

# ARCHAEOLOGICAL MONITORING REPORT

## ST. MICHAELS CHURCH, WOOLVERSTONE (HER Ref. WLV 023)

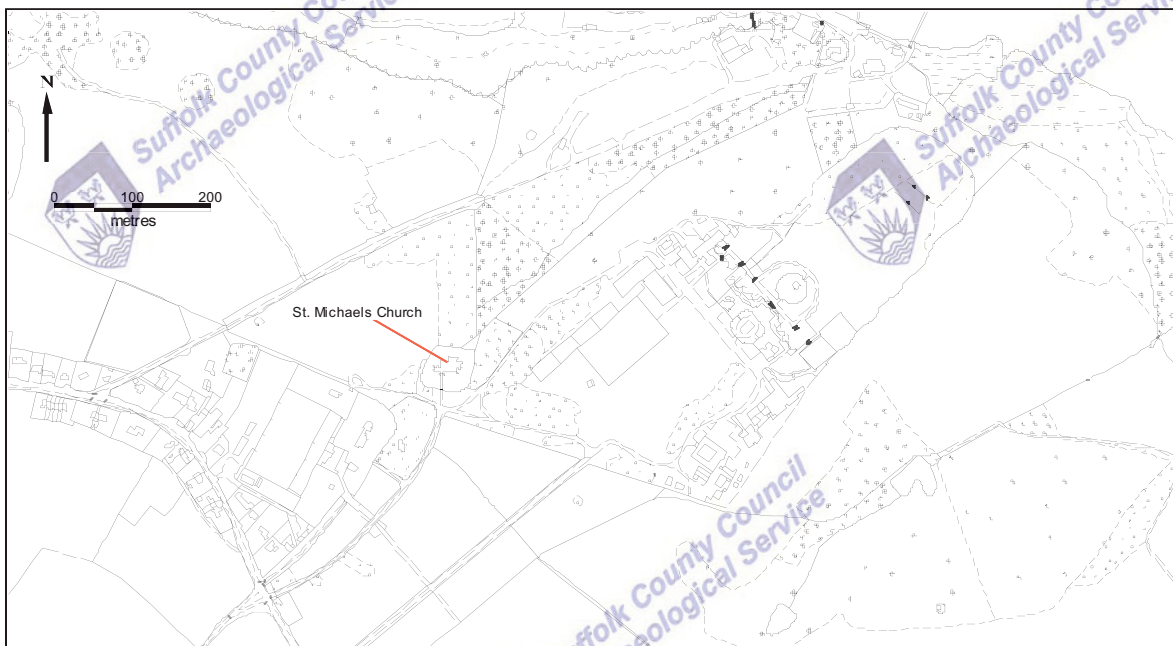
A REPORT ON THE MONITORING OF GROUNDWORKS ASSOCIATED  
WITH THE CONSTRUCTION OF A NEW TOILET FACILITY AND  
EXTERNAL SERVICE TRENCHES

Suffolk County Council Archaeological Service Report No. 2008/238  
(OASIS ID. suffolkc1-47173)

### *Summary*

Woolverstone, St. Michaels Church (TM 1900 3858) Reordering works included the insertion of a new toilet facility into the base of the tower and the external excavation of service trenches and the insertion of a Trench Arch Drain. Archaeological monitoring of the excavation works was undertaken by Suffolk County Council's Archaeological Service Field Projects Team. The excavations external and internal to the tower revealed a bonded flint and septaria footing that stepped out on both sides of the wall, presumably to spread the weight of the tower. Removal of the existing patterned slate floor (Victorian) in the tower revealed a secondary floor surface of compacted mortar with flints and brick/tile fragments. The subsequent removal of this floor revealed the underlying sandy soil, which included fragments of disarticulated human bone, probably from burials in the churchyard prior to the construction of the tower in the 15<sup>th</sup> century. Five half bricks set in a circle close to the centre of the tower and sealed by the secondary floor surface had no obvious function. The drainage trenches and soakaway external to the tower were not deep enough to disturb intact burials and further structural remains were not uncovered.

