). There are a number of interesting questions raised by the presence of the font, firstly why such a small and probably relatively poor church had such a well-executed piece of sculpture. This can perhaps be explained by its appropriation by Calder Abbey in 1160, which would have potentially provided the funding for such work, but more importantly stone masons capable of doing it. Indeed, records of masons' marks from Calder Abbey include a number of variations of the 'W' form found on the font (Ferguson 1883; Loftie 1885, 498) and there is at least some similar carved decoration on masonry within the structure of Calder Abbey (Loftie 1883, fig 11).

**5.1.8 Finds – the drainage trench:** the majority of finds found during the excavation of the drainage trench are of little significance, and date from the 19<sup>th</sup> century onwards, however, the two fragments of carved stone recovered from the subsoil near the south corner of the church are likely to date from the 9<sup>th</sup> to 11<sup>th</sup> century. One clearly matches the scrolled design of the standing section of cross with the inscription (St Bridget 1: Bailey and Cramp 1988, 54-57) and so is presumably of similar date, i.e. late 9<sup>th</sup> century. The other fragment appears to be the boss from a cross head, and while it cannot be related to either of the standing cross fragments with any certainty it is more likely to have been a part of St Bridget 2 and therefore 10<sup>th</sup> to 11<sup>th</sup> century in date. These finds represent an important discovery, and it is notable that the boss fits into a wider Irish Sea style (Rosemary Cramp pers comm.), but they need further specialist research in order to ascertain their true significance (see *Section 5.2.3*).

**5.1.9 Environmental Sample:** few remains of significance were recovered from the environmental sample, and unfortunately none of it is suitable for radiocarbon dating, so there is little scope for further analysis. The possible industrial residues are also insubstantial and add little to our understanding of the site and no further work is recommended on these materials.

## 5.2 Conclusion and Recommendations

**5.2.1** The watching brief has added a considerable amount of useful information to our understanding of the structural development of the church, which had not formerly been examined in great detail, and

has also revealed significant remains from one or two early medieval crosses and a late 12<sup>th</sup> century font. All of these discoveries are of at least regional importance.

5.2.2 The results of the work at St Bridget's Old Church are of enough interest to justify publication in a suitable location, such as the *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*. In order for this to be done, however, both the cross fragments and the sections of font need to be properly conserved so that they can then be examined and recorded in detail. It is also possible that both the cross and font fragments might retain elements of original paint, which would only be revealed through proper conservation.

5.2.3 It is therefore recommended that funding be sought to pay for professional conservation of the stone items and, if practical, restoration of the font. This will then enable detailed recording to be undertaken, which will in turn feed into publication, which ideally would also need additional funding.

## 6. Bibliography

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## Appendix 1: Summary Context List

Context	Type	Location	Description	Interpretation
<b>100</b>	Deposit	All trenches	Dark reddish brown to black clay silt, small amount of slate fragments, 20-50% rounded and angular cobbles, typically 0.4m thick but thinner closer to church, over <b>102</b> , and in ramp/soakaway area	Topsoil
<b>101</b>	Deposit	South side	Mid orange-brown sandy clay, 5% sub-angular cobbles, typically 0.5m thick	Subsoil
<b>102</b>	Deposit	North side	Rounded gravel in dark grey-brown silt matrix, typically 0.1m thick. On top of subsoil	Dumped deposit for drainage?
<b>103</b>	Deposit	North side	Mid orange-brown sandy clay, 20% angular stone and 1% slate fragments, typically 0.3m thick	Subsoil, similar to <b>101</b>
<b>104</b>	Deposit	All trenches	Mid orange-brown firm clay	Natural
<b>105</b>	Deposit	West end	Mid orange-brown sandy clay, 5% sub-angular cobbles, typically 0.5m thick	Subsoil, same as <b>101</b>
<b>106</b>	Deposit	Southern section	Mid orange-brown sandy clay, 5% sub-angular cobbles, typically 0.5m thick	Subsoil, same as <b>101</b>
<b>107</b>	Deposit	Soakaway	Mid orange-brown gritty-sandy clay, 2% angular cobbles, typically 0.4m thick	Subsoil
<b>108</b>	Deposit	Soakaway and ramp	Dark greyish-orange to brown sandy gravel, 20% rounded cobble	Natural lense
<b>109</b>	Deposit	Ramp	Mid brown sandy clay, 2% rounded gravel, typically 0.5m thick	Subsoil
<b>110</b>	Structure	Ramp	Low wall constructed from rounded boulders at base and smaller rounded stones above, with more angular infill and lots of gritty lime mortar. Only 2-3 course remaining	Original churchyard wall
<b>111</b>	Deposit	Southern section	Dark grey brown sandy clay, 1% rounded cobble, 0.5m wide and over 0.7m long (extending out of trench)	Fill of probable grave ( <b>112</b> )
<b>112</b>	Cut	Southern section	Linear feature, orientated east/west, 0.5m wide, over 0.7m long, not excavated	Cut of probable grave

