Report No: 2014R056



St Petroc's Church, Bodmin, Service trenching. Cornwall.

Archaeological Watching Brief



Cornwall Archaeological Unit

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This study was commissioned by Mr David Brown on behalf of the Revd Canon Graham Minors and the Parochial Church Council St Petroc's Church Bodmin and carried out by Cornwall Archaeological Unit, Cornwall Council.

The contractors on site were Specialist Stonemasonry Ltd (Jonathan C. Starr).

The Project Manager was Andy Jones.

The views and recommendations expressed in this report are those of Historic Environment Projects and are presented in good faith on the basis of professional judgement and on information currently available.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.



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Cover illustration

Excavating the north sector of the trench looking south towards the church.

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Abbreviations

CALL	~ "			1.1
CAU	Cornwall	Archaeol	ogicai	Unit

HER Cornwall and the Isles of Scilly Historic Environment Record

HE Historic Environment, Cornwall Council

MCO Monument number in Cornwall HER

OD Ordnance Datum – height above mean sea level at Newlyn

OS Ordnance Survey

RIC Royal Institution of Cornwall

Summary

Archaeological recording was carried out by Cornwall Archaeological Unit (formerly Historic Environment Projects), Cornwall Council on behalf of the Revd Canon Graham Minors and the Parochial Church Council during ground works in the churchyard required for the installation of water and gas pipelines at St Petroc's church, Bodmin (SX 07290 67044).

St Petroc's Church is a Grade I Listed Building (1355166). It stands on the site of the early medieval monastery of St Petroc's. The current church retains evidence for a church built in the 12^{th} century with alterations and additions in the 15^{th} century. The church underwent major renovations and a partial re-build in the 19^{th} century.

There were also other Listed structures in the churchyard close by the route of the trench. These included the well of St Guron (1195279), a cross (1195279), and a column (1195278).

The project provided considerable evidence for the history and archaeological potential of the churchyard.

- Details of forty 44 graves were recorded. Bone preservation was shown to be good. The burials were mixed, consisting of adults, and children. Six of the burials proved to be within coffins. The rest were shroud burials. One burial was possibly that of a priest.
- Six distinct groups of graves probably representing family burial plots were recorded. They were clearly separated by areas of ground which were devoid of burials; this may indicate that these plots had been marked out on the original ground surface, perhaps by grave markers.
- Apart from Grave group F (consisting of Graves [42] to [44]) associated with the recumbent slate memorial slab dedicated to the memories of Ann Coppin (d 1773) and John Coppin (d 1832), no direct dating evidence for the graves was obtained. Shroud burials are more likely to be of 15th to 17th century date. It is noted that family groups of graves become common during the post-Reformation, Tudor period (16th century), whilst coffin burials became common in the 18th century. The churchyard was closed to burials in 1849.
- A culvert was recorded to the northwest of St Guron's Well that may be part of the water system associated with this feature. It may also be part of the drainage system recorded as having been built in the 16th century or part of a drainage system emplaced in 1817.

Introduction

Project background

Cornwall Archaeological Unit (formerly Historic Environment Projects) was commissioned by Mr David Brown on behalf of the Revd Canon Graham Minors to undertake a programme of archaeological recording during ground works required for the installation of water and gas pipelines at St Petroc's church Bodmin (SX 07290 67044). The total area examined was approximately 0.009 Ha and consisted of approximately 130m of trench running down the path to the west of the churchyard, and alongside the northern wall of the nave and two large manhole pits each measuring approximately 2m x 2m (Fig 3).

St Petroc's church is of medieval origin and the preservation of buried archaeological material was considered to be high. The church is a Grade I Listed Building and is set within a Conservation Area and the Historic Settlement area of Bodmin. There are Listed structures in the churchyard, which include the well of St Guron, a cross and a column.

Phil Copleston (Historic Environment Planning Advice Officer, Cornwall Council) was consulted on the scope of the archaeological recording and a written scheme of investigation, outlining the methodology for archaeological recording was produced (09/01/14) by Dr Andy Jones (Archaeologist Team Leader, HE Projects), (Appendix 2).

The fieldwork was carried out between 26th March and 29th April on an intermittent visit basis. This report details the results of the watching brief.

Aims

The purpose of the archaeological watching brief was to gain information about the character of activity within the area affected by the work, which would give an insight into the archaeological potential existing below ground. The programme of archaeological recording was designed:

- To ensure that the site works were carried out in such a way as to allow recording as set out in the Written Scheme of Investigation.
- To record any stratified medieval human remains that could not be preserved in situ.
- To determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.
- To establish the nature of the activity on the site.
- To identify any artefacts relating to the occupation or use of the site.
- To record evidence for the nature of the archaeological potential of the churchyard, for example the depth and character of deposits within the churchyard.
- The dissemination and publication of the results.
- The long-term conservation of the project archive in appropriate conditions.

Methods

Desk-based study

Prior to the work commencing and during the course of writing the report, historical databases and archives were consulted in order to obtain information about the history of the site and the structures and features that were likely to survive. The main sources consulted were as follows:

- Cornwall HER.
- Images of England online listed buildings database.
- Early maps and photographs.
- Published histories.
- · Previous archaeological reports.

Fieldwork

The fieldwork was carried out as an intermittent watching brief that involved close liaison between the site contractor and the project archaeologist. The trenching was done by a machine fitted with a toothless bucket or hand-dug. Sections of the trench were left open (suitably protected by fencing) until they could be inspected by the

archaeologist. The western part of the churchyard was also fenced off to prevent public access to the area. This fencing was set at a distance from where the trench could not be easily observed. This was done in lieu of screening in the event of the encountering and recovery of human remains.

Features encountered were plotted onto a site plan (noting the locations of features and recorded profiles) at a scale of 1:100. They were measured in from fixed points on the ground, which are shown on the OS survey mapping, together with compass bearings. Sample sections (noting the nature of soil depths, layers present, etc.) were also recorded along the line of the trenches and within the larger pits.

Where possible any human remains were left *in situ* and undisturbed. This proved possible where they lay at or below the levels required for the services, or where the line of the trench could be altered to avoid the burial.

Where the trench unavoidably truncated burials, the location, depth, and orientation of each was recorded along with noting what part of the body was being affected (i.e. head, chest, arms, thorax, legs, etc.). The bones were then removed by hand, and carefully bagged and stored while the trench was dug to its required depth, and the services laid. The bones were then reburied in the backfill of the trench as close as possible to their original position. Burials were not 'chased' into the sides of the trench, and at all times the remains were treated with respect and kept hidden from public view.

Post-fieldwork

Any artefacts collected were bagged and their position along the trench recorded. All were considered unstratified, being uncovered by the machine from disturbed contexts. Subsequently all the objects were allowed to air dry (especially important for pottery to allow it to harden) then carefully washed. The material was then identified and catalogued (Appendix 2).

Background

Location and setting

St Petroc's Church lies at the eastern end of the medieval core of the town of Bodmin (SX 07313 67034) within Bodmin parish (Figs 1, 2 and 7).

The Churchyard lies on the northern flanks of a steep sided valley that runs roughly east to west, which is a small tributary of the River Camel. The ground slopes to the south west dropping from 94m OD to 84m OD.

The site is underlain by Upper Devonian, and Carboniferous rocks of the Tamar Group consisting of slates and siltstones of the Saltash Formation (BGS 1969 Sheet 347).

Brief history of St Petroc's Church

The church is one of the most important and largest medieval buildings in Cornwall. It stands on the site of St Petroc's monastery which probably originated in the 6th century, but its use changed to that of parish church once St Petroc's was refounded as an Augustine priory on a separate site in the early 12th century. The base of the tower is the only part of the Norman church to survive. The tower is located on the north side of the church, at the division of the nave and chancel. The reason for this location may be that it was originally a detached campanile, or because it formerly stood at the end of the north transept of a cruciform Norman church. Surviving accounts and contracts indicate that the church was largely rebuilt in the late 15th century. All except the tower, chancel, and west end were rebuilt to produce a spacious, battlemented building consisting of nave, chancel, aisles and a south porch said to contain the finest example of fan vaulting in Cornwall. The west end, which incorporated a fine Norman doorway, was completely rebuilt in the early 19th century. A Roman coin was found at the time.

St Guron's well, in the churchyard, is likely to be a remnant of the earlier monastic foundation. A pillar, a grave slab from the friary, and various parts of a gothic cross are also located there.

The route of the trenching passed close to several important archaeological sites;

- St Petroc's medieval church (MCO6278).
- A Romano-British Ingot was found within the churchyard (MCO217).
- Early medieval period monastery (MCO23003).
- A medieval cross shaft and a column are located close to the route of the trench (MCO4997 and MCO23006).
- Medieval well of St Guron is located in the churchyard (MCO6943).

There also remained the potential for buried features, such as human burials and/or structures associated with the medieval church, and previously unrecorded archaeological sites and artefacts of other periods to survive as well.

Previous archaeological work

The southern area of the site had been partially examined before in 1999 during the installation of floodlights to illuminate the exterior of the church. Small pits were dug to a depth of *circa* 0.5m that revealed the ground to be disturbed and occasional redeposited bone and sherds of pottery were encountered. The majority of the cabling was done using a mole and as a result no archaeological features were encountered (Thomas 1999).

In 2000 a detailed survey and historical research was undertaken on St Guron's Well. This provided details of the building, and culvert/water systems involved in what was once one of the primary water sources in Bodmin (Preston-Jones and Mattingly 2000).