(Stuart Boulter for SCCAS & Woolverstone Parochial Church Council; SCCAS Rpt. No. 2008/238)



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**Fig. 1** 1:10,000 scale OS map extract showing the location of St. Michaels Church

## 1. Introduction

St. Michaels Church lies to the east of the village in the grounds of Woolverstone Park (TM 1900 3858) at the head of a shallow valley, at a height of *c.*30 metres OD, overlooking the estuary of the River Orwell, some 600 metres to the north (Fig. 1).

The standing building is essentially Victorian, the result of three major reordering/rebuilding programmes during the 19<sup>th</sup> century, although retaining its 15<sup>th</sup> century medieval tower.

Faculty consent covering proposals for a reordering, that included the insertion of a new toilet facility into the base of the tower, with external excavations including the insertion of a Trench Arch Drain and soakaway, were conditional on the provision for a programme of archaeological recording. Diocesan Archaeological Advisor (Robert Carr) considered that monitoring of groundworks would enable an adequate record to be made of any exposed archaeological deposits (see Brief & Specification document appended to this report).

Suffolk County Council's Archaeological Service Field Team was subsequently commissioned by the project Architect (Ashley Courtney of Freeland Rees Roberts Architects) on behalf of their client (Woolverstone Parochial Church Council) to undertake the specified archaeological recording.

## 2. Methodology

Six site visits were made while excavations were in progress. Observations were recorded in note form. A plan of the interior of the tower was drawn at a scale of 1:20 on plastic drafting film (digitised as Fig. 2.), with more general information recorded on smaller scale site plans. A full photographic record was made, both digital and monochrome prints.

## 3. Results

Site visits were made on the 29<sup>th</sup> April, 1<sup>st</sup>, 2<sup>nd</sup>, 6<sup>th</sup>, 9<sup>th</sup> of May and 1<sup>st</sup> July during which time the majority of the groundwork excavations were open and available for examination by the archaeologist.

The purpose of the initial site visit was to be present when a small exploratory hole was excavated into the existing floor of the tower in the south-west corner, in an area where most damage was likely to occur during the building works. This was seen as essentially an evaluation exercise.

The extant floor of the tower comprised a checkerboard pattern of *c.*0.15 metres (6 inch) squares of thin cut pieces of roofing slate laid on edge with each successive square at right angles to the last (Plate 1), forming an alternating pattern. A similar floor surface was present in the porch. The floor was found to be 0.07 metres (3 inches) thick and was bedded on approximately 1 centimetre of mortar. The slate was found to be very hard and not easily to break out and, as a consequence, it was decided to allow the contractors to remove the entire slate floor in the tower with regular monitoring visits from the archaeologist.

The removal of the slate floor revealed a second surface comprising a mixture of brick fragments and flint pebbles in lime mortar which appeared to change in character close to the base of the walls (Plate 2). Subsequently, the material close to the wall was found to be the stepped out footing of the tower wall itself. While relatively rough, this did seem to be a formal surface that could have functioned as a floor. In addition, the existing plaster facing on the wall continued down to the stepped footing, which is further evidence that this lower level had at one time represented a functioning floor surface.

After photographic recording, the contractors removed the central material abutting the stepped footing, revealing its 15 centimetres thickness (Plate 3). Beneath this layer, brown silty sand was encountered with occasional disarticulated human skeletal material, probably from burials predating the construction of the tower in the 15<sup>th</sup> century.

The stepped out footing, comprising flints and septaria set in lime mortar, was recorded running around the base of the southern, western and northern walls. The width of the step out varied between 0.45 metres in the north-west corner down to only 0.15 metres at the eastern end of the south wall (Fig. 2; Plate 4). At the eastern end of both the north and south walls the step out had been truncated by a north south aligned red-brick wall that formed the step down into the nave. A test excavation into the stepped footing in the south-west corner revealed that the solid bonded wall footing continued down for a distance of 0.60 metres.