## Appendix 2: Summary Finds List

Context	Location	Type	Qty	Description	Date range
100	Spur 1	Pottery	4	White earthenware saucer rim-to-base fragments, from single vessel, partially refitting, rim painted yellow and sponge-printed black	19 <sup>th</sup> – 20 <sup>th</sup> century
100	Spur 1	Glass	1	Colourless bottle body with mould seam	20 <sup>th</sup> century
100	Spur 1	Glass	2	Colourless window pane fragment, one obscured	Post-medieval
100	Spur 1	Plastic	1	Lilac-coloured perforated lid	20 <sup>th</sup> – early 21 <sup>st</sup> century
100	Spur 1	Alu	2	Foil fragment and screw-top bottle lid	20 <sup>th</sup> – early 21 <sup>st</sup> century
100	Spur 1	Fe	3	Cast pipe / gutter fragment, thick broken washer, hand-forged nail	Post-medieval
100	East spur, north side	Fe	4	Cast pipe / gutter fragment and plate fragments	Post-medieval
100	East spur, south side	Glass	2	1 x Colourless window pane fragment, 1 x brown bottle glass	Late 19 <sup>th</sup> – 20 <sup>th</sup> century
100	East spur, south side	Bone	1	Small mammal bone	Not closely dateable
101	South side	Fe	3	Nail, cast pipe / gutter fragment, and highly corroded unidentified fragment	Post-medieval
101	South side	Glass	2	Colourless window pane fragments	19 <sup>th</sup> – 20 <sup>th</sup> century
103	North side	Fe	9	Nails x 8, highly corroded, one bent, various sizes, plus corroded lump	Not closely dateable
103	North side	Glass	1	Colourless window pane fragment	Post-medieval
103	North side	Alu	2	Ring pull fragments	Late 20 <sup>th</sup> century
103	North side	Pb and Fe	1	Iron fitting, fixed into aperture with lead	Post-medieval
103	North side	Bone	2	An unfused long bone of a small, juvenile mammal (missing proximal and distal ends) and an unidentified fragment	Not closely dateable
105	West side	Fe	1	Nail, small	Post-medieval
106	South section	Stone	1	Possible whetstone? No obvious sign of use	Not closely dateable
106	South section	Stone	1	Red sandstone perforated roof tile fragment, pecked hole (?)	Not closely dateable
106	South section	Fe	1	Horse shoe	Late medieval – early post-medieval (Sparkes 1979)
106	South section	Stone	1	Thin fragment of red sandstone, one face finished with a spiralled 'bush scroll' decoration essentially identical to that on one of the two crosses still standing in the churchyard (Beckermets St Bridget 1; Bailey and Cramp 1988, 54-56).	Late 9 <sup>th</sup> century
106	South section	Stone	1	Dressed red sandstone fragment from a cross comprising a domed form with radiating lines, and is apparently the boss from the centre of a cross head.	10 <sup>th</sup> – 11 <sup>th</sup> century AD?
107	Sondage	Cu alloy	1	George V penny	1921
107	Sondage	Cu alloy	1	George V penny	1920
107	Sondage	Pottery	1	White earthenware hollow-ware fragment with blue painted line	19 <sup>th</sup> – 20 <sup>th</sup> century
109	Below ramp	Glass	2	Colourless window pane fragments	Post-medieval