Archaeological results from the 2014 recording

General

The main line of the service trench ran roughly north to south downhill from the northern edge of the churchyard to the road at the south, running for most of its length along the edge of the churchyard path that passes to the west of the church (Figs 8-11). The *circa* 97m long trench was divided into three working sectors which was dug sequentially and left open to be inspected by the archaeologist. The pipes were laid, and the trench back filled before the next sector was opened.

The trench was excavated by mini-digger and by hand. Its width averaged 0.5m though this varied due to section collapse caused by unstable material, and it was taken down to an average depth of 0.8m (Fig 13). Eleven sections were recorded along this trench, the following are presented here to illustrate the nature of the ground encountered (Fig 3). Details of the remainder can be found in the site archive.

At a point some 32m from the southern end of the trench an east to west spur trench was excavated along the path outside the northern wall of the nave of the church to the door in the western side of the tower. The trench ran for *circa* 33m, and three sections (12 to 14) were recorded along its length (Fig 3).

Section 1 north sector

Depth	Thickness	Description	Interpretation
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0m - 0.04m	0.04m	Tarmac.	Surface of path
0.04m - 0.06m	0.02m	Yellow-brown sandy gravel.	Bedding for pathway
0.06m - 0.16m	0.1m	Yellow, grey-brown clay with some stony rubble.	Layer
0.16m - 0.2m	0.04m	Dark grey-brown clay with stony rubble.	Layer
0.20m - 0.75m	0.55m	Loose grey-brown clay with numerous stone blocks, pottery, window mullion fragment, and occasional human bone.	Layer
0.75m - 0.8m	0.05m Not bottomed	Yellow, grey-brown clay with numerous shillet fragments.	Decayed natural?

Section 3 north sector

Depth	Thickness	Description	Interpretation
0m - 0.04m	0.04m	Tarmac.	Surface of path
0.04m - 0.07m	0.03m	Compacted yellow-brown sandy gravel.	Bedding for pathway
0.07m - 0.22m	0.15m	Yellow, grey-brown clay with a little stony rubble. Some tree roots.	Layer
0.22m - 0.77m	0.55m	Grey-brown clay with occasional stone fragment.	Layer
0.77m - 0.82m	0.05m Not bottomed	Compacted yellow, grey-brown clay with numerous shillet fragments.	Decayed natural?

Section 5 centre sector

Depth	Thickness	Description	Interpretation
0m - 0.05m	0.05m	Tarmac and cobbles.	Surface of path with the cobbles forming a drainage gully running down centre of path.
0.05m - 0.1m	0.05m	Compacted yellow-brown sandy gravel.	Bedding for pathway
0.10m - 0.25m	0.15m	Yellow, grey-brown clay with a little stony rubble. Some tree roots.	Layer
0.25m - 0.75m	0.5m	Grey-brown clay with occasional stone fragment, roofing slates, and redeposited human bone.	Layer
0.75m - 0.77m	0.02m Not bottomed	Compacted yellow, grey-brown clay with numerous shillet fragments.	Decayed natural?

Section 7 centre sector

Depth Thickness Description Interpretation	
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0m - 0.04m	0.04m	Tarmac.	Surface of path
0.04m - 0.07m	0.03m	Compacted yellow-brown sandy gravel.	Bedding for pathway
0.07m - 0.22m	0.15m	Light grey-brown clay.	Layer
0.22m - 0.8m	0.58m	Red, grey-brown clay with occasional stone fragment.	Layer
-	-	Orange-brown clay and shillet at base of trench.	Natural

Section 8 centre sector

Depth	Thickness	Description	Interpretation
0m - 0.05m	0.05m	Tarmac.	Surface of path
0.05m - 0.1m	0.05m	Compacted yellow-brown sandy gravel.	Bedding for pathway
0.10m - 0.2m	0.1m	Light grey-brown clay with few stones and occasional bone	Layer
0.20m - 0.55m	0.35m	Friable dark grey-brown clay with numerous stony fragments, and human bones. There was also burials consisting of grave cuts, and articulated skeletons.	Layer
0.55m - 0.9m	0.35m Not bottomed	Orange-brown clay and shillet with graves cut through it.	Natural bedrock

Section 9 south sector

Depth	Thickness	Description	Interpretation
0m - 0.05m	0.05m	Tarmac.	Surface of path
0.05m - 0.1m	0.05m	Compacted yellow-brown sandy gravel.	Bedding for pathway
0.10m - 0.25m	0.15m	Dark grey-brown clay with numerous stony fragments, and human bones. There was also burials consisting of grave cuts, and articulated skeletons.	Layer
0.25m - 0.35m	0.10m	Orange, grey-brown clay.	Layer
0.35m - 0.90m	0.55m Not bottomed	Orange-brown clay and shillet with graves cut through it.	Natural bedrock

Section 11 south sector

Depth	Thickness	Description	Interpretation
0m - 0.05m	0.05m	Grass roots and topsoil	Surface of lawn
0.05m - 0.15m	0.1m	Grey-brown clay loam	Subsoil
0.15m - 0.65m	0.5m	Dark grey-brown clay with numerous stony fragments, and human bones. There was also burials consisting of grave cuts, and articulated skeletons.	Layer
0.65m - 0.95m	0.3m	Orange, grey-brown clay with stony fragments. There was also burials consisting of grave cuts, and articulated skeletons.	Layer
0.95m - 1.35m	0.4m	Orange-brown clay and shillet.	Rotten bedrock

I	1.35m - 1.65m	0.3m N	lot	Solid shillet bedrock.	Bedrock
		bottomed			
1					i

Section 13 East spur

Depth	Thickness	Description	Interpretation
0m - 0.15m	0.15m	Recumbent slate headstone heavily eroded.	Surface of path
0.15m - 0.30m	0.15m	Compacted yellow-brown sandy gravel.	Bedding for pathway
0.30m - 0.80m	0.5m Not bottomed	Orange-brown clay and shillet.	Natural bedrock

The profile recorded along the east–west spur trench suggests that the whole hillside had been cut into, terraced and levelled prior to the church having been constructed. The base of the church tower sits on this terrace, and as this is of 12th century date this is the most likely period as to when the terrace was cut. It was certainly in existence or enlarged when the North Aisle was constructed in the 15th century.

A total of 79 objects were recovered in the course of the work (Appendix 2), pottery forming the largest portion of the collection consisting of some 50 sherds (63%). All the finds were unstratified and most were recovered from the spoil alongside the trench, or by inspection of the spoil as it was deposited within the dumper. The finds range in date from the late 12th to 13th centuries through to the present day, this material reflects activity within the churchyard, perhaps relating to the various phases of building and alteration of the church and its fabric.

Archaeological Features

The archaeological recording led to the identification of 44 graves and a culvert, which are described below.

Graves

A total of 44 graves, or possible graves were recorded along the line of the trenching and within the pits dug for the manholes and inspection chambers (Figs 4, 5, and 6). Some proved to be remarkably close to the surface, *circa* 0.1m below the level of the path. Details of each grave are recorded in the following table.

Number	Sector	Depth	Description	Notes
[1]	North	0.82m	Area of disturbed ground cut into the natural. Cut 0.5m wide, however, edges indistinct, orientated west – east. Full length not exposed. Infilled with dark grey-brown clay with a couple of bone fragments visible.	Possible grave? Below level required for trench, so not investigated further.
[2]	North	0.85m	Masonry encountered at depth of 0.4m. Flat surface of stones (shillet blocks) mortared together and orientated <i>circa</i> WNW/ESE. Walling 1.1m wide. Length not determined as disappeared into either section. 3 courses of stone surviving up to 0.3m high. A grave cut <i>circa</i> 0.5m wide orientated west – east was encountered 0.1m below the base of the masonry. Full length not exposed. Infilled with dark grey-brown clay. Part of the lower body including pelvis and upper parts of the femurs were uncovered.	Box tomb or ledger grave ((Fig 12). Adult burial. No evidence for coffin recorded. Shroud burial? Left in situ and not investigated further. Post-medieval, 19 th

				century?
[3]	Centre	0.25m	Area of disturbed ground cut into the yellow, grey-brown clay. Distinct parallel cuts orientated west – east. Cut 0.45m wide, however, the full length not exposed. The cut was scarcely wider than the body with an uneven bottom. Infilled with dark grey-brown clay.	Adult burial. Heavily disturbed. The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
			Part of the legs consisting of fragmentary remnants of both femurs and tibia's recorded	Bones lifted, then reburied in area after pipes laid.
[4]	Centre	0.3m	Area of disturbed ground cut into the yellow, grey-brown clay. Cut 0.35m wide, however, full length not exposed. Edges indistinct. Orientated west – east. Infilled with dark grey-brown clay. Disarticulated leg bones recorded.	Adult burial? Heavily disturbed. Shroud burial? Bones lifted, then reburied in area after pipes laid.
[5]	Centre	0.6m	A grave cut <i>circa</i> 0.45m wide orientated west	Adult burial.
			 east was recorded. Full length not exposed. Infilled with dark grey-brown clay. Burial showed evidence of having been disturbed with only a partial skull and parts of the upper body uncovered. 	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[6]	Centre	0.6m	A grave cut <i>circa</i> 0.4m wide orientated west – east was recorded. The cut was scarcely wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Lower torso and upper legs uncovered.	Adult burial. The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[7]	Centre	0.64m	A grave cut <i>circa</i> 0.5m wide orientated west – east was recorded. The cut was scarcely wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Lower torso and upper legs uncovered.	Adult burial. The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded. Bones lifted, then reburied in area
				after pipes laid.
[8]	Centre	0.7m	A grave cut <i>circa</i> 0.35m wide orientated west – east was recorded. The cut was scarcely wider than the body. Full length not exposed. Infilled with dark grey-brown clay. Long bones of legs exposed (femurs, tibias, and fibulas).	Adult burial. There was no evidence for a coffin recorded. Shroud burial? Left in situ and not
				investigated.
[9]	Centre	0.3m	A grave cut <i>circa</i> 0.45m wide orientated west – east was recorded. The cut was scarcely wider than the body with an uneven bottom.	Adult burial. The grave shape suggests a shroud
		1	Full length not exposed. Infilled with dark	burial; there was