On the north side of the tower the threshold of the existing doorway was revealed comprising a single slab of crumbling Purbeck Marble (Plate 5).

An unusual feature was revealed towards the centre of the tower area after the removal of the secondary floor surface (Fig. 2; Plates 4 & 6). Five white-coloured half bricks had been set into the earth below the secondary floor around a circular area, *c.*0.25 metres in diameter, which included chalk and mortar inclusions. The bricks sloped in slightly towards the circular area. The function of this feature was unclear.

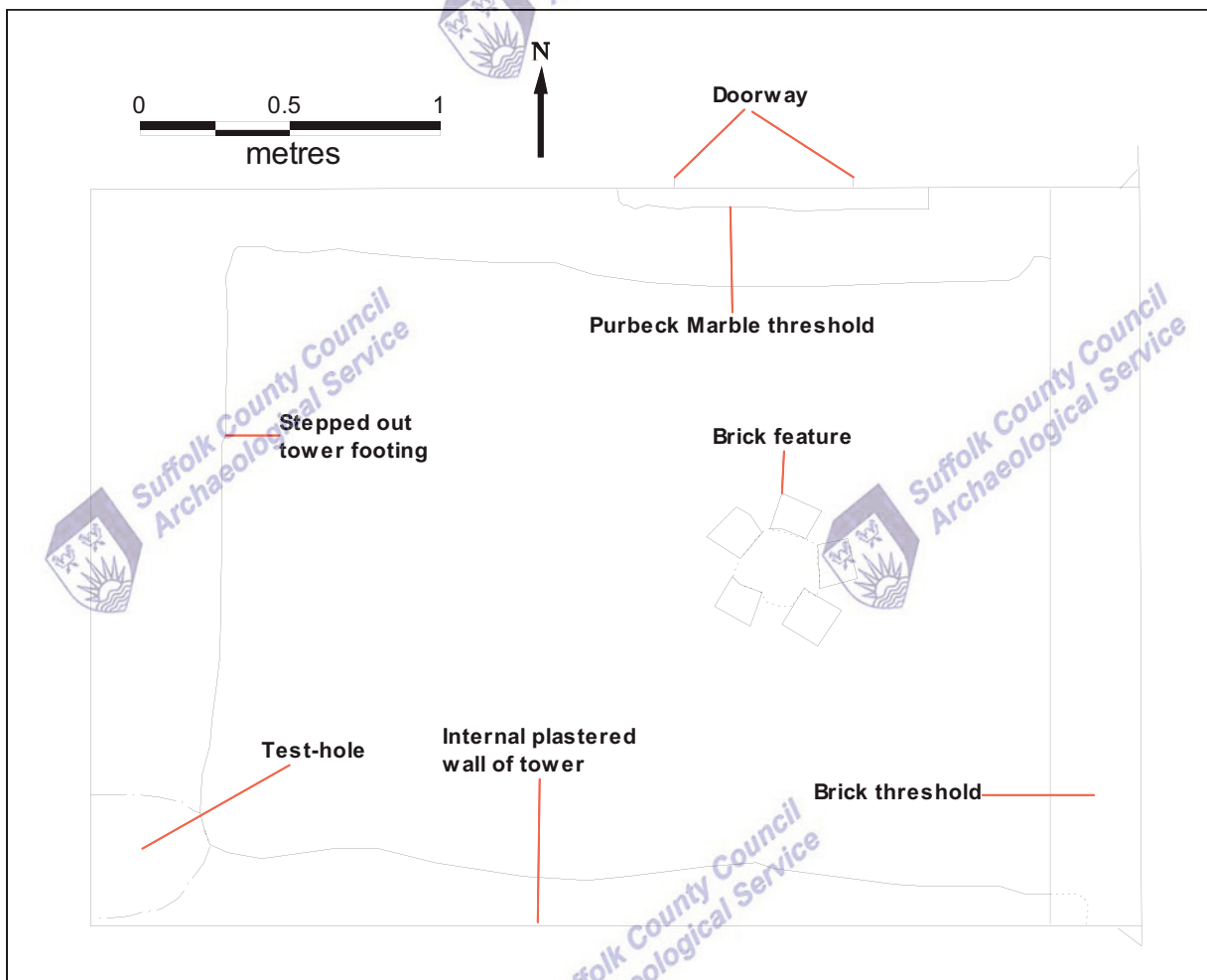


Fig. 2 1:25 scale plan of the interior of the tower



**Plate 1** Representative area of extant tower floor



**Plate 2** Junction between stepped tower wall footing (top) & secondary floor level (bottom)



**Plate 3** Junction between tower footing (left) & secondary floor (right) level (right) & underlying cemetery soil



**Plate 4** Stepped out tower footing from the east



**Plate 5** Purbeck marble step



**Plate 6** Detail of central brick feature



In one of the monitoring visits a 2.00 metres by 1.10 metres area had been excavated against the external west wall of the tower (Fig. 3; Plates 7 & 8). At a depth of 0.38 metres, the bonded flint and septaria footing of the tower wall was encountered, stepping out for 0.40 metres from the vertical face, at a point 0.45 metres below the tower plinth. The step increased to 0.50 metres wide as it approached the towers diagonal south west buttress. The removed overburden comprised c.0.20 metres of turf and topsoil overlying a further c.0.38 metres of mixed sandy soil with included building debris and mortar. Another visit was made after the contractors had excavated down to the west of and adjacent to the external tower footing. Disarticulated human skeletal material was recorded.



