



HERITAGE NETWORK



**ST JAMES' CHURCH,  
Pulloxhill, Beds.**

HN806

*Archaeological Monitoring Report*





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

ST. JAMES' CHURCH  
Pulloxhill, Beds.

HN806

*Archaeological Monitoring Report*

*Prepared on behalf of Pulloxhill Parochial Church Council*

by

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*The cover photo shows St James' Church looking west*

## Acknowledgements

The fieldwork for this project was carried out by David Hillelson. The report was compiled by Mark Winter and edited by David Hillelson.

The Heritage Network would like to express its thanks to Pamela J. Ward, Chartered Architect, and David Baker, Diocesan Archaeological Adviser, for their co-operation and assistance in the execution of this project.

## Summary

<b>Site name and address:</b>	St. James' Church, Pulloxhill, Bedfordshire, MK45 5HD		
<b>County:</b>	Bedfordshire	<b>District:</b>	Mid Bedfordshire
<b>Village/town:</b>	Pulloxhill	<b>Parish:</b>	Pulloxhill
<b>Planning reference:</b>	n/a	<b>NGR:</b>	TL 0616 3380
<b>Client name and address:</b>	Pulloxhill Parochial Church Council, c/o Pamela J. Ward, Chapel Farm, Whipsnade, Dunstable, Bedfordshire, LU6 2LL		
<b>Nature of work:</b>	Drainage trenching	<b>Former land use:</b>	Churchyard
<b>Site Status:</b>	n/a	<b>Reason for investigation:</b>	Faculty jurisdiction
<b>Position in planning process:</b>	n/a	<b>Project brief originator:</b>	Diocesan Archaeological Adviser
<b>Size of affected area:</b>	c.22m <sup>2</sup>	<b>Size of area investigated:</b>	c.4.5m <sup>2</sup>
<b>Site Code:</b>	HN806	<b>Other reference:</b>	n/a
<b>Organisation:</b>	Heritage Network	<b>Site Director:</b>	David Hillelson
<b>Project type, methods etc...</b>	Monitoring	<b>Archive Recipient:</b>	n/a
<b>Start of work</b>	23/04/2009	<b>Finish of work</b>	23/04/2009
<b>Related SMR Nos:</b>	n/a	<b>Periods represented:</b>	None
<b>Oasis UID:</b>	Heritage1-58905	<b>Significant finds:</b>	Human bone
<b>Monument types:</b>	Graves		
<b>Physical archive:</b>	None		
<b>Previous summaries/reports:</b>	n/a		

### Narrative:

During excavation of a new drainage trench at St James' Church, Pulloxhill, human remains were encountered. As a result the Heritage Network was commissioned by Pulloxhill Parochial Church Council to carry out a programme of archaeological monitoring on the remaining works.

This investigation revealed the presence of at least 10 graves, containing at least 7 adults and 4 juveniles. A more detailed assessment of age and sex was not possible due to the partial recovery and poor condition of the

remains.

## 1. Introduction

**1.1** This report has been prepared on behalf of the *Pulloxhill Parochial Church Council*, as part of a programme of archaeological observation and recording of groundworks in the churchyard of St James', Pulloxhill, Beds. The archaeological fieldwork was undertaken upon discovery of human remains during excavation of a drainage trench on site and with the agreement of the Diocesan Archaeological Adviser. All work followed the standard guidance for archaeological work in churchyards provided by the Association of Diocesan and Cathedral Archaeologists.

**1.2** The church and churchyard are situated in the centre of the village of Pulloxhill, centred on NGR TL 0616 3380 (Figure 1). The present church has medieval origins with later alterations and is a grade II\* listed building (heritagegateway).

**1.3** The groundworks were associated with the construction of toilet facilities in the church. The work was initially conducted without archaeological supervision but the Heritage Network was subsequently commissioned to monitor the work when human remains were encountered within a drainage trench.

**1.4** The aim of the monitoring and recording programme has been to record the location, extent, date, character, condition, significance and quality of the surviving archaeological remains and to excavate and record such as would be likely to be destroyed by the works.