		1	grey-brown clay. Long bones of legs exposed	certainly no
			(femurs, tibias, and fibulas).	evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[10]	Centre	0.6m	A grave cut circa 0.5m wide orientated west	Adult burial.
			 east was recorded. The cut was scarcely wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Long bones of legs exposed (femurs, tibias, and fibulas). 	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[11]	Centre	0.6m	A grave cut <i>circa</i> 0.45m wide orientated west	Adult burial.
			east was recorded. The cut was scarcely wider than the body. Full length not exposed. Infilled with dark	No evidence for coffin recorded. Shroud burial?
			grey-brown clay. Upper torso (chest, ribs, part of spine, and arm bones) recorded. The arms had been crossed over the chest with the hands at each opposing elbow.	Left <i>in situ</i> and not investigated further.
[12]	Centre	0.5m	A grave cut <i>circa</i> 0.38m wide orientated west	Adult burial.
			 east was recorded. The cut was scarcely wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Long bones of legs exposed (femurs, tibias, and fibulas). 	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[13]	Centre	0.6m	A grave cut <i>circa</i> 0.45m wide orientated west	Adult burial.
			east was recorded. The cut was scarcely wider than the body. Full length not exposed. Infilled with dark	No evidence for coffin recorded. Shroud burial?
			grey-brown clay. Long bones of legs exposed (femurs, tibias, and fibulas).	Left in situ and not investigated further.
[14]	Centre	0.31m	A grave cut that was <i>circa</i> 1m long, 0.4m	Childs burial.
			wide, orientated west – east was recorded. The cut was scarcely wider than the body, had rounded ends with an uneven bottom. Infilled with dark grey-brown clay. Full skeleton of a child exposed, head at west end. The arms had been crossed over the	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
			chest with the hands at each opposing elbow.	Bones lifted, then re-buried in area after pipes laid.
[15]	Centre	0.56m	A grave cut that was <i>circa</i> 1m long, 0.35m	Childs burial.
			wide, orientated west – east was recorded. The cut was scarcely wider than the body, had rounded ends with an uneven bottom. Infilled with dark grey-brown clay. Burial seems to have been disturbed in antiquity, with skull broken, and many bones	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
			disarticulated. The skeleton of a child	Bones lifted, then
			exposed, head at west end. The arms had been crossed over the chest with the hands	reburied in area

			at each opposing elbow.	after pipes laid.
[16]	Centre	0.3m	A grave cut <i>circa</i> 0.45m wide orientated west	Adult burial.
			 east was recorded. The cut was scarcely wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Lower abdomen and upper legs exposed (pelvis and femurs). 	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then re-buried in area after pipes laid.
[17]	Centre	0.6m	A grave cut <i>circa</i> 0.37m wide orientated east - west was recorded. The cut was scarcely wider than the body. Full length not exposed. Infilled with dark	Adult burial. The orientation suggests this may have been a priest.
			grey-brown clay. The head and upper torso were exposed (skull, scapula, spine and ribs). The skull was at the east end of the grave.	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Left <i>in situ</i> and not investigated further.
[18]	South	0.1m	A grave cut <i>circa</i> 0.45m wide orientated east - west was recorded. The cut was scarcely	Adult burial.
			wider than the body. Full length not exposed with only the skull	No evidence for coffin recorded. Shroud burial?
			was exposed, the rest disappearing into the baulk.	Left in situ and not investigated
[10]	Carrella	0.2m	Infilled with dark grey-brown clay.	further. Adult burial.
[19]	South	30utii 0.2iii	A grave cut <i>circa</i> 0.5m wide orientated west – east was recorded. The cut was scarcely wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Lower abdomen and upper legs exposed (spine, pelvis and femurs).	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[20]	South	0.6m	A grave cut <i>circa</i> 0.45m wide orientated west – east was recorded. The cut was scarcely	Adult burial.
			wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Part of chest and abdomen exposed (spine, ribs, and arm bones). The arms had been crossed over the abdomen.	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[21]	South	South 0.1m	A grave cut that was circa 1m long, 0.34m wide, orientated west – east was recorded.	Childs burial.
			The cut was scarcely wider than the body, had rounded ends with an uneven bottom. Infilled with dark grey-brown clay. Burial seems to have been disturbed in antiquity, with skull broken, and many bones disarticulated. The skeleton of a child	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
			exposed, head at west end.	Bones lifted, then reburied in area

				after pipes laid.	
[22]	South	0.5m	A grave cut <i>circa</i> 0.45m wide orientated west	Adult burial.	
			 east was recorded. The cut was scarcely wider than the body. Full length not exposed. Infilled with dark grey-brown clay. Long bones of legs exposed (femurs, tibias, and fibulas). 	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.	
				Bones lifted, then reburied in area after pipes laid.	
[23]	South	South 0.3m	A grave cut <i>circa</i> 0.45m wide orientated west – east was recorded. The cut was scarcely	Adult burial.	
			wider than the body. Full length not exposed. Infilled with dark grey-brown clay. Long bones of legs exposed (femurs, tibias, and fibulas).	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.	
				Bones lifted, then reburied in area after pipes laid.	
[24]	South	0.3m	A grave cut <i>circa</i> 0.38m wide orientated west – east was recorded. The cut was scarcely	Adult burial.	
			wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Part of chest and abdomen exposed (spine, ribs, and arm bones). The arms had been crossed over the chest with the hands at each opposing elbow.	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.	
				Bones lifted, then reburied in area after pipes laid.	
[25]	South	South 0.5m	0.5m	A grave cut <i>circa</i> 1.72m long, 0.36m wide at the head end and 0.3m wide at the foot end orientated west – east was recorded. The cut was scarcely wider than the body, had rounded ends and an uneven bottom. Infilled with dark grey-brown clay.	Adult burial. The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
			Full adult skeleton exposed. The arms had been crossed over the abdomen.	Bones lifted, then reburied in area after pipes laid.	
[26]	South	0.6m	A grave cut <i>circa</i> 0.45m wide orientated west – east was recorded. The cut was scarcely	Adult burial.	
				wider than the body. Full length not exposed. Infilled with dark grey-brown clay. Long bones of legs exposed (femurs, tibias, and fibulas).	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.	
[27]	South	South 0.5m	A grave cut that was <i>circa</i> 0.9m long, 0.35m wide, orientated west – east was recorded.	Childs burial.	
			The cut was scarcely wider than the body, had rounded ends with an uneven bottom. Infilled with dark grey-brown clay. Burial seems to have been disturbed in antiquity, with skull broken, and many bones disarticulated. The skeleton of a child	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.	
			exposed, head at west end. The arms had	Bones lifted, then reburied in area	

			been crossed over the abdomen.	after pipes laid.
[28]	South	0.8m	A grave cut <i>circa</i> 0.45m wide orientated west	Adult burial.
			 east was recorded. The cut was scarcely wider than the body and had a rounded end at the foot end. Full length not exposed. Infilled with dark grey-brown clay. Part of spine, pelvis, and long bones of legs exposed. 	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Left <i>in situ</i> and not investigated further.
[29]	South	0.8m	A grave cut <i>circa</i> 1.75m long, 0.38m wide at the head end and 0.32m wide at the foot end	Adult burial.
			orientated west – east was recorded. The cut was scarcely wider than the body, had rounded ends.	The grave shape suggests a shroud burial; there was certainly no
			Infilled with dark grey-brown clay.	evidence for a coffin recorded.
			Full adult skeleton exposed. The arms had been crossed over the abdomen.	Left <i>in situ</i> and not investigated further.
[30]	South	0.5m	A grave cut <i>circa</i> 0.39m wide orientated west – east was recorded. The cut was scarcely	Adult burial.
			 east was recorded. The cut was scarcely wider than the body with an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Skull and upper torso (chest and abdomen) exposed. 	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[31]	South	0.5m	A grave cut <i>circa</i> 0.36m wide orientated west – east was recorded. The cut was scarcely wider than the body with rounded head end and an uneven bottom. Full length not exposed. Infilled with dark grey-brown clay. Skull and upper torso (chest) exposed.	Adult burial. The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Bones lifted, then reburied in area after pipes laid.
[32]	South	0.8m	A grave cut <i>circa</i> 0.35m wide orientated west – east was recorded. The cut was scarcely	Adult burial.
			wider than the body with rounded head end. Full length not exposed. Infilled with dark grey-brown clay. Skull and upper torso (chest and abdomen) exposed. Arms were positioned alongside body.	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Left <i>in situ</i> and not investigated further.
[33]	South	0.8m	A grave cut <i>circa</i> 0.38m wide orientated west – east was recorded. The cut was scarcely	Adult burial.
			wider than the body with rounded head end. Full length not exposed. Infilled with dark grey-brown clay. Skull and upper torso (chest) exposed.	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin recorded.
				Left <i>in situ</i> and not investigated

