# Holy Trinity Church, Cambridge

Archaeological monitoring and recording of geotechnical test pit and boreholes



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**UNIVERSITY OF CAMBRIDGE** 

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### **Summary**

Archaeological monitoring and recording were carried out during the digging of one test pit and three exploratory boreholes at Holy Trinity Church, Cambridge (TL 4498 5853). The testpit, located south of the church, against the eastern, external wall of the vestry, revealed a wide walltrench, back-filled with construction deposits and graveyard soil including small- and medium-sized pieces of disarticulated human bone and a small assemblage of predominantly Post-Medieval material culture. Beneath this wall trench, a horizon of undisturbed graveyard soil was identified with indicators that in situ burials might be present within that layer. Within the church, three shallow boreholes determined that compacted earth exists directly below the concrete floor in the North and South Transepts, whilst a borehole in the Nave revealed a void containing service ducts.

### Introduction

Archaeological monitoring of a single hand-dug test pit and three exploratory boreholes was undertaken at Holy Trinity Church, Market Street, Cambridge (TL 4498 5853) on the 21<sup>st</sup> April 2015 by the author for the Cambridge Archaeological Unit (CAU). This work was commissioned by Purcell UK Architects on behalf of Holy Trinity Church, Cambridge. It was carried out in accordance with the Written Scheme of Investigation set out by the CAU (Dickens 2015), in response to a brief produced by G. Stewart of the Cambridgeshire Historic Environment Team (Stewart 2015). The aim of the geotechnical testing was to inform the larger project of extension and alteration proposed for the church premises.

### Background

Holy Trinity Church is located in the historic city centre of Cambridge, to the east of the River Cam (Figure 1). The church is bordered on the northern and eastern sides by semipedestrianised streets (Market Street and Sidney Street), to the south by the remaining portion of the original graveyard and Church Walk, and to the west by Henry Martyn Hall. The church is situated on second terrace river gravels at a height of 9.1m OD.

The archaeological and historical background of the church, including a summary of archaeological evidence within a 0.2km radius of the building, has already been presented in a desk based assessment (Appleby 2011) and therefore only points pertinent to the limited works undertaken during the geotechnical investigations are summarised here. The area of the church is not known to be the location of prehistoric activity. Similarly, Roman and Saxon activity, whilst present within the span of the modern city, was centred elsewhere, predominantly around Castle Hill and Bridge Street. Medieval occupation of the area around Market Street is thought to have developed from the 11<sup>th</sup> century onwards, as Cambridge became a thriving urban centre.

A church on the site of the current (Grade II listed) Holy Trinity Church is known to have burnt down in the 'Cambridge Fire' of 1174. The earliest elements of the west wall of the current structure are thought to date to the late 12<sup>th</sup> century (possibly presenting part of the original structure). The fabric of the rest of the building demonstrates a succession of construction, extension and remodelling episodes, mostly completed during the 14<sup>th</sup> and 15<sup>th</sup> centuries. Some work was undertaken on the chancel in the early 19<sup>th</sup> century and a vestry was constructed adjoining the southern wall of the south aisle in the 1950s. Some of the church's graveyard survives on the northern, eastern and western sides of the building, although it is known from maps and records of land acquisition that the original boundaries of the churchyard were more extensive on every side. Monitoring of a hand-dug cable trench along the length of Church Walk, outside the current southern limit of the churchyard, demonstrated that this land had formerly been within the cemetery, although due to disturbance from earlier service trenches, no articulated burials were encountered during this

watching brief (Dickens 1999). Diocesan records indicate that the churchyard was officially closed in 1855 (Appleby 2011, Table 3.1).

### Methodology

The aim of the archaeological monitoring of the geotechnical boreholes was to establish the extent to which intact archaeology might survive beneath the current ground surface/floor level inside and outside the church building.

One test pit and three boreholes were excavated, with all hand and machine digging undertaken by CB Groundworks & Construction Ltd. A single test pit (Test Pit 3) was dug against the outside of the eastern wall of the vestry (1.15m by 0.90m wide, 0.98m deep). The hand-digging was monitored, the character of the strata investigated and the spoil separated by context and surveyed for finds. A section drawing was completed at 1:10. Contexts were assigned a context number (e.g. **[001]**) and were recorded using the CAU's modified version of the MoLAS recording system (Spence 1994). Three 12cm diameter boreholes were cut through the concrete floor of the church. These were cut with the aim of identifying the depth of that layer and the nature of the immediately underlying deposit and therefore had limited scope for archaeological observation. The nature and depth of the sub-concrete layer, as superficially exposed, was recorded.