## 2. Fieldwork

### *SITE TOPOGRAPHY AND GEOLOGY*

**2.1** The study area is centred on NGR TL 0616 3380, at approximately 105mAOD (Figure 1). The churchyard is bordered to the northwest by Church Road, to the northeast by properties along Orchard Road, to the southeast by fields and to the southwest by Rectory Farm.

**2.2** The site lies on the boundary between two different soil types. The first type are derived from the Evesham 3 Association (411c) which are associated with Jurassic and Cretaceous clays and described as

‘Slowly permeable calcareous clayey, and fine loamy over clayey soils. Some slowly permeable seasonally waterlogged non-calcareous soil’ (SSEW 1983).

**2.3** The second type are derived from the Ashley Association (572q) which are associated with Chalky till and described as

‘Fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging associated with similar but wetter soils. Some calcareous and non-calcareous slowly permeable clayey soils’ (SSEW 1983).

### *METHODOLOGY*

**2.4** The timetable for the fieldwork followed the client's groundwork schedule. A single site visit was made to monitor the groundworks.

**2.5** The machining of the pipe trench was undertaken using a tracked mini-digger. This was fitted with a 0.45m toothed bucket. Spoil from the groundworks was inspected for archaeological artefacts.

**2.6** Where possible human remains were photographed and located but preserved in situ. Remains which had been disturbed during excavation were taken to the Heritage Network office to be broadly assessed for age at death, sex and any sign of obvious gross pathology. Age at death was ascertained by recording the degree of bone fusion, with specific reference to the cranial sutures and epiphyses of the long bones, and examining the levels of dental development and wear (Scheuer and Black). Remains were then categorised as Adult (fully fused, with complete adult dentition in wear), sub-adult (largely fused skeleton of near adult proportion, some deciduous dentition) or juvenile (little or no fusion, predominantly deciduous dentition). Sex was inferred from observation of a series of gender specific traits observed on the pelvis and cranium. The pelvis is considered the most reliable indicator of sex in the human skeleton (Buikstra and Ubelaker 1994, p16) and where possible changes were observed on the ventral arc, sub pubic concavity and ischiopubic ramus ridge. These changes were scored as:

Blank –unobservable



- 1- Female
- 2- Ambiguous
- 3- Male

Changes in the greater sciatic notch were also noted and recorded as:

- 1- Female
- 2- Probably female
- 3- Ambiguous
- 4- Probably male
- 5- Male

In addition to these morphological differences a number of gender specific traits were also observed on the cranium. These differences were based at the nuchal crest, mastoid process, supra-orbital margin, supra-orbital ridge and mental eminence. Each of these was rated as follows:

- 1- Female
- 2- Probably female
- 3- Ambiguous
- 4- Probably male
- 5- Male

A more comprehensive assessment was not conducted on these remains due to the low number and incomplete recovery of individuals.

**2.7** No *Project Design* was requested for the present project. However, all work followed the practice recommended by the association of Cathedral and Diocesan Archaeologists, and the current standards and guidelines published by English Heritage, the Institute of Field Archaeologists, and others.

### ***SERVICE TRENCH***

**2.8** One service trench was observed. The trench ran in a northwest to southeast direction from the church gate to the church tower and measured c.0.45m wide, reaching a depth of up to 1.00m (Figure 2).

**2.9** The stratigraphy of this trench consisted a 0.08m thick tarmac path over a 0.06m thick yellowish brown (10YR 5/6) gravel levelling layer. Beneath this was a dark yellowish brown (10YR 3/6) silty clay cemetery soil measuring up to 0.86m thick. At the bottom of the trench the yellowish brown (10YR 5/8) sandy gravel natural was encountered.

**2.10** Excavations on site revealed a total of at least 10 graves (Figure 3), none of which appeared to have either grave goods or evidence for coffins:

#### **Grave 1 (Plate 1)**

**2.11** Grave 1 had been heavily disturbed prior to the Heritage Network's arrival on site. Despite this the cervical vertebra and right side clavicle, scapula and humerus were all evident, protruding from the trench section at a depth of 0.90m below the existing ground level. A large amount of material was recovered from this area and taken to the Heritage Network offices for

assessment. This revealed the presence of elements from the skull, torso, arm, upper leg and foot. Given the orientation of the remains still present in the trench it therefore seems that two individuals were encountered in this area. The first consisting of a skull and upper elements of the torso and the second consisting of the lower body. All elements associated with these individuals appear fully fused and adult in nature but the poor level of preservation and high degree of fragmentation makes ascertaining sex of the individuals impossible.