				further.
[34]	South	0.1m	A grave cut that was <i>circa</i> 0.3m wide,	Childs burial.
			orientated west – east was recorded. Heavily disturbed, full shape of grave could not be determined.	No evidence for a coffin recorded.
			Skull and upper torso (chest and abdomen)	Shroud burial?
			exposed. The skull had been broken and many bones disarticulated.	Bones lifted, then reburied in area
			Infilled with dark grey-brown clay.	after pipes laid.
[35]	South	1.m	A grave cut <i>circa</i> 0.38m wide orientated west – east was recorded. The cut was scarcely wider than the body with rounded head end and an uneven bottom.	Adult burial. The grave shape suggests a shroud burial; there was
			Full length not exposed. Infilled with dark grey-brown clay. Skull and upper torso (chest and abdomen) exposed. Arms were	certainly no evidence for a coffin recorded.
			positioned alongside body.	Bones lifted, then reburied in area after pipes laid.
[36]	South	0.5m	A grave cut <i>circa</i> 0.36m wide orientated west	Adult burial.
			 east was recorded. The cut was scarcely wider than the body with rounded head end and an uneven bottom. 	The grave shape suggests a shroud burial; there was
			Full length not exposed. Infilled with dark grey-brown clay. Upper torso (chest and abdomen) exposed. Arms were positioned	certainly no evidence for a coffin recorded.
			across abdomen.	Bones lifted, then reburied in area after pipes laid.
[37]	South	0.5m	A grave cut <i>circa</i> 0.38m wide orientated west – east was recorded. Infilled with dark greybrown clay.	Adult burial.
				No evidence for a coffin recorded.
			Skull only was recorded in eastern section, rest of burial not observed.	Left <i>in situ</i> and not investigated further.
[38]	South	0.56m	A grave cut <i>circa</i> 0.35m wide orientated west – east was recorded. The cut was scarcely	Adult burial.
			wider than the body with an uneven bottom. Rounded foot end. Full length not exposed. Infilled with dark grey-brown clay. Part of pelvis and long bones of legs exposed (femurs, tibias, and fibulas).	The grave shape suggests a shroud burial; there was certainly no evidence for a coffin
				recorded.
				Bones lifted, then re-buried in area after pipes laid.
[39]	South	0.7m	A grave cut <i>circa</i> 0.5m wide orientated west	Adult burial.
			 east was recorded. The cut had parallel sides in the area observed. 	Coffin burial.
			Full length not exposed. Infilled with dark grey-brown clay.	Left <i>in situ</i> and not investigated further.
			Lower torso (abdomen and pelvis) and upper part of legs exposed. Arms were positioned across abdomen.	
			The body had been clearly placed within a wooden coffin with dark black-brown staining seen just within the grave cut and mirroring its shape. Four iron coffin nails were also recorded. It is not certain that there was a lid.	

[40]	South	0.7m	A grave cut <i>circa</i> 0.5m wide orientated west – east was recorded. The cut had parallel sides in the area observed. Full length not exposed. Infilled with dark grey-brown clay. Lower torso (abdomen and pelvis) and upper part of legs exposed. Arms were positioned alongside body. The body had been clearly placed within a wooden coffin with dark black-brown staining seen just within the grave cut and mirroring its shape. It is not certain that there was a lid.	Adult burial. Coffin burial. Left in situ and not investigated further.
[41]	South	0.65m	A grave cut <i>circa</i> 0.5m wide orientated west - east was recorded. The cut was sub rectangular in shape. Full length not exposed. Infilled with dark grey-brown clay. Skull and upper torso (chest and abdomen) exposed. Arms were positioned alongside body. The body had been clearly placed within a wooden coffin with dark black-brown staining seen just within the grave cut and mirroring its shape.	Adult burial. Coffin burial. Left in situ and not investigated further.
[42]	South	0.35m	A grave cut sub rectangular in shape with squared ends. It was 1.74m long, orientated west – east and was 0.38m wide, outlined in several places by stone fragments on edge. Infilled with dark grey-brown clay. Full adult skeleton exposed. The arms had been laid alongside the body.	Adult burial. The grave shape suggests a coffin burial though no physical evidence for a coffin was recorded. Bones lifted, then reburied in area after manhole access constructed.
[43]	South	0.6m	A grave cut sub rectangular in shape with squared ends. It was 1.78m long, orientated west – east and was 0.4m wide. Infilled with dark grey-brown clay. Full adult skeleton exposed. The arms had been laid alongside the body. A couple of coffin nails were all that remained of the coffin itself.	Adult burial. The grave shape suggests a coffin burial. A couple of coffin nails were the only evidence surviving for the coffin itself. Bones lifted, then reburied in area after manhole access constructed.
[44]	South	1.m	A grave cut sub rectangular in shape with squared ends. It was 1.8m long, orientated west – east and was 0.5m wide. Infilled with dark grey-brown clay. Full adult skeleton exposed. The arms had been laid alongside the body. The body had been partially disarticulated by disturbance perhaps by the re-opening of the grave for the deposition of the two graves lying above it.	Adult burial. The grave shape suggests a coffin burial though no physical evidence for a coffin was recorded. Bones lifted, then reburied in area after manhole access constructed.

Of the 44 recorded graves, 38 were adult burials, 5 were of children, while one was indeterminate, its identification as a grave being uncertain (Figs 4, 5, and 6). All were dug following the usual Christian practice of being orientated west to east, with all but one having their heads placed at the west end of the grave. There was only one exception, that found in grave [17], which had the head placed at the east end. This position is the rite adopted for the burial of priests.

The majority of the graves, 37 in total, appear to be shroud burials which are indicated by grave cuts that are scarcely wider than the body with a rounded end, and an uneven bottom to the base (Rodwell 1989).

Six of the graves are apparently coffin burials, graves [39], [40], [41], [42], [43] and [44]. These are characterised by cuts that are sub rectangular in shape with squared ends and are flat bottomed (Rodwell 1989). Only four of these graves had actual physical evidence for the coffin itself surviving, either in the form of soil staining, or by the presence of coffin nails.

The graves were also found to be in layers especially where deep sections were recorded. For example, in the northern manhole pit, three levels of graves were encountered. The first layer was at shallow depths, between 0.1m-0.3m with the average occurring at 0.3m, the second layer was between 0.31m-0.6m with most being close to 0.5m, with a third layer at a depth between 0.61m-1m; with the majority being around 0.8m below the current ground surface. It is uncertain if this layering was deliberate or just developed over time as new graves were dug. Unfortunately due to the mode of excavation, the narrowness of the trench, and the nature of the ground, determination of the nature and sequence of grave cuts was difficult, especially in deciding the level from which the graves had been dug, and which graves had truncated the cuts of others.

No direct dating evidence was obtained from any of them, except for graves [42], [43], and [44]. These lay under a broken grave stone (Fig 14) that bore memorial inscriptions to Ann Coppin (d 1773) and John Coppin (d 1832). This memorial stone probably relates to grave [42] and the one immediately below it grave [44], suggesting that they were placed within the same grave. Grave [43] was set slightly to the south. It is possible that the person in grave [43] was a close relative.

Culvert

In the south sector of the trench within the grassed area to the northwest of St Guron's well, running alongside the path, a stone lined culvert was uncovered (Fig 6). This consisted of a channel measuring 0.3m deep and 0.35m wide. It was constructed of granite slabs set on edge, floored with slate, and capped with granite capstones (*circa* 0.4m x 1m) the top of which was approximately 0.3m below the current ground surface. The culvert was cleared with only a slight layer of damp silt found on its floor, suggesting that it was still in use. It ran in a northeast to southwest direction, sloping to the southwest. The new services were dug at a level that ran below this culvert, which was rebuilt to still function once the trench was backfilled. It is uncertain what this culvert represents, whether it is part of the town water system associated with St Guron's Well (Preston-Jones and Mattingly 2000) or part of a drainage system taking water away from the church roof, that also feeds into the spouted roadside well that lies on the southwest side of the churchyard.

Discussion

This project has provided several valuable insights into the archaeological potential, history, and burial practices used at St Petroc's Church.

The history of the site indicates that the current church was on the site of an early medieval monastic site. Unfortunately within the areas examined, no evidence for this was discovered.

The earliest activity recorded within the trenches was from the late 12th to 13th century, indicated by the presence of several potsherds of this date. All were of domestic wares including cooking vessels. Unlikely to be domestic midden deposited within the churchyard, this is more likely to represent material utilised by workmen constructing the church. Although unstratified, and not associated with any features, these are certainly contemporary with the Norman church and the church tower that was constructed when its use changed to that of parish church after St Petroc's monastery was relocated to a different site and refounded as an Augustine priory.

The church was largely rebuilt in the late 15th century. This is reflected by the quantity of pottery of this date within the ceramic assemblage. Again most vessels are domestic utilitarian wares, probably brought in by the workforce; however, a sherd of Saintonge Plain Ware does suggest contacts with the wider world and perhaps even a greater affluence within the community. Contact with Europe that also reflects the level of grandeur that was being striven for, for this building at this period is evidenced by the presence of Flemish (Low Countries) floor tiles. These are plain glazed tiles which come in green and yellow glazed varieties which suggest that at least part of the rebuilt building may have had a patterned (checkerboard?) floor.

The west end of the church was completely rebuilt in the 19th century, this probably explains the earlier material including the earlier floor tile fragments found in the centre and south sectors of the trenching.

A total of 44 graves were recorded within the area of the trenching (Figs 4, 5, and 6). Due to the scale of the site works it was not possible to determine the sex of individual burials and thus no comment can be made about the ratio of male to female.