**Plate 6** Stepped out external footing



**Plate 7** Stepped out external footing & overburden

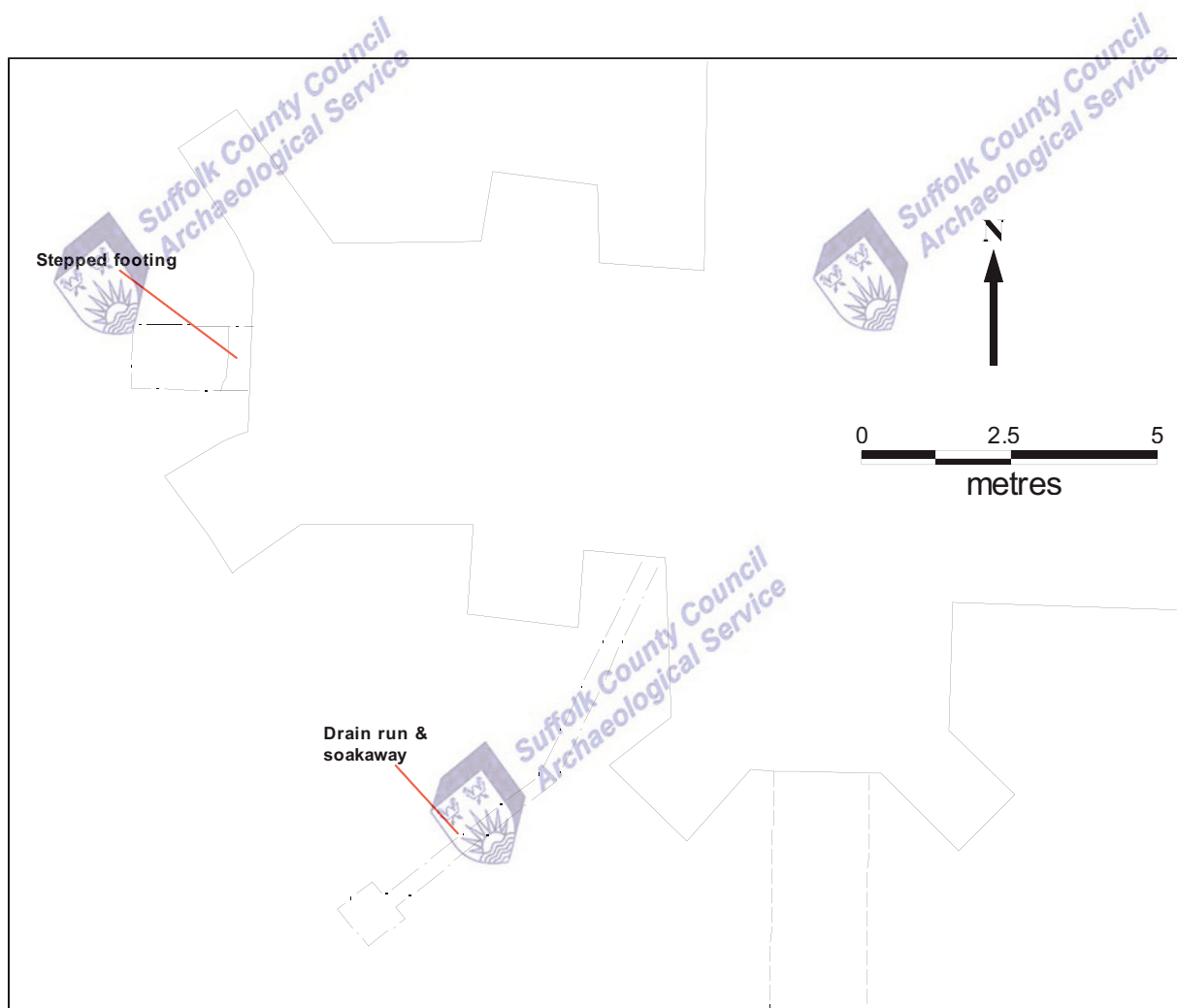


**Plate 8** Soakaway south of tower

A final site visit was made to monitor the excavation of a soakaway and associated drain run south of the tower (Fig. 3; Plate 8).

The dog-legged drain run was excavated to a depth of c.0.50 metres deep. Disarticulated leg-bone fragments were recovered from the upcast spoil. The c.0.80 metre square soakaway was excavated to a depth of 1.70 metres. Fragments of a skull were recorded at a depth of c.1.00 metre. No intact burials were encountered within the excavations. Subsequently, all of the disarticulated skeletal material was re-buried on the site.

The archaeologists were not informed when the Trench Arch Drain was being excavated and this process was not subject to archaeological monitoring.



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**Fig. 3** 1:125 scale OS map extract showing the location of the external excavations

#### 4. Interpretation

The archaeological monitoring of the excavations revealed features associated with the structure of the medieval tower and the later, essentially Victorian refurbishments.

Both the internal and external stepped footing of the medieval tower was exposed, revealing that it was *c.*0.80 metres wider than the base of the wall at ground level. The purpose of this footing was almost certainly to spread the weight of the tower over a larger surface area. The internal tower excavations revealed two floor surfaces, both of which are post-medieval in date. An enigmatic feature comprising five half bricks surrounding a pad-like area of chalk and mortar was