#### **Grave 2 (Plate 1)**

**2.12** Grave 2 contained a skull at a depth of 0.90m below the surface. This appears to be of adult size and completely fused and was contained within a clearly defined grave cut. Given the position of the body in the trench it is possible that some elements recovered near Grave 1 belong to this individual.

#### **Grave 3 (Plate 1)**

**2.13** Grave 3 contained a skull at a depth of 0.70m below the ground surface. These remains appear to be fully fused and of adult size and, given its location, it is unlikely that any other material recovered from the site is associated with this individual.

#### **Graves 4, 5 and 6 (Plate 2)**

**2.14** These graves were all located very closely together. Grave 4 contained a skull at a depth of 0.90m below the surface and was observed within a grave cut. Grave 5 contained a badly damaged skull, possibly of a child, at a depth of 0.90m below the ground surface. Grave 6 appears to be a left and right tibia and may represent the lower limbs of Grave 4. This was observed at a depth of 0.90m below the surface.

**2.15** A quantity of bone from near these graves was recovered and brought to the Heritage Network offices for further analysis. These remains belonged to the skull, torso and upper limb. The remains were also largely unfused suggesting that this individual was a juvenile, and these remains are most likely from Grave 5. Two left humeri were observed here indicating that two individuals are represented within these remains, both of which can be considered as juveniles.

#### **Grave 7 (Plate 3)**

**2.16** Grave 7 contained a skull at a depth of 0.60m below the existing ground surface. These remains appear to be fully fused and of adult size.

#### **Grave 8 (Plate 3)**

**2.17** Grave 8 may represent a pelvis and was observed at a depth of 0.55m below the ground surface. Further remains were disturbed in this area and brought to the Heritage Network office for further analysis. These appear to represent the pelvis, lower limbs and feet of at least two individuals. Examination revealed that these elements were largely unfused, suggesting that these individuals were juveniles.

#### **Grave 9 (Plate 4)**

**2.18** Grave 9 appears to contain a left and right tibia at a depth of 0.80m below the existing surface. Further remains recovered from near this grave include elements of the torso and the left side of the mandible. This individual appears to be of adult size and has adult dentition.

Examination of the mandible revealed heavy wear on the premolars and third molar and the absence of the first and second molars with complete remodelling of the sockets.

**Grave 10 (Plate 5)**

**2.19** Grave 10 contained a skull and redeposited humerus at a depth of 0.80m below the ground surface. These elements appear to be of adult size and fully fused.

**Unstratified**

**2.20** A small quantity of bone which did not appear to belong to any other graves was recovered from the trench. This consisted of a cervical vertebra, 2 thoracic vertebrae, a right side perinatal femur, radius and ulna and the proximal third of an unfused right tibia. The unfused nature of these remains is further evidence for the burial of juveniles on the site.

### 3. Discussion

**3.1** St James' is a largely medieval church with 19<sup>th</sup> century alterations. The building is Grade II\* listed and a further 17 Grade II listed buildings are recorded within 1km. A watching brief conducted on the excavation of a French drain at the church in 1999 revealed the medieval foundations of the church and its original layout, as well as blocked doorways and windows. Another watching brief, conducted in 1991 during the laying of a new gas pipeline 250m to the northwest, revealed evidence of modern agricultural activity as well as medieval pottery. An evaluation conducted at Flitton Road, 500m to the northeast, revealed a pit containing late Neolithic/early Bronze Age pottery as well as some later features.

**3.2** A total of 10 graves, containing at least 11 individuals, were recorded during this project. These individuals appear to comprise represent 7 adults and 4 juveniles, unfortunately it was not possible to assign sex to any of the adults due to the poor condition and partial recovery of the remains.

**3.3** No dating evidence in the form of grave goods, personal possessions, coffin furniture or nails was revealed to indicate the age of the burials investigated. Nevertheless the location of these burials across the present access path and on a slightly different orientation to the existing grave monuments suggests that they predate the last reorganisation of the churchyard which may be contemporary with the rebuilding of the church in the mid 19<sup>th</sup> century.