However, it was recorded that five of the burials were of children. It is generally accepted that the "normal" ratio of deaths of children to adults in pre-industrial societies is about 4:2 (Daniell 1997). It can be seen that the observed ratio *circa* 1:7 at St Petroc's Church is nowhere near this. There are several reasons for this. Children's remains are more delicate and may not have survived in acidic soils. Alternatively, the graves being much smaller and more ephemeral may have resulted in them being missed in the course of the work. Lastly, the absence of child graves could also be the result of zoning within the churchyard.

From elsewhere in the country it is known that specific areas within a churchyard were designated for child burials, clusters of child burials having been found at Raunds, Whithorn, Jarrow, Winchester and Hartlepool. The west or east ends of the church were often favoured. At Taunton 85 per cent of child burials were found at the western end, whilst at Kellington juvenile burials were discovered at the east end of the chancel (Daniell 1997). There is also evidence for the zoning of graves in Cornwall. In the early medieval graveyard found at Mawgan Porth there was a distinct group of children's cist graves at the north west end of the cemetery (Bruce-Mitford 1997) while a similar group, probably post-medieval (16th century?), consisting of eight children's graves was found lying close together within a small part of Tintagel churchyard (Nowakowski 1992). It may be that at St Petroc's similar zoning was in practice where children's burials were concentrated in an area not investigated, which would explain their low numbers within the trench.

However, although these patterns are interesting some caution should be taken in assessing their significance. Only a small fraction of the entire area of the cemetery was excavated during this project. The sample of graves examined is thus very small, and the apparent patterns may perhaps be simply fortuitous and unrepresentative of the larger pattern to be seen in the rest of the churchyard.

Apart from the graves noted above which lay underneath the slate memorial (Fig 14) dedicated to Ann Coppin (d 1773) and John Coppin (d 1832) no direct evidence for the dates of any of the burials recorded during the work at St Petroc's Church was obtained.

Examination of cemeteries elsewhere in north Cornwall has suggested a sequence of burial practices. The earliest Christian burials are within long cists, the practice continuing from the 8th to the late 14th century. This can be seen at places such as Carnanton, Lanvean and Mawgan Porth (Thorpe 2001). Shroud burials become prevalent from the 15th to 17th centuries (although many parishes kept a communal coffin in which the corpse was carried during the burial service), with burial in woollen shrouds or wool lined coffins being made compulsory in 1666 and 1678 to boost the English woollen industry (Tate 1946). Wooden coffins only entered into popular use during the 1700s (Friar 1996) and it is about this time that stone headstones begin to appear in churchyards in large numbers.

This sequence suggests that at St Petroc's Church the shroud burials encountered are more likely to be of 15th to 17th century date, and the burials in coffins are likely to of predominantly 18th or 19th centuries date. The churchyard was closed to burials in 1849 (Revd Canon Graham Minors pers. comm.) so all the burials must predate this. The path across the churchyard along which the trench was excavated is shown on the 1840 Tithe Award Map, which indicates that the burials are older than this (indeed the construction of the path must be one of the major reasons why several of the burial were close to surface), it certainly resulted in the demolition of the chest or ledger tomb, Grave [2].

The existence of groups of graves may also be a clue to their date. It has been noted that there was an increased emphasis on the phenomenon of the family grave during the post-Reformation Tudor period (16th century) when many of the religious foci governing the preferential placing of graves was removed from churches and their graveyards (Daniell 1997).

Apart from a few exceptions it was found that the graves formed distinct groups (Figs 4, 5, and 6).

- a) The first group consisted of four burials, Graves [4], to [7]. All were adults. All were shroud burials.
- b) The second group consisted of nine burials, Graves [8], to [16]. There were the remains of seven adults and two children. All were shroud burials.
- c) The third group consisted of five burials, Graves [17] to [21]. Four of the burials were of adults, with one child. Grave [17] is of interest in that its orientation is different from the others in that the head lay in the east. This burial rite is generally indicative of the burial of a priest. It is done so that on the day of resurrection, he will rise, and face his flock (Friar 1996). All were apparently shroud burials.
- d) The fourth group was the largest and greatest concentration of burials. This consisted of 16 burials, Graves [24 to [39]. Fourteen of the burials were adult, two were of children. All were apparently shroud burials apart from Grave [39] which was within a wooden coffin.
- e) The fifth group consists of two burials, Graves [40] and [41]. Both were adults within coffin burials.
- f) The sixth group consisted of three burials, Graves [42] to [44]. All were adults within coffin burials. This group was associated with the recumbent slate memorial slab dedicated to the memories of Ann Coppin (d 1773) and John Coppin (d 1832).

These groups of graves probably represent family burial plots used over a period of time. They are clearly separated by areas of ground which were completely devoid of

burials; this may indicate that these plots had been marked out on the original ground surface from which they had been dug perhaps by grave markers (Figs 4, 5 and 6).

The absence of burials south of Grave [42] in the ground to the west of St Guron's Well is also notable (Fig 6); although it is possible that the trench did not reach a depth sufficient to encounter burials this is unlikely. Included within this area is the main approach to the west door of the church, the main ceremonial entrance to the building so this would have been kept clear of burials. In 1820 CS Gilbert, in his book 'Historical Survey of Cornwall', in discussing St Guron's Well states 'there are no bodies interred near the spring' (quoted in Preston-Jones and Mattingly 2000). It is possible that an area around the well (and especially upslope) was kept clear of burials to prevent contamination of what was one of the most important sources of water for the whole of the town of Bodmin.

Considering St Guron's well, it is possible that the culvert recorded in the course of the work may be part of the water system associated with this feature.

Certainly being constructed into a steep hillside the church has suffered inundation from water and innumerable springs. In the early 19th century substantial efforts were made to conduct the spring water and other outflows away from the church. Wallis writing in 1827 noted that *circa* 1817 the ground beneath the church was full of springs and that sometimes in winter the church was inundated with water. While attempting to drain it a covered gutter of granite was discovered on the northern side of the church possibly even one of the aqueducts referred to in the 16th century accounts. This was completed 'from the south-east corner immediately within the rails of the altar. It passes down by the northern wall and under the western door across the yard, into Brewery Lane. At the same time, 'a spacious trench' was formed all around the church and by these improvements 'the whole edifice has been rendered perfectly dry' (quoted in Preston-Jones and Mattingly 2000).

The culvert recorded in the project sounds very similar to the 'covered gutter of granite' described above, so it could be part of the 16^{th} century aqueducts, or indeed part of the system emplaced in 1817.

The current investigations has shown that the archaeological potential for features surviving below ground is very high within the churchyard, it is thus highly desirable that any future work involving ground disturbance should be monitored archaeologically.

References

Primary sources

Ordnance Survey, c1875. 25 Inch Map First Edition (licensed digital copy at HE)

Ordnance Survey, c1907. 25 Inch Map Second Edition (licensed digital copy at HE)

Ordnance Survey, 2007. Mastermap Digital Mapping

Tithe Map and Apportionment, c1841. Parish of Bodmin (licensed digital copy at HE)

British Geological Survey, 1969. 1:50000 Map. Bodmin. Sheet 347.

Publications

Bruce-Mitford, R, 1997. Mawgan Porth. A settlement of the late Saxon period on the north Cornish coast. English Heritage, London.

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

Friar, S, 1996. A Companion to the English Parish Church. Allan Sutton, Stroud.

Nowakowski, J, 1992. Grave News from Tintagel. CAU Report, Truro.

Preston-Jones, A and Mattingly, J, 2000. St Guron's Well, Bodmin Parish Churchyard, Cornwall. Historic Environment Service, Cornwall County Council, Truro Rodwell, W, 1989. English Heritage Book of Church Archaeology. Batsford, London.

Tate, W,E, 1946, rep 1983. The Parish Chest. Chichester.

Thomas, N, 1999. St Petroc's Church, Bodmin. Installation of floodlight cables Historic Environment Service, Cornwall County Council, Truro.

Thorpe, C, 2001. St Mawgan in Pydar Church, Cornwall – Archaeological watching brief. CAU, Cornwall Council.

Wallis, J, 1827. The Bodmin Register no 1.

Websites

http://www.heritagegateway.org.uk/gateway/English Heritage's online database of Sites and Monuments Records, and Listed Buildings

Project archive

The CAU project number is 146359

The project's documentary, photographic and drawn archive is housed at the offices of Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY. The contents of this archive are as listed below:

- 1. A project and information file containing site records and notes, project correspondence and administration (file no 146359).
- 2. Field plans and copies of historic maps stored in an A2-size plastic envelope (GRE 817/1 6).
- 3. Digital photographs stored in the directory: R:\Historic Environment (Images)\SITES.A-D\Bodmin St Petroc's Church WB 146359
- 4. English Heritage/ADS OASIS online reference: cornwall2-186113
- 5. This report text is held in digital form as: G:\TWE\Waste & Env\Strat Waste & Land\Historic Environment\Projects\Sites\Sites B\Bodmin St Petrocs Church WB 146359\Report

Artefacts retrieved during the project are stored at the HE Projects Finds Archive Store, Cardrew Industrial Estate, Redruth.

The site code is STP14.

Appendix 1: Written Scheme of Investigation for an archaeological watching brief at St Petroc's Church, Bodmin

Introduction

Background

HE Projects, have been requested by Mr David Brown on behalf of the Revd Canon Graham Minors to provide a project design and estimate for a programme of archaeological recording (email dated 15th December 2013) at St Petroc's church Bodmin. The work involves the excavation of water and gas pipeline trenches along the footpath and they extend around the northern side of the church. The work is expected to take place early in 2014.