recorded almost central to the tower. The bricks themselves were in a white fabric, were clearly handmade and of a type often used for floors in the 18<sup>th</sup>/19<sup>th</sup> century. Given that the brick feature was sealed by the secondary floor level, then it follows that the floor must post-date the feature. The upper floor surface constructed from roofing slate was the same as that in the porch. Both floor levels must be considered to be associated with the extensive rebuilding and refurbishments undertaken during the 19<sup>th</sup> century.

While disarticulate bone was recovered both internal to the tower and in the external excavations, no intact burials were encountered. The disturbed human skeletal material

recovered internal to the tower almost certainly belong to medieval burials interred in the churchyard, in the area later occupied by the tower, which was constructed in the 15<sup>th</sup> century.

## 5. Conclusion

The implication of a programme of archaeological monitoring was a mitigation process designed to preserve, by record, archaeological deposits/features that would be destroyed during the reordering works. During the monitoring it became clear that damage to the medieval fabric of the tower would be limited to a hole, below ground level, through its west wall. The material removed from within the body of the tower was all thought to relate to the major Victorian rebuilding and refurbishment and, as such, was of relatively low archaeological importance. Other than the towers external stepped footing, no other structural evidence was revealed in the exterior excavations and the disarticulated bone did not merit further study and was reburied on site.