#### ***CONFIDENCE RATING***

**3.4** The Heritage Network was not commissioned to undertake this project until human remains were disturbed on the site. All other conditions during the course of the fieldwork, including weather and ground conditions, were generally good for the identification of potential features and deposits, and for their investigation.

**3.5** There are no further circumstances, which would lead to a confidence rating for the present project, which is less than High.

### 4. Schedule of Site Visits

Date	Staff	Hours	Comments
23/04/09	DJH	10	Monitor drainage

### 5. Bibliography

Baker, D., 2009, *Model Brief for Archaeological Investigation, Recording and Reporting*

Buikstra, J. and Ubelaker, D. (eds.) 1994, *Standards for Data Collection from Human Skeletal Remains*, Arkansas Archaeological Survey Research Series No. 44

Institute of Field Archaeologists, 1999, *Standard and Guidance for Archaeological Field Evaluation*.

Scheuer, L. and Black, S. 2000, *Developmental Juvenile Osteology*, Elsevier Academic Press, London

Soil Survey of England and Wales 1983 *Soil Map Sheet 4, Eastern England, Scale 1:250,000*

### 6. Illustrations & Plates

Figure 1 ..... Site location

Figure 2 ..... Site layout

Figure 3 ..... Grave layout

Plate 1 ..... Graves 1-3, looking east

Plate 2 ..... Graves 4-6, looking east

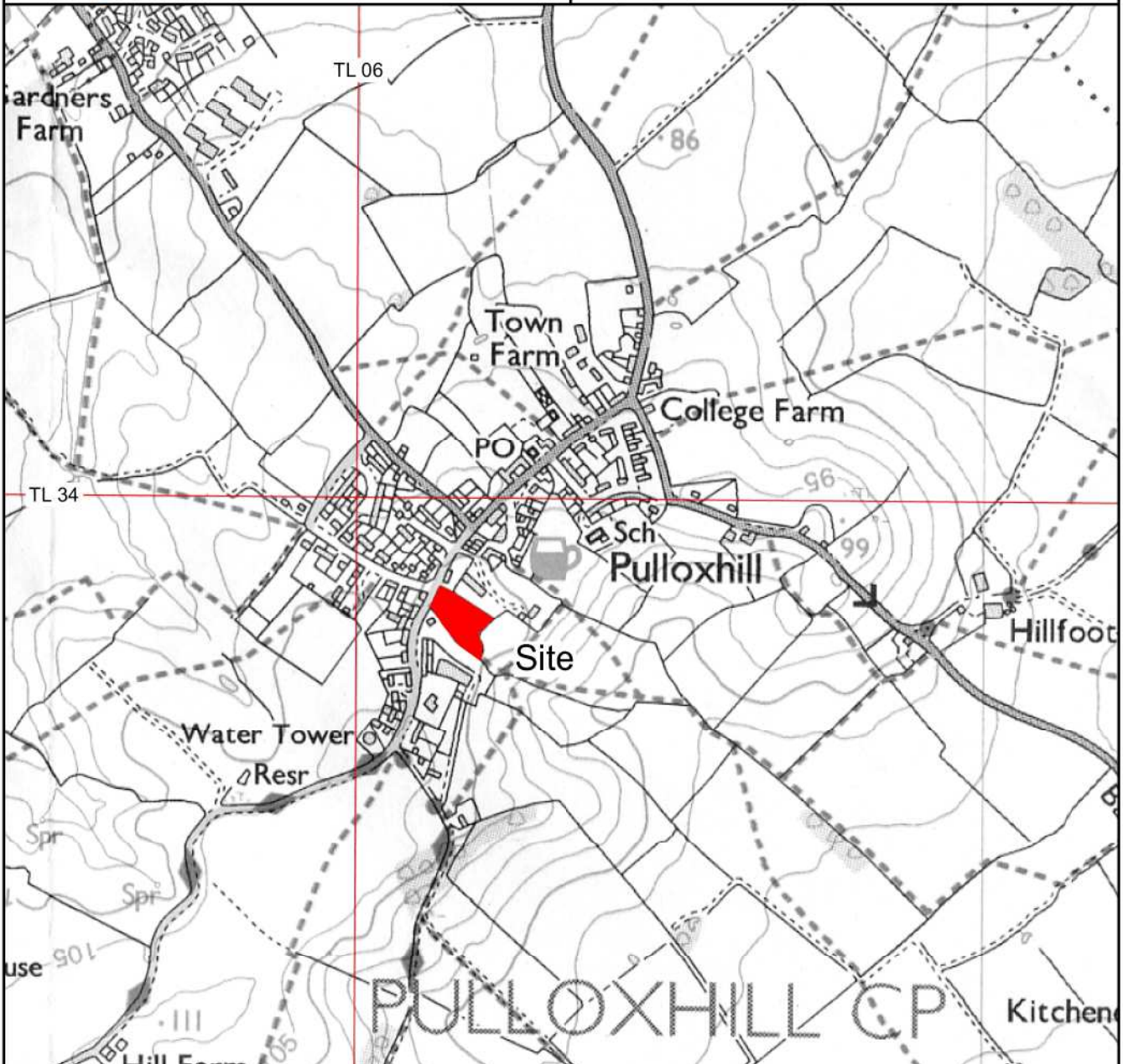
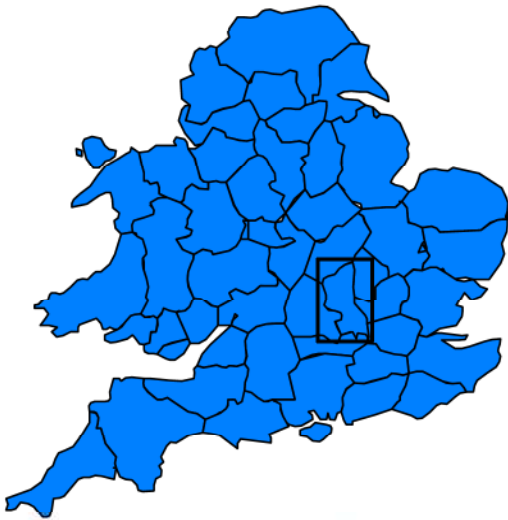
Plate 3 ..... Graves 7-8, looking east