All work was carried out in strict accordance with statutory Health and Safety legislation and within the recommendations of FAME (Allen & Holt 2010).

### Results

Test Pit 3, abutting the external face of the eastern wall of the vestry, revealed a sequence of contexts related to the vestry's construction (**[001–004]**) and one possible pre-vestry horizon (**[005]**) (Table 1; Figure 2). The extent of construction deposits [001], [002] & [003] across the entire area of the test pit indicates that the wall-trench dug for the vestry wall was wider (perhaps by only a few centimetres) than the test pit (i.e. the original wall-trench was >0.9m from the brick coursing of the wall). Thus, the entire test pit was located within the back-filled wall-trench down to a depth of 0.86m, the base of the wall foundations. Concrete footing ([004]) and soakaway deposit ([002]) aside, the majority of the wall-trench was filled with redeposited graveyard soil ([001] & [003] which contained quite frequent small and medium-sized human bones or bone fragments, occasional metal coffin fittings and fragments of tile, pot and a few other pieces of predominantly Post-Medieval material culture. The absence of larger human bones in the back-fill suggests that the bigger bones encountered during the excavation of the wall-trench may have been removed before the rest of the soil was deposited back into the trench.

At depths below 0.86m, further graveyard soil was revealed. This level is assumed to be undisturbed by the construction of the vestry. A single, horizontal, adult femur (notable for being considerably larger in size than anything found within the back-filled soil above) was partially exposed at this level. Due to the location of this bone in relation to the test-pit's sides, neither of the ends of this bone were exposed and thus it could not be determined whether this was part of an articulated burial. However, the size and east–west orientation of this long bone suggests that *in situ* burials may be present in this horizon.

TEST PIT 3			
Depth (m)	Description	Material Culture	
0-0.05	Current surface Paving slabs	na	
0.05–0.59	<i>Wall-trench fill</i> [001] Redeposited graveyard soil Dark grey-black soil with patches of orange builder's sand in the upper 0.05m of the deposit. Soil contained quite frequent small pieces of stone, especially small flint gravels and small clunch fragments.	Human bone (disarticulated, quite frequent, mostly small fragments or small bones, a mixture of adult, juvenile and infant bones), Metal (coffin handle and tacks/fittings), Tile (fragments, Late Medieval–early 19 <sup>th</sup> century), Pottery (small sherds, 17 <sup>th</sup> –early 19 <sup>th</sup> century), Clay pipe (16 <sup>th</sup> –17 <sup>th</sup> century), Wig curler (18 <sup>th</sup> century), Glass (small body sherds, 18 <sup>th</sup> –19 <sup>th</sup> century), Oyster shell (small fragments), Worked bone (one medieval or early Post-Medieval parchment pricker or point), Worked stone (one fragment)	
0.11–0.60	Soakaway/construction deposit [002] Sand and grit Coarse grained orange sand with small grit pieces. The upper part of this deposit was restricted to a 0.21m-wide linear band against the vestry wall, while the lower part spread across the whole area of the test pit.	na	
0.59–0.86	<i>Wall-trench fill</i> [003] Redeposited graveyard soil Dark grey-black graveyard soil with quite frequent small pieces of stone, especially small flint gravels and small clunch fragments.	Human bone (disarticulated, quite frequent, mostly small- and medium-sized fragments or small bones, a mixture of adult and infant bones), Metal (coffin handle and tacks/fittings), Tile (fragments, Post-Medieval), Clay pipe (16 <sup>th</sup> –17 <sup>th</sup> century), Pottery (one small sherd, 18 <sup>th</sup> –19 <sup>th</sup> century), Glass (one small body sherd, 18 <sup>th</sup> –19 <sup>th</sup> century), Oyster shell (small fragments)	
0.60–0.86	Wall foundation [004] Concrete footing Footing extended 0.21m into the test pit.	na	
0.86-0.98+ Table 1	Graveyard soil [005] Graveyard soil Dark grey-black graveyard soil with quite frequent small pieces of stone, especially small flint gravels	Human bone (frequent, disarticulated small- and medium-sized fragments and one large femur partially exposed at the base of the test pit – potentially part of an <i>in situ</i> burial)	

All human bone found was collected for immediate on-site reburial.