Stuart Boulter  
Senior Project Officer  
Field Projects Team  
Suffolk County Council Archaeological Service

August 2008



**SUFFOLK COUNTY COUNCIL**  
**ARCHAEOLOGICAL SERVICE - CONSERVATION TEAM**

*Brief and Specification for an Archaeological Evaluation*

**CHURCH OF ST MICHAEL, WOOLVERSTONE**

**The commissioning body should be aware that it may have Health & Safety and other responsibilities, see paragraphs 1.7 & 1.8.**

***This is the brief for the first part of a programme of archaeological work. There is likely to be a requirement for additional work, this will be the subject of another brief.***

**1. Background**

- 1.1 Faculty consent is being sought for WC facilities in the church. As part of this development a cesspool is being planned for insertion into the churchyard. In addition a new soakaway is required.
- 1.2 In order to understand the full archaeological implications of these proposals the church has been advised to undertake an archaeological evaluation.
- 1.3 The areas for excavation lie within the historic boundaries of the churchyard close to the medieval church. Any excavation will affect burials. The intention of the evaluation is to establish the presence and estimated number of burials likely to be affected in order that suitable mitigation may be arranged and costs estimated.
- 1.4 The minimum size of the pit for the cesspool tank will be c.4.6m x 3.0m and c.4m deep. The soakaway will be c.2m in diameter.
- 1.5 All arrangements for the field evaluation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area for proposed development are to be defined and negotiated with the commissioning body.
- 1.6 Work on this project should follow advice given in 'Guidance for best practice for treatment of human remains excavated from Christian Burial Grounds', Church of England and English Heritage 2005, detailed standards, information and advice to supplement this brief are to be found in *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Papers 14, 2003.
- 1.7 In accordance with the standards and guidance produced by the Institute of Field Archaeologists this brief should not be considered sufficient to enable the total execution of the project. A Project Design or Written Scheme of Investigation (PD/WSI) based upon this brief and the accompanying outline specification of minimum requirements, is an essential requirement. This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443) for approval. The work must not commence until this office has approved both the archaeological contractor as suitable to undertake the work, and the PD/WSI as satisfactory. The PD/WSI will *provide the basis for measurable standards*.
- 1.8 Before any archaeological site work can commence it is the responsibility of the developer to provide the archaeological contractor with either the contaminated land report for the site or a written statement that there is no contamination. The developer should be aware that investigative sampling to test for contamination is likely to have an impact on any archaeological deposit which exists; proposals for sampling should be discussed with this office before execution.
- 1.9 The responsibility for identifying any restraints on field-work (e.g. Scheduled Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites &c.) rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not over-ride such restraints or imply that the target area is freely available.



## 2. Brief for the Archaeological Evaluation

- 2.1 Establish the depth and extent of the highest articulated remains and attempt to establish the depth and extent of the burial deposit.
- 2.2 Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.
- 2.3 This project will be carried through in a manner broadly consistent with English Heritage's *Management of Archaeological Projects*, 1991 (MAP2), all stages will follow a process of assessment and justification before proceeding to the next phase of the project. Field evaluation is to be followed by the preparation of a full archive, and an assessment of potential. Any further excavation required as mitigation is to be followed by the preparation of a full archive, and an assessment of potential, analysis and final report preparation may follow. Each stage will be the subject of a further brief and updated project design, this document covers only the evaluation stage.
- 2.4 The developer or his archaeologist will give the Conservation Team of the Archaeological Service of Suffolk County Council (address as above) five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored.
- 2.5 An outline specification, which defines certain minimum criteria, is set out below.