Plate 4 ..... Grave 9, looking east

Plate 5 ..... Grave 10 looking east



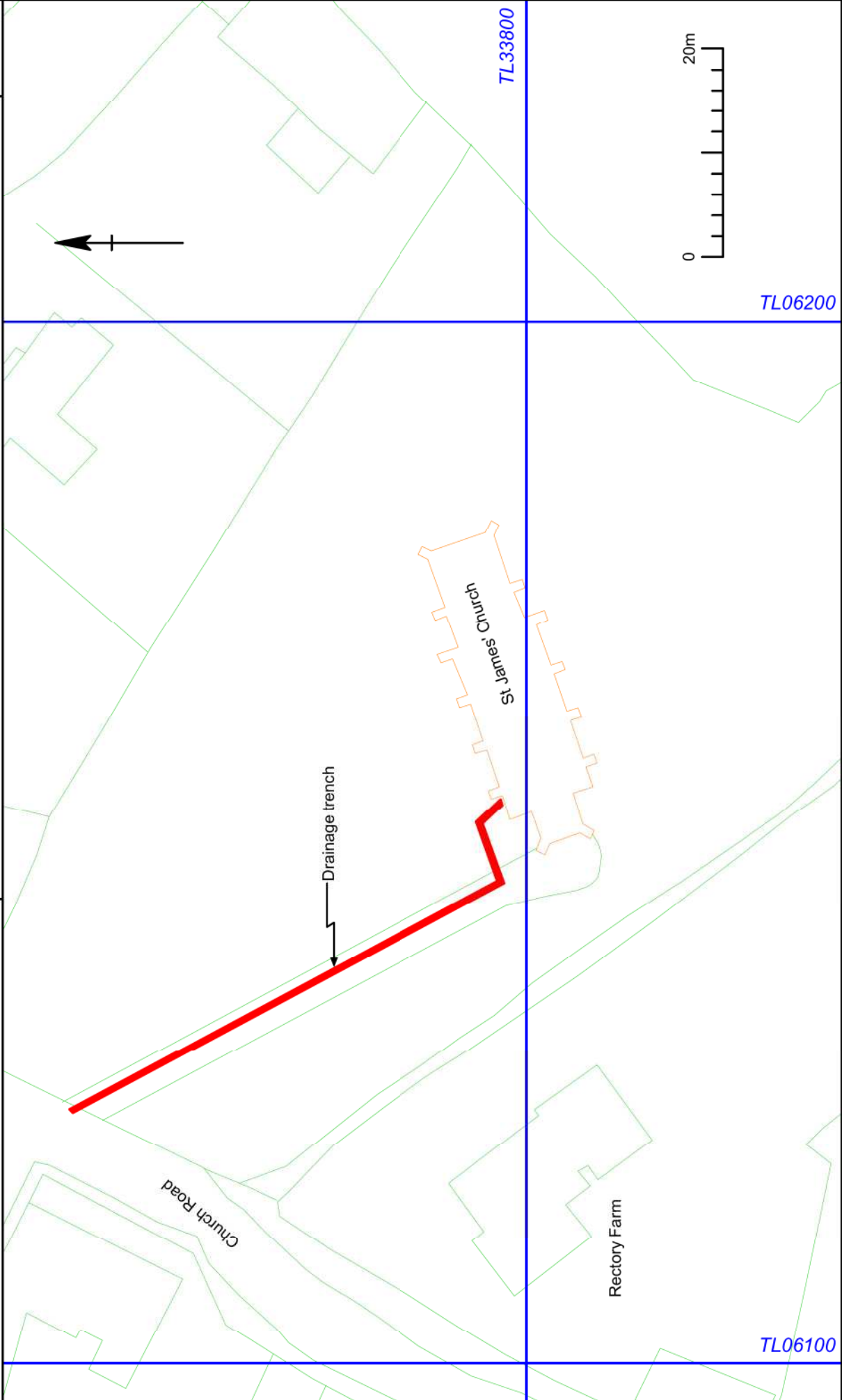


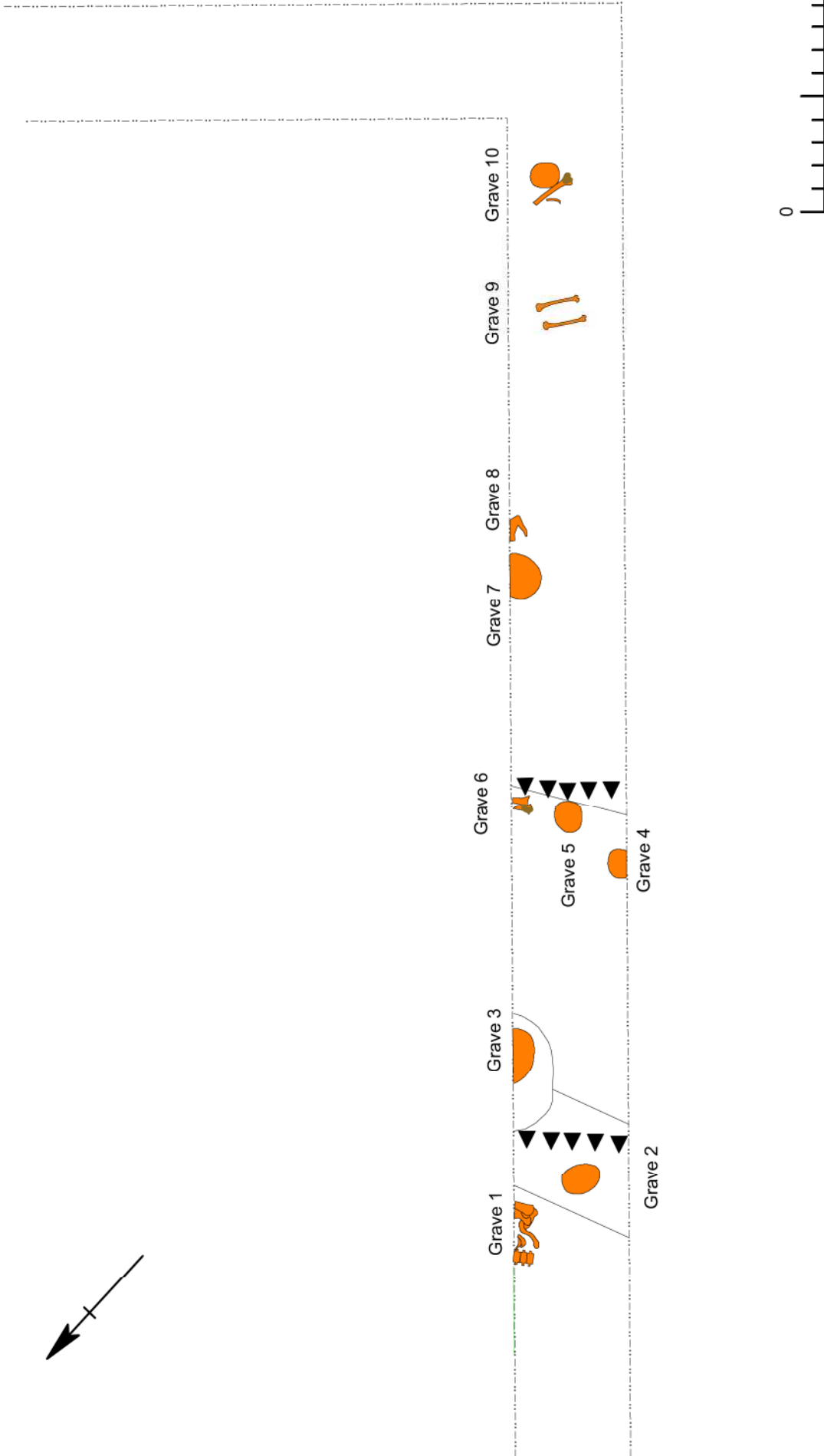


Site Location

Scale 1:10000







Grave Layout



Plate 1: Graves 1-3, looking east



Plate 2: Graves 4-6, looking east





Plate 3: Graves 7-8, looking east



Plate 4: Grave 9, looking east



Plate 5: Grave 10, looking east

## Appendix

OASIS ID: heritage1-58905	
<b>Project details</b>	
Project name	St James' Church, Pulloxhill
Short description of the project	During excavation of a new drainage trench at St James' Church, Pulloxhill human remains were encountered. As a result the Heritage Network was commissioned by Pulloxhill Parochial Church Council to carry out a programme of archaeological monitoring on the remaining works. This investigation revealed the presence of at least 10 graves, containing at least 7 adults and 4 juveniles. A more detailed assessment of age and sex was not possible due to the partial recovery and poor condition of the remains.