Table 1.

Three shallow boreholes (diameter: 0.12m) within the church removed 0.18–0.23m of flooring and concrete to expose what lay immediately beneath (Table 2). In Borehole 1, in the North Transept, and Borehole 4, in the South Transept, dark, compacted earth was revealed

directly below the concrete, whilst in Borehole 2, in the west end of the Nave, a void containing plastic pipes for 20<sup>th</sup> century services lay below the concrete layer (Figure 2).

BOREHOLE 1		BOREHOLE 2			BOREHOLE 4	
Layer	Depth (m)	Layer	Depth (m)		Layer	Depth (m)
Floor tiles and insulating foam	0-0.07	Floor tiles and insulating foam	0–0.07		Floor tiles	0-0.02
Concrete	0.07-0.18	Concrete	0.07-0.18		Concrete	0.02-0.23
Dark, compacted earth	0.18–0.23+	Void containing services	0.18–0.29+		Dark, compacted earth	0.23–0.24+

Table 2.

### Discussion

Test Pit 3 demonstrated that the church vestry's east wall, constructed in the 1950s, had a wide, back-filled wall-trench which had disturbed all burials to a depth of 0.86m. However, a potentially intact cemetery horizon was identified directly beneath this wall-trench. The location of this test pit against the vestry wall means that no conclusions can be made about the extent of disturbance in the rest of the limited area of graveyard that survives to the east of this modern building. The material found within the wall-trench was predominately Post-Medieval in date with no distinctly late 19<sup>th</sup> or 20<sup>th</sup> century material amongst the assemblage. This corresponds with the documented closure of the cemetery in the mid-19<sup>th</sup> century.

The shallow boreholes within the church revealed little archaeological information, other than that that compacted earth exists directly below the concrete floor in the North and South Transepts whilst service conduits are present under the floor in at least parts of the Nave.

### Acknowledgements

Archaeological work at Holy Trinity Church, Cambridge was commissioned by Purcell UK Architects on behalf of Holy Trinity Church, Cambridge and monitored by Gemma Stewart of Cambridgeshire Historic Environment Team. On-site observation and recording was undertaken by Iona Robinson. Report graphics were produced by Vicki Herring. The project was managed by Alison Dickens.

### References

Allen, J.L. & A. Holt, 2010. *Health and Safety in Field Archaeology*. Federation of Archaeological Managers and Employers (FAME).

Appleby, G.A., 2011. Holy Trinity Church, Market Street, Cambridge: An archaeological desktop assessment. (CAU Report 1013.) Cambridge Archaeological Unit.

Dickens, A., 1999. Archaeological Observations on Cable Laying at Church Walk, Cambridge (TL 450 585). (CAU Report 300.) Cambridge Archaeological Unit.

Dickens, A., 2015. A Specification for Archaeological Monitoring and Recording of Geotechnical test pits at Holy Trinity Church, Cambridge. (Planning ref. 13/0091/LBC; WSI Ref. 2015/AD005.) Cambridge Archaeological Unit.

Spence, C. (ed.), 1994. Archaeological Site Manual (3<sup>rd</sup> edition.) London: Museum of London.

Stewart, G. 2015. Brief for Archaeological Monitoring and Recording: Holy Trinity Church and Henry Martyn Hall. (CHET Design Brief.) Cambridgeshire County Council Historic Environment Team.



