

ARCHAEOLOGICAL MONITORING REPORT

RAF Lakenheath, Cargo Bay Deployment Facility LKH 246

A REPORT ON THE ARCHAEOLOGICAL MONITORING, 2005
(Planning app. no. F/2004/0200/GOV)

Jo Caruth
Field Team
Suffolk C.C. Archaeological Service

© February 2006

Lucy Robinson, County Director of Environment and Transport
Endeavour House, Russel Road, Ipswich, IP1 2BX

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Contents

List of Figures
List of Tables
List of Contributors
Acknowledgements
Summary
SMR information

Introduction
Methodology
Results
Summary and Conclusion

Appendix 1: Brief and specification

List of Figures

1. Site location
2. Layout of new development
3. Photograph of trench section showing mineralised sand
4. Soil profile at west end of the development area
5. Monitoring results

List of Tables

1. Diary of visits

List of Contributors

All Suffolk C.C. Archaeological Service unless otherwise stated.

Jo Caruth Senior Project Officer

Acknowledgements

This project was funded by MOD Defence Estates (USF) and managed by Kevin Calvert. The archaeological work specified by Jude Plouviez (Suffolk County Council Archaeological Service, Conservation Team) and the fieldwork was carried out by Jo Caruth from Suffolk County Council Archaeological Service, Field Team.

Summary

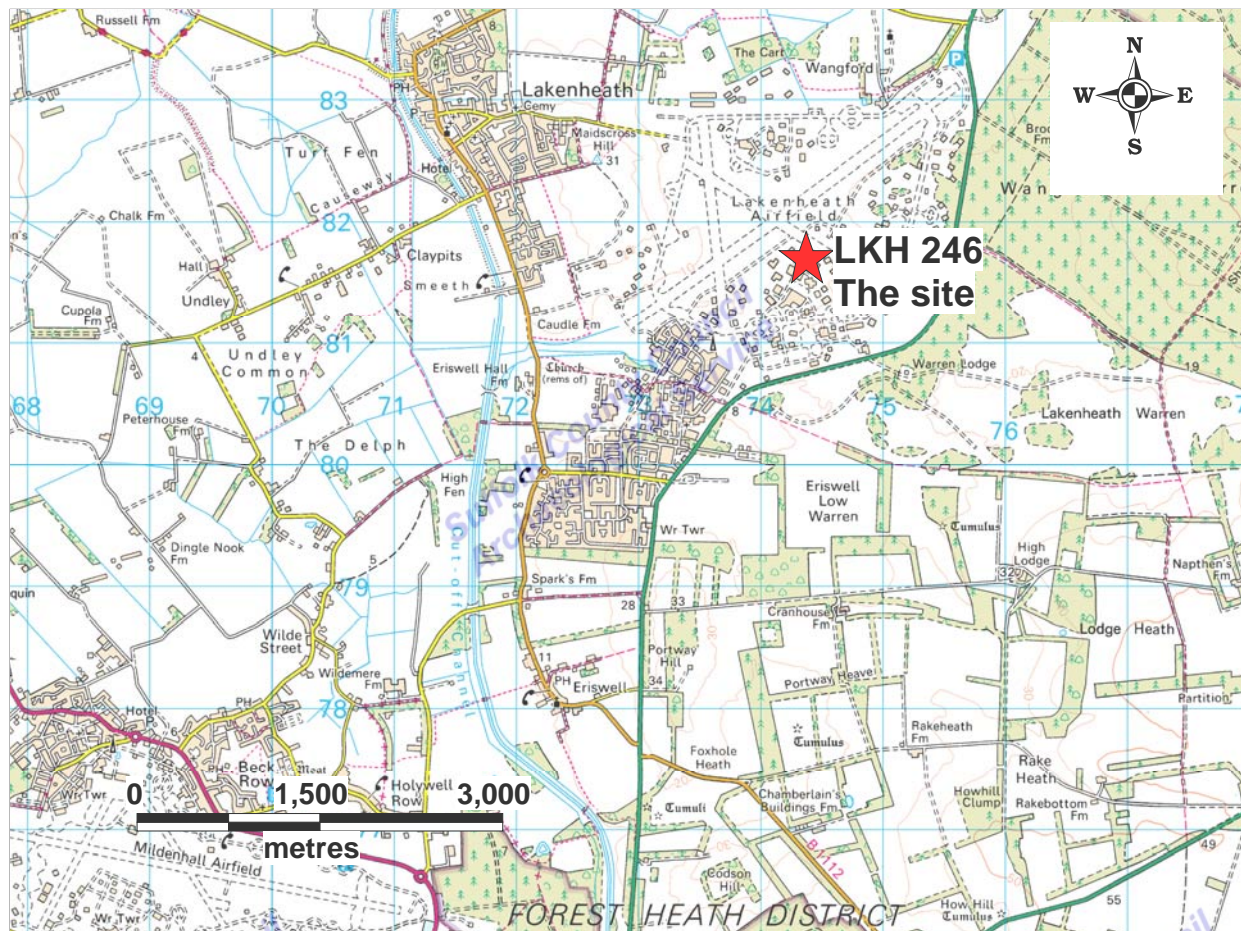
Monitoring for extensive construction works on the airfield at RAF Lakenheath revealed information about the ancient landscape of this area. It showed a topography of damp hollows, indicated by layers of desiccated peat and brown sand deposits, and acid heathland, indicated by surviving layers of black mineralised sand overlying bright yellow sand. The evidence survived because levelling for the airfield in the 1940's led to the area being built-up with modern deposits up to 40cm deep sealing the former ground surface. This adds to the growing body of landscape evidence recovered from RAF Lakenheath to complement the archaeological evidence.

SMR information

Planning application no. F/2004/0200/GOV
Date of fieldwork: May -November 2005
Grid Reference: TL 7437 8174
Funding body: MOD Defence Estates (USF)
Oasis reference. Suffolkc1-8349

Introduction

Archaeological monitoring has been carried out during the construction of a new Cargo Bay Deployment facility at RAF Lakenheath. The monitoring was a condition on the planning consent (F/2004/0200/GOV) and was undertaken according to a Brief and Specification by Jude Plouviez (Appendix 1). The site lies at TL 7437 8174 in the centre of the airfield and the only known nearby sites are a post-medieval warren boundary (LKH 174) and a lodge (LKH 221), which lie outside of the development are to the north-east. The route of the former turnpike road originally ran through the eastern end of the site. Previous archaeological work on this part of the airfield has revealed occasional dispersed prehistoric features and landscape data. The size and scope of this project mean that it had good potential for characterising the general area, both archaeologically and topographically.