Project dates	Start: 23-04-2009 End: 23-04-2009
Previous/future work	No / No
Any associated project reference codes	HN806 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Other 4 - Churchyard
Monument type	GRAVE Uncertain
Significant Finds	HUMAN BONE Uncertain
Methods & techniques	'Test Pits'
Development type	Pipelines/cables (e.g. gas, electric, telephone, TV cable, water, sewage, drainage etc.)
Prompt	Faculty jurisdiction
Position in the planning process	Not known / Not recorded
<b>Project location</b>	
Country	England
Site location	BEDFORDSHIRE MID BEDFORDSHIRE PULLOXHILL St James Church, Pulloxhill
Postcode	MK45 5HE
Study area	22.00 Square metres
Site coordinates	TL 0616 3380 51.9920572144 -0.453696822997 51 59 31 N 000 27 13 W Point
Height OD / Depth	Min: 105.00m Max: 105.00m
<b>Project creators</b>	
Name of Organisation	Heritage Network
Project brief originator	None
Project design originator	none
Project director/manager	David Hillelson
Project supervisor	David Hillelson
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Pulloxhill Parochial Church Council
<b>Project archives</b>	
Physical Archive Exists?	No
Digital Archive recipient	Bedford Museum
Digital Media available	'Images raster / digital photography'
Paper Archive	Bedford Museums

recipient	
Paper Media available	'Diary','Drawing','Photograph','Plan','Report'
<b>Project bibliography 1</b>	
Publication type	Grey literature (unpublished document/manuscript)
Title	St James' Church, Pulloxhill, Beds:Archaeological Monitoring Report
Author(s)/Editor(s)	Winter, M.
Other bibliographic details	Report 535
Date	2009
Issuer or publisher	Heritage Network
Place of issue or publication	Letchworth, Hertfordshire
Description	A4 booklet, comb bound, green cover, 7 pages, 3 figures, 5 plates