Figure 1. Location of Holy Trinity Church

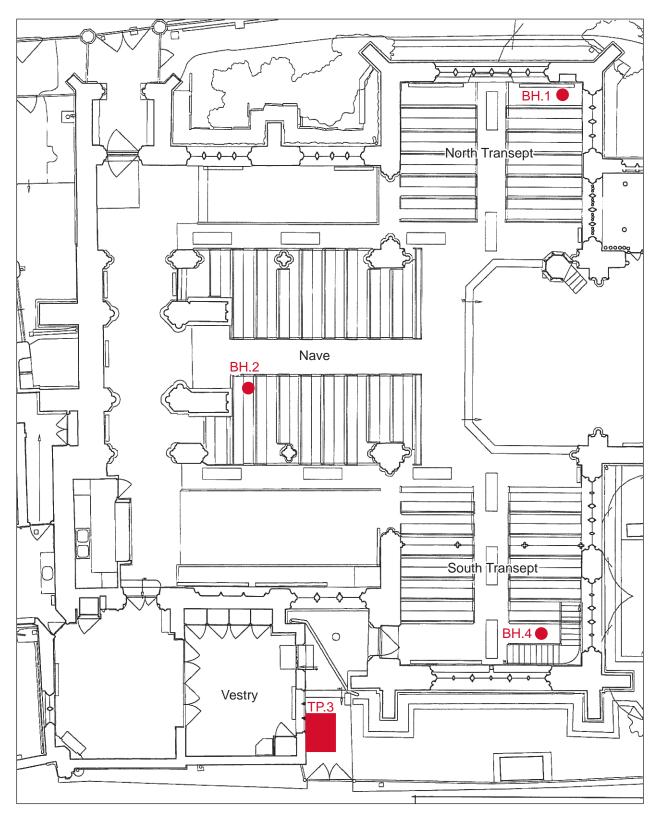


Figure 2. Location of Boreholes 1, 2 and 4, and Test Pit 3

## **OASIS DATA COLLECTION FORM: England**

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### **Printable version**

### OASIS ID: cambridg3-209926

### **Project details**

-	
Project name	Archaeological monitoring and recording of a test pit and boreholes at Holy Trinity Church, Cambridge
Short description of the project	Archaeological monitoring and recording were carried out during the digging of one test pit and three exploratory boreholes at Holy Trinity Church, Cambridge (TL 4498 5853). The test-pit, located south of the church, against the eastern, external wall of the vestry, revealed a wide wall-trench, back-filled with construction deposits and graveyard soil including small- and medium-sized pieces of disarticulated human bone and a small assemblage of predominantly Post-Medieval material culture. Beneath this wall trench, a horizon of undisturbed graveyard soil was identified with indicators that in situ burials might be present within that layer. Within the church, three shallow boreholes determined that compacted earth exists directly below the concrete floor in the North and South Transepts, whilst a borehole in the Nave revealed a void containing service ducts.
Project dates	Start: 21-04-2015 End: 21-04-2015
Previous/future work	Yes / Yes
Any associated project reference codes	HTC 15 - Sitecode
Any associated project reference codes	ECB4419 - HER event no.
Type of project	Field evaluation
Site status	Listed Building
Current Land use	Community Service 1 - Community Buildings
Current Land use	Other 4 - Churchyard
Monument type	NONE None
Significant Finds	POTTERY Post Medieval
Significant Finds	TILE Post Medieval
Significant Finds	GLASS Post Medieval
Significant Finds	HUMAN REMAINS Post Medieval
Significant Finds	WORKED BONE Post Medieval
Methods & techniques	"'Test Pits"'

### OASIS FORM - Print view

Development type	Building refurbishment/repairs/restoration
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	After full determination (eg. As a condition)

### **Project location**

Country	England
Site location	CAMBRIDGESHIRE CAMBRIDGE CAMBRIDGE Holy Trinity Church
Postcode	CB2 3NZ
Study area	2.00 Square metres
Site coordinates	TL 4496 5851 52.2052985132 0.12160747521 52 12 19 N 000 07 17 E Point
Height OD / Depth	Min: 9.10m Max: 9.10m

### **Project creators**

Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Alison Dickens
Project director/manager	Alison Dickens
Project supervisor	Iona Robinson
Type of sponsor/funding body	Landowner
Name of sponsor/funding body	Purcell UK Architects on behalf of Holy Trinity Church, Cambridge

### **Project archives**

Physical Archive recipient	Cambridgeshire County Archaeology Store
Physical Archive ID	HTC 15
Physical Contents	"Ceramics", "Glass", "Metal", "Worked bone", "Worked stone/lithics"
Digital Archive recipient	Cambridgeshire County Archaeology Store
Digital Archive ID	HTC 15
Digital Contents	"Ceramics", "Glass", "Metal", "Worked bone", "Worked stone/lithics"
Digital Media available	"Images raster / digital photography","Images vector","Text"
Paper Archive recipient	Cambridgeshire County Archaeology Store

### OASIS FORM - Print view

Paper Archive ID	HTC 15
Paper Contents	"Ceramics","Glass","Metal","Worked bone","Worked stone/lithics"
Paper Media available	"Notebook - Excavation"," Research"," General Notes","Plan","Report","Section","Survey "
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