<b>Context</b>	<b>Location</b>	<b>Type</b>	<b>Qty</b>	<b>Description</b>	<b>Date range</b>
<b>109</b>	Below ramp	Glass	1	Green bottle neck, undiagnostic	17 <sup>th</sup> – early 19 <sup>th</sup> century

## Appendix 3: Assessment of Industrial Residue from Sample



### Assessment of sample residue recovered from Beckermet, Cumbria Site Code BC13

#### Introduction

This assessment report describes sample residue recovered from Beckermet, Cumbria. A brief overview of the material from the site is provided. The significance of the material is discussed and recommendations made for further work. The assessment report follows the guidelines issued by English Heritage (Jones 2001, 7).

#### Slag Classification

The slags were visually examined and the classification is based solely on morphology. In general they are divided into TWO broad groups. First are the diagnostic ferrous material which can be attributed to a particular industrial process; these comprise ores and the ironworking slags, i.e. smelting and smithing slags. The second group, are the non-diagnostic slags, which could have been generated by a number of different processes but show no diagnostic characteristic that can identify the process. In many cases the non-diagnostic residues, e.g. hearth or furnace lining, may be ascribed to a particular process through archaeological association. The residue classifications used in the report are defined below. The count and weight of each slag type present in each context was recorded.

#### Diagnostic Ferrous Slags and Residues

Smithing Slag – randomly shaped pieces of iron silicate slag generated by the smithing process. In general slag is described as smithing slag unless there is good evidence to indicate that it derived from the smelting process.

Ferrous metal – fragments or unrecognized iron artefacts,

#### Non-Diagnostic Slags and Residues

Clinker – high silica residue from burning, may include burnt fragments e.g. of bone.

### Results

#### Overview

Two small bags of sample residues included iron fragments and clinker.

#### Description

Both bags derived from Context 110, Sieve sample 1. One bag contained magnetic material that appeared to be mostly fragments of corroded metal. There was one fragment of possible smithing slag but it is too small to be certain of the identification. There was also one piece of white slate like stone. The second bag contained c.10 fragments of black coloured clinker. The fracture surface showed a

vesicular structure. A sample was analysed by hand-held XRF and showed that the major element present was calcium with some iron silicon, phosphorus and sulphur present (Figure 1). It is possible that it is burnt bone or similar mineral material. A small fragment was heated but it did not combust and hence must be wholly inorganic, i.e. mineral. This material is unlikely to be viable for C-14 dating.