St Petroc's church is of medieval origin and the preservation of buried archaeological material is likely to be high. The church is a Grade I Listed Building and is set within a Conservation Area and the Historic Settlement area of Bodmin. There are Listed structures in the churchyard, which include the well of St Guron, a cross and a column.

Phil Copleston (Historic Environment Planning Advice Officer, Cornwall Council) has been consulted on the scope of the archaeological recording and this project design has been approved by him.

Historical background

The church is one of the most important and largest medieval buildings in Cornwall. It stands on the site of St Petroc's monastery, but its use changed to that of parish church once St Petroc's was refounded as an Augustine priory in the early 12th century. The base of the tower is the only part of the Norman church to survive. The tower is located on the north side of the church, at the division of the nave and chancel. The reason for this location may be that it was originally a detached campanile, or because it formerly stood at the end of the north transept of a cruciform Norman church. Surviving accounts and contracts indicate that the church was largely rebuilt in the late 15th century. All except the tower, chancel, and west end were rebuilt, to produce a fine, spacious, battlemented building consisting of nave, chancel, aisles and a south porch said to contain the finest example of fan vaulting in Cornwall. The west end, which incorporated a fine Norman doorway, was completely rebuilt in the early 19th century. A Roman coin was found at the time. St Guron's well, in the churchyard, is likely to be a remnant of the earlier monastic foundation. A pillar, a grave slab from the friary, and various parts of a gothic cross are also located there.

The route of the trenching is close to several important archaeological sites;

- St Petroc's medieval church (MCO6278).
- A Romano-British Ingot was found within the churchyard (MCO217).
- Early medieval period monastery (MCO23003).
- A medieval cross shaft and a column are located close to the route of the trench (MCO4997 and MCO23006).
- Medieval well of St Guron is located in the churchyard (MCO6943).

The excavations may cause disturbance to buried archaeological deposits, in the form of human burials and/or structures associated with the medieval church.

Construction works

The following works are understood to involve ground disturbance and to require an archaeological watching brief:

• Hand-dug and mini-digger excavated gas and water trenches measuring approximately 0.6m wide by up to 0.5m deep.

Aims and objectives

- To ensure that the site works are carried out in such a way as to allow recording as set out in this Written Scheme of Investigation.
- To record any stratified medieval human remains which cannot be preserved in situ.
- To determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.
- To establish the nature of the activity on the site.
- To identify any artefacts relating to the occupation or use of the site.

The key objective will be:

• To record evidence for the nature of the archaeological potential of the churchyard, for example the depth and character of deposits within the churchyard.

Methodology

The archaeological programme will follow three stages: fieldwork; archiving, and archive report production. Where significant deposits are encountered further stages of assessment; analysis; final publication may be required.

Fieldwork

Archaeological Recording

The archaeological fieldwork will be carried out as an intermittent watching brief involving close liaison between the site contractor and the project archaeologist. Any significant archaeological features exposed during the trenching will be carefully excavated by hand and archaeologically recorded by written description, plan, section and photographic record as appropriate by an HE Projects archaeologist.

Inspection and recording of the trenching

The trenching should be carried out by a machine fitted with a toothless bucket or hand-dug. Open sections of the trench will be inspected by the archaeologist, who will record any archaeological features exposed within it.

Where appropriate this may require:

- A stop on the works whilst archaeological deposits or structures are recorded. In the
 event of significant remains being discovered a contingency should be allowed to
 permit the archaeologist time to record the remains.
- Human remains will not be 'chased' into the sides of the trench, and burials should be left *in situ* and treated with respect.
- Non-recent burials (before-c1600 AD) will be recorded using a skeleton recording form, planned and photographed and will not normally be subject to analysis.

Recording - general

During the archaeological recording the archaeologist will:

• Identify and record any archaeological features that are revealed in the excavated area; the level of recording will be appropriate to the character/importance of the archaeological remains.

If complex and/or significant archaeological deposits are encountered then the archaeological requirements should be reviewed by the client, the Historic Environment Planning Advice Officer and HE Projects. In the event that remains cannot be preserved in situ then full-scale excavation may be required. The significance of

the remains should be agreed between the client, the Historic Environment Planning Advice Officer and HE Projects.

Where necessary the detailed archaeological recording may include:

- Excavation of archaeological features exposed in the excavated area and plotting them onto a base map.
- Production of plans and section drawings of the excavated features and recording of features using a continuous numbering system.
- Retrieval of artefacts.

Recording - general

- Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the Ordnance Survey Landline (electronic) map; all drawings will include standard information: site details, personnel, date, scale, north-point.
- All significant features and finds will be accurately located at an appropriate scale. Sections will normally be drawn at 1:10 and plans at 1:20.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.
- Photography: scaled monochrome photography will be used as the main record medium, with colour digital images used more selectively for illustrative purposes.
 This will include both general and site specific photographs. Photographs should have a scale and detailed ones should include a north arrow.
- Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within significant archaeological features (ditches and pits, etc) will be sampled for environmental evidence and dating material. In the event that significant organic remains are encountered, advice may be needed from Vanessa Straker (Regional Advisor for Archaeological Science).
- If human remains are discovered on the site the Historic Environment Planning Advice Officer and the Ministry of Justice will be informed. All recording will conform to best practice and legal requirements.
- If in situ and articulated human remains are uncovered, which require excavation, they will be excavated with due reverence. The site will be adequately screened from public view. Once excavated, human remains must not be exposed to public view.
- If human remains are not to be removed their physical security will be ensured, by backfilling as soon as possible after recording.
- Fragments of human bone should be treated with respect and reburied.

Treatment of finds

The archaeological fieldwork may produce artefactual material.

- All finds in significant stratified contexts predating 1800 AD (eg, settlement features) should be collected by context and described. Post-medieval or modern finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.
- All finds will be collected in sealable plastic bags which will be labelled immediately
 with the context number or other identifier.

Archiving

Following review with the HE Project Manager the results from the fieldwork will be collated as an archive. This will involve washing and cataloguing of finds, the indexing and cross-referencing of photographs, drawings and context records.

All finds, etc will be stored in a proper manner (being clearly labelled and marked and stored according to HE guidelines).

- All records (context sheets, photographs, etc) will be ordered, catalogued and stored in an appropriate manner (according to HE guidelines).
- The site archive and finds will initially be stored at HE premises and transferred to the Royal Cornwall Museum and the RCM conditions for archives will be followed.
- In the event that there are no finds or they are retained by the owner, the documentary archive in due course shall be deposited with the Cornwall Record Office, but in the medium term will be stored at ReStore. All digital records will be filed on the Cornwall Council network.

Archive report

The results from the fieldwork will be presented in a concise report. Copies of the report will be distributed to the Client, the Principal Historic Environment Officer and the local and main archaeological record libraries. A PDF copy of the report will be produced.

This will involve:

- Producing a descriptive text.
- Producing maps and line drawings.
- Selecting photographs.
- · Report design.
- Report editing.
- · Dissemination of the finished report.
- Deposition of archive and finds in the Royal Cornwall Museum, Truro.

The report will have the following contents:

- Summary Concise non-technical summary.
- Introduction Background, objectives, aims and methods.
- Results

 Factual description of the results of the various aspects of the project, with separate sections as necessary for discussion/interpretation and potential for further analysis.
- Discussion Discussion of the interpretation of the results, highlighting information gained on a chronological or thematic basis.
- Archive A brief summary and index to the project archive.
- Appendix A copy of the WSI.
- Illustrations General location plan.
 - Detailed location plans to link fieldwork results to OS map.

Recommendations for further analysis and publication.

- Selected plans and section drawing (if appropriate).
- Photographs (if appropriate).

An English Heritage/ADS online access to the index of archaeological investigations (OASIS) record will be made.

In the event that significant remains are uncovered (in situ medieval burials, etc) further stages of analysis and publication would be required. The cost for this work is not included within this project design and estimate.

Monitoring

- This written scheme of investigation will need to be approved by the Planning authority.
- The recording exercise will be monitored. The Historic Environment Planning Advice
 Officer should be informed one week in advance of the intention to start the
 recording.
- HE Projects will liaise with the Historic Environment Planning Advice Officer to advise on the programme and progress of work, and agree site meetings as required.
- A summary of the results will be presented to the Historic Environment Planning Advice Officer within one month of the completion of the fieldwork.
- In the event that significant remains are encountered an updated project design will be agreed with the Historic Environment Planning Advice Officer.

Project Staff

An experienced archaeologist employed by HE will carry out the archaeological fieldwork.

The report will be compiled by experienced archaeologist(s) employed by HE.

Relevant experienced and qualified specialists will be employed to undertake appropriate tasks during the assessment and analysis stages of the project.

The project manager will be a Member of the Institute for Archaeologists (IFA), who will:

- Take responsibility for the overall direction of the project.
- Discuss and agree the objectives and programme of each stage of the project with project staff, including arrangements for Health and Safety.
- Monitor progress and results for each stage.
- Edit the project report.

Timetable

The archiving and archive report will be completed within 12 months of the ending of the excavations. The timetable for further stages of assessment, analyses and publication will be agreed with Historic Environment Planning Advice Officer in the light of the results from the fieldwork.

Health and safety during the fieldwork

The Historic Environment is within the Environment Directorate of Cornwall Council. HE Projects follows the Council's *Statement of Safety Policy*.