## 3. Specification: Field Evaluation

- 3.1 Two trial trenches should be dug within the areas defined for the cesspool and soakaway. The cesspool trench should cover the entire projected plan area. The soakaway trench should be c. 2m x 2m.
- 3.2 It is not intended that articulated remains will be disturbed or exhumed at this stage. Provision for post excavation preparation and analysis of human remains is not required at this stage. Disarticulated, broken and disturbed skeletal material is to be carefully collected and re-interred within the trial trench when this is backfilled.
- 3.3 The top of the first archaeological deposit may be cleared by machine, but must then be cleaned off by hand. There is a presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of further excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
- 3.4 In all evaluation excavation there is a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation; that significant archaeological features, e.g. solid or bonded structural remains, building slots or post-holes, should be preserved intact even if fills are sampled.
- 3.5 There must be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. The depth and nature of colluvial or other masking deposits must be established across the site.
- 3.6 The excavator should be aware of, and comply with, the provisions of Section 25 of the Burial Act 1857. "*Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England*" English Heritage and the Church of England 2005 provides advice and defines a level of practice which should be followed whatever the likely belief of the buried individuals.
- 3.7 Plans of any archaeological features on the site are to be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. Any variations from this must be agreed with the Conservation Team.
- 3.8 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies.
- 3.9 Topsoil, subsoil and archaeological deposit to be kept separate during excavation to allow sequential backfilling of excavations.

#### 4. **General Management**

- 4.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by the Conservation Team of SCC Archaeological Service.
- 4.2 The composition of the project staff must be detailed and agreed (this is to include any subcontractors).
- 4.3 A general Health and Safety Policy must be provided, with detailed risk assessment and management strategy for this particular site.
- 4.4 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 4.5 The Institute of Field Archaeologists' *Standard and Guidance for Archaeological Desk-based Assessments* and for *Field Evaluations* should be used for additional guidance in the execution of the project and in drawing up the report.

#### 5. **Report Requirements**

- 5.1 An archive of all records and finds must be prepared consistent with the principles of English Heritage's *Management of Archaeological Projects*, 1991 (particularly Appendix 3.1 and Appendix 4.1).
- 5.2 The data recording methods and conventions used must be consistent with, and approved by, the County Sites and Monuments Record.
- 5.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
- 5.4 An opinion as to the necessity for further evaluation and its scope may be given. No further site work should be embarked upon until the primary fieldwork results are assessed and the need for further work is established.
- 5.5 Reports on specific areas of specialist study must include sufficient detail to permit assessment of potential for analysis, including tabulation of data by context, and must include non-technical summaries.
- 5.6 The Report must include a discussion and an assessment of the archaeological evidence. Its conclusions must include a clear statement of the archaeological potential of the site, and the significance of that potential in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 5.7 Finds must be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*. The finds, as an indissoluble part of the site archive, should be deposited with the County SMR if the landowner can be persuaded to agree to this. If this is not possible for all or any part of the finds archive, then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate.
- 5.8 The site archive is to be deposited with the County SMR within three months of the completion of fieldwork. It will then become publicly accessible.
- 5.9 Where positive conclusions are drawn from a project (whether it be evaluation or excavation) a summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute for Archaeology*, must be prepared. It should be included in the project report, or submitted to the Conservation Team, by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.
- 5.10 County SMR sheets must be completed, as per the county SMR manual, for all sites where archaeological finds and/or features are located.
- 5.11 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms.

5.12 All parts of the OASIS online form must be completed for submission to the SMR. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

Specification by: R D Carr

Suffolk County Council  
Archaeological Service Conservation Team  
Environment and Transport Department  
Shire Hall  
Bury St Edmunds  
Suffolk IP33 2AR



Tel: 01284 352441

Date: 6 February 2008

Reference: /St Michael's Church

**This brief and specification remains valid for 12 months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.**

**If the work defined by this brief forms a part of a programme of archaeological work required by a Planning Condition, the results must be considered by the Conservation Team of the Archaeological Service of Suffolk County Council, who have the responsibility for advising the appropriate Planning Authority.**