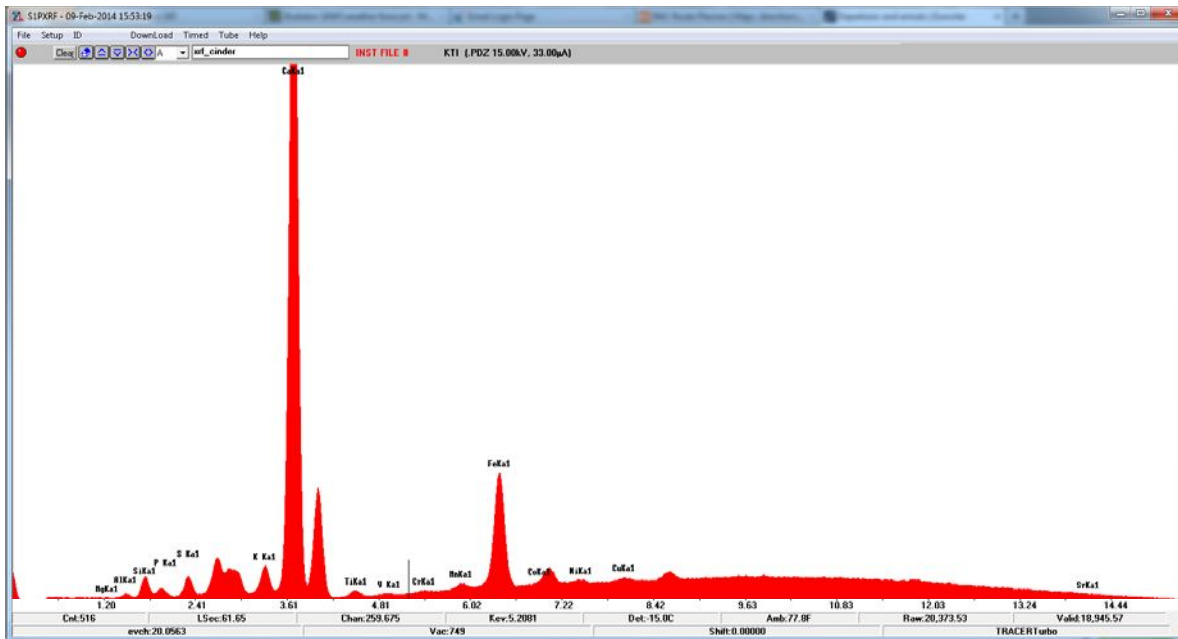


Figure 1: Hand-Held XRF analysis of a sample of clinker from Beckermot

## Significance

The material is insubstantial and provides no understanding of the activity in the area. It is unclear as to what the cindery material was prior to burning.

## Recommendations

No further work required.

## References

Jones D.M. (Ed.) 2001 *Centre for Archaeology Guidelines: Archaeometallurgy*. English Heritage

## Appendix 4: XRF Methodology

The instrument is a Bruker S1 Turbosdr hand-held XRF instrument operating at 40kV. A beam of x-rays is generated in the instrument and focussed on the sample, the x-rays interact with the elements present in the sample resulting in the emission of secondary x-rays which are characteristic (in terms of their energy and wavelength) of the elements present in the sample. The energies of the secondary x-rays are measured and a spectrum generated showing a level of background noise with peaks of the elements present superimposed on the background noise. Samples were analysed for 30 live seconds, the spectrum is stored and a normalised composition determined using a bespoke Bruker Fundamental Parameters Programme (R-Alloys FP). All elements heavier than calcium (Ca, Z=20), can be detected. The calculated two-sigma error on each element is calculated and overall show values of the order of +/- 0.2%. The data is normalised and hence gives data showing relative percentage of detected elements, clearly the dominant elements in a crucible fragment are oxygen, aluminium and silicon which are not detected. The data is generated in a comma delimited file and then exported to an Excel spreadsheet, where the data is examined and relevant tables generated. The 'interior' and 'exterior' face of each sample was analysed. This demonstrates whether non-ferrous elements are present in/on both surfaces. The technique is non-destructive.



## Appendix 5: Environmental Sample Assessment

**Table 1: Volume and contents of retent (Key: + = 1-9, ++ = 10-20, +++ = 21-50, ++++ = >51)**

Context Number	Sample number	Charred organic	Bone (small mammal)	Mollusc	Lime mortar	Industrial residue	Potash	Magnetic material
110	1	+++	+	+	+++	+	+	++

**Table 2: Retent Sample Results (Key: + = rare (0-5), ++ = occasional (6-15), +++ = common (15-50) and ++++ = abundant (>50); NB charcoal over 1cm is suitable for identification and AMS dating)**

Context Number	Sample Number	Sample Volume (ml)	Unburnt bone			Shell		Material available for AMS Dating	Cinders	Coal	Comments
			Mammal	Fish	Bird	Marine	Terrestrial				
110	1	5	+				++	-	+	+	

**Table 3: Flotation Sample Results (Key: + = rare (0-5), ++ = occasional (6-15), +++ = common (15-50) and ++++ = abundant (>50); NB charcoal over 1cm is suitable for identification and AMS dating)**

Context Number	Sample Number	Feature	Total flot volume (ml)	Material available for AMS	Comments
110	1		35	-	Contains terrestrial snail shell ++++ and cinders ++