<u>Prior to carrying out any fieldwork HE Projects will carry out a risk assessment.</u>

Copyright

Copyright of all material gathered as a result of the project will be reserved to Cornwall Council. Existing copyrights of external sources will be acknowledged where required.

Use of the material will be granted to the client.

Insurance

As part of Cornwall Council, HE is covered by Public Liability and Employers Liability Insurance.

Standards

HE Projects follows the Institute for Archaeologists' Standards and Code of Conduct and is a Registered Archaeological Organization.

As part of Environment Directorate, Cornwall Council, the HE Projects has certification in BS9001 (Quality Management), BS14001 (Environmental Management), OHSAS18001 (Health, Safety and Welfare), Investors in People and Charter Mark.

Freedom of Information

All information gathered during the implementation of the project will be subject to the rules and regulations of the Freedom of Information Act 2000.

NOTES:

- HE Projects will require 1 weeks' notification before commencing the fieldwork project.
- The client will regularly liaise with HE Projects to ensure that the project archaeologist is aware when sections of the trench are open for inspection and/or structures/burials are exposed during site works.
- It is intended that the programme for archiving, assessment, analysis and reporting is reviewed in the light of the fieldwork results.

9/1/14

Dr Andy Jones

Archaeologist Team Leader

Historic Environment Projects

Cornwall Council

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Appendix 2: Finds catalogue

North Sector U/s

- 1 bodysherd Cornish Medieval Coarseware (Lostwithiel type ware). 12^{th} to 13^{th} centuries.
- 1 rimsherd Cornish Late Medieval Coarseware (Lostwithiel Ware). Cooking vessel. $15^{\rm th}$ to $16^{\rm th}$ centuries.
- 3 sherds (two with traces of white paint decoration on exterior). Cornish Late Medieval Coarseware (Lostwithiel Ware). 15th to 16th centuries.
- 1 rimsherd Cornish Late Medieval Coarseware. Rim of a cooking vessel (very well fired, almost a stoneware). 15th to 16th centuries.
- 1 neck sherd Cornish Late Medieval Coarseware. Cooking vessel (very well fired, almost a stoneware). 15th to 16th centuries.
- 1 sherd Post-Medieval Glazed Red Earthenware (South Somerset / Donyatt Ware). Large plate with sgraffito decoration. 17th to 18th centuries.
- 1 sherd North Devon Post-Medieval Glazed Red Earthenware. 16th to 18th centuries.

Centre Sector U/s

- 1 rimsherd Cornish Medieval Coarseware. Cooking vessel. 12th to 13th centuries.
- 6 bodysherds Cornish Medieval Coarseware (Lostwithiel type ware). 12th to 13th centuries.
- 1 rimsherd Cornish Late Medieval Coarseware. Jug? 15th to 16th centuries.
- 1 basal angle sherd Cornish Late Medieval Coarseware. 15th to 16th centuries.
- 1 sherd Cornish Late Medieval Coarseware. 15th to 16th centuries.
- 1 neck sherd North Devon Post-Medieval calcareous ware (Barnstaple ware). $17^{\rm th}$ to $18^{\rm th}$ centuries.
- 2 sherds Modern White Glazed Stoneware (china). 19th to 20th centuries.
- 1 sherd Modern porcelain, 19th to 20th centuries.
- 4 fragments clay pipe stem. $\emptyset = 4$ mm. 1538

 $\emptyset = 3$ mm. 1663.

 $\emptyset = 3$ mm. 1663.

 $\emptyset = 2.5$ mm. 1725.

- 1 roofing tile fragment. Granitic fabric similar to Lostwithiel Ware. 15th to 16th centuries.
- 4 floor tile fragments. Green glaze on surface. Flemish (Low Countries) floor tile. $16^{\rm th}$ century.
- 1 iron ring. Coffin handle? 18th to 19th centuries?
- 1 iron disc. Coffin fitting? 18th to 19th centuries?
- 1 iron nail. Coffin nail. 18th to 19th centuries?

- 1 basal shard Post-Medieval green bottle glass. 18th to 19th centuries.
- 1 rim shard hand blown Post-Medieval blue bottle glass. 18th to 19th centuries.
- 1 shard Modern window glass. 19th to 20th centuries.

Southern Sector U/s

- 11 sherds Cornish Medieval Coarseware. 12th to 13th centuries.
- 3 bodysherds Cornish Medieval Coarseware (Lostwithiel type ware). 12^{th} to 13^{th} centuries
- 1 sherd French Late Medieval Coarseware (Saintonge Plain Ware). 15^{th} to 16^{th} centuries.
- 1 neck sherd Cornish Late Medieval Coarseware (Lostwithiel Ware). 15th to 16th centuries.
- 1 sherd Cornish Late Medieval Coarseware (Lostwithiel Ware). 15th to 16th centuries.
- 3 sherds Post-Medieval Glazed Red Earthenware. 17th to 18th centuries.
- 1 sherd with handle springing. North Devon Post-Medieval calcareous ware (Barnstaple ware). 17^{th} to 18^{th} centuries.
- 1 sherd North Devon Post-Medieval calcareous ware (Barnstaple ware). 17^{th} to 18^{th} centuries.
- 1 sherd Post-Medieval Yellow Glazed Slip Decorated Earthenware (Bristol / Staffordshire Ware) $18^{\rm th}$ century.
- 4 sherds Modern White Glazed Stoneware (china). 19th to 20th centuries.
- 1 fragment clay pipe stem (mouth piece). $\emptyset = 1.5$ mm. 1850
- 4 floor tile fragments. 3 with green glaze, 1 with yellow glaze on surface. Flemish (Low Countries) floor tile. 16th century.
- 4 floor tile fragments. 2 with green glaze. Unknown coarse fabric, Granitic? North Devon? Post-medieval. $16^{\rm th}$ to $18^{\rm th}$ centuries.
- 3 floor tile fragments. Post-medieval? Modern? Probably 19th to 20th centuries.
- 1 roofing tile fragment. Green glazed. Fabric comparable to North Devon Post-Medieval Gravel Tempered Glazed Red Earthenware (Barnstaple Ware). 17th to 18th centuries.
- 1 shard Modern window glass. 19th to 20th centuries.

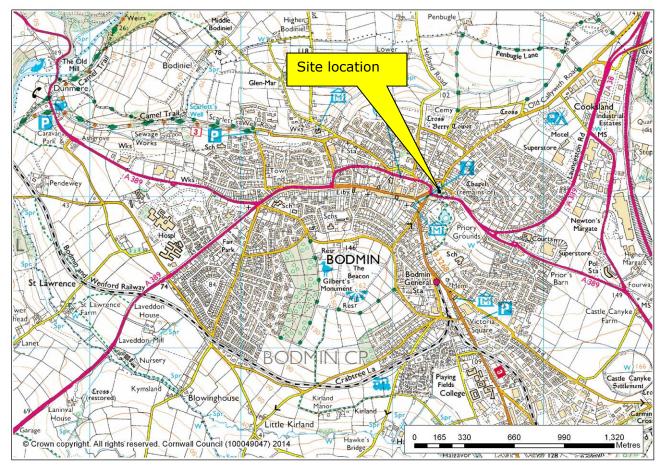


Figure 1. General location of St Petroc's Church.

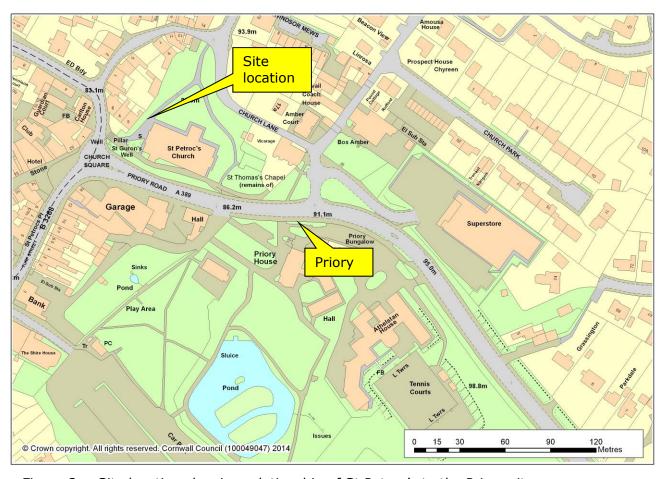


Figure 2. Site location showing relationship of St Petroc's to the Priory site.

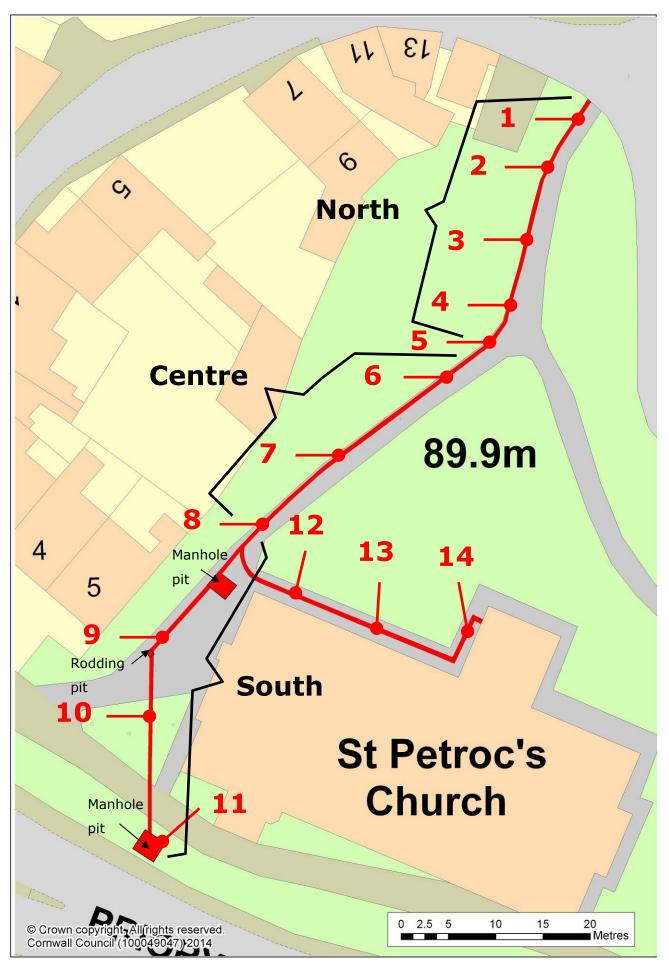


Figure 3. Trench location plan showing site divisions, and positions of recorded sections.

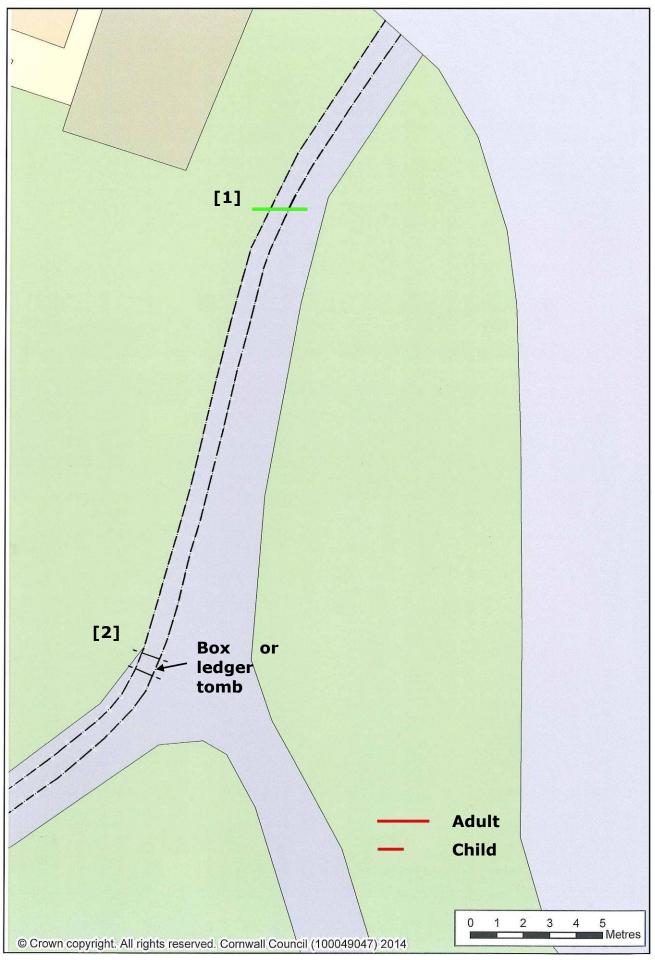


Figure 4. Trench plan northern sector showing recorded graves. Shallow depth 0.10m - 0.30m (red), Medium depth 0.31m - 0.60m (blue), and deep 0.65m + (green).

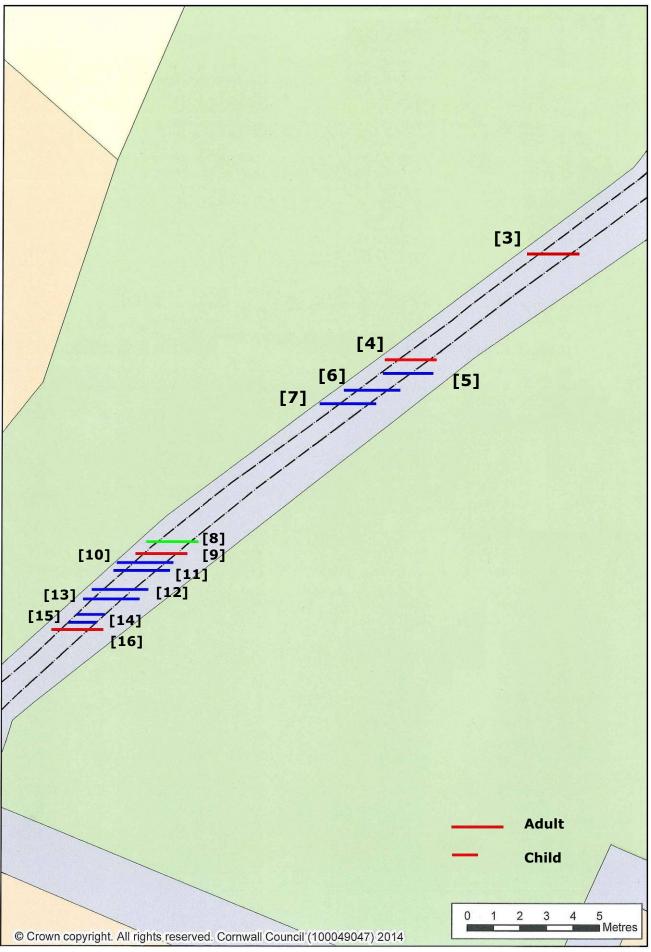


Figure 5. Trench plan central sector showing recorded graves. Shallow depth 0.10m-0.30m (red), Medium depth 0.31m-0.60m (blue), and deep 0.65m+(green).

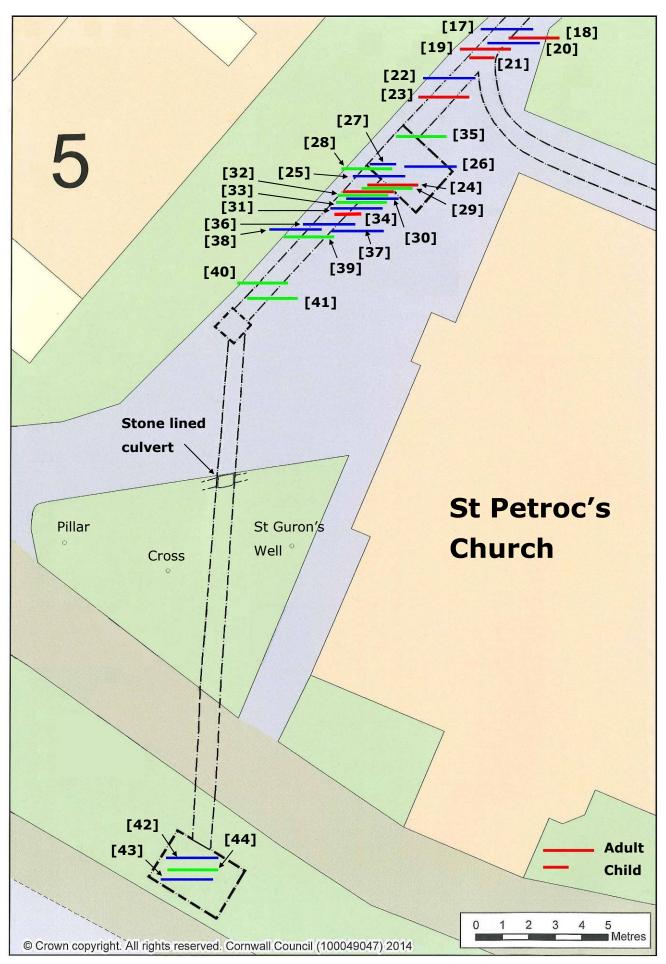


Figure 6. Trench plan southern sector showing recorded graves. Shallow depth 0.10m - 0.30m (red), Medium depth 0.31m - 0.60m (blue), and deep 0.65m + (green).

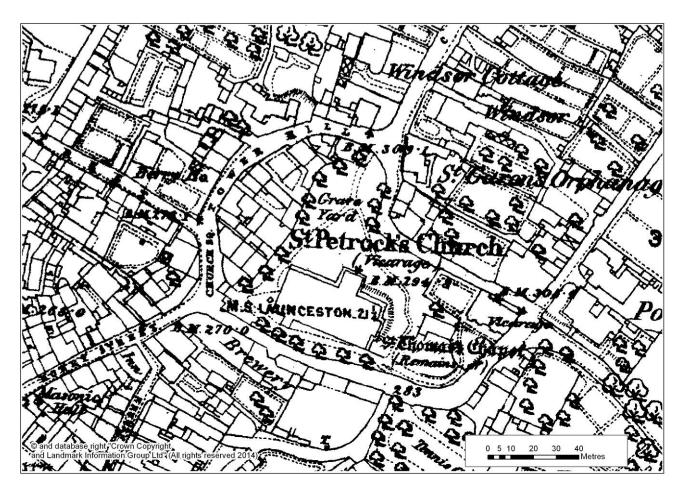


Figure 7. 1880 OS map showing churchyard.



Figure 8. North sector looking south prior to excavation of trench showing slope of ground.



Figure 9. North sector looking north prior to excavation of trench showing slope of ground.



Figure 10. Centre sector looking south showing slope of ground.



Figure 11. South sector looking east showing slope of ground, west side of Church and vicinity of St Guron's Well.



Figure 12. North sector showing remnants of box tomb (ledger grave).



Figure 14. Memorial stone to Ann Coppin (d 1773) and John Coppin (d 1832).



Figure 13. Sample section along east spur of the trenches showing nature of ground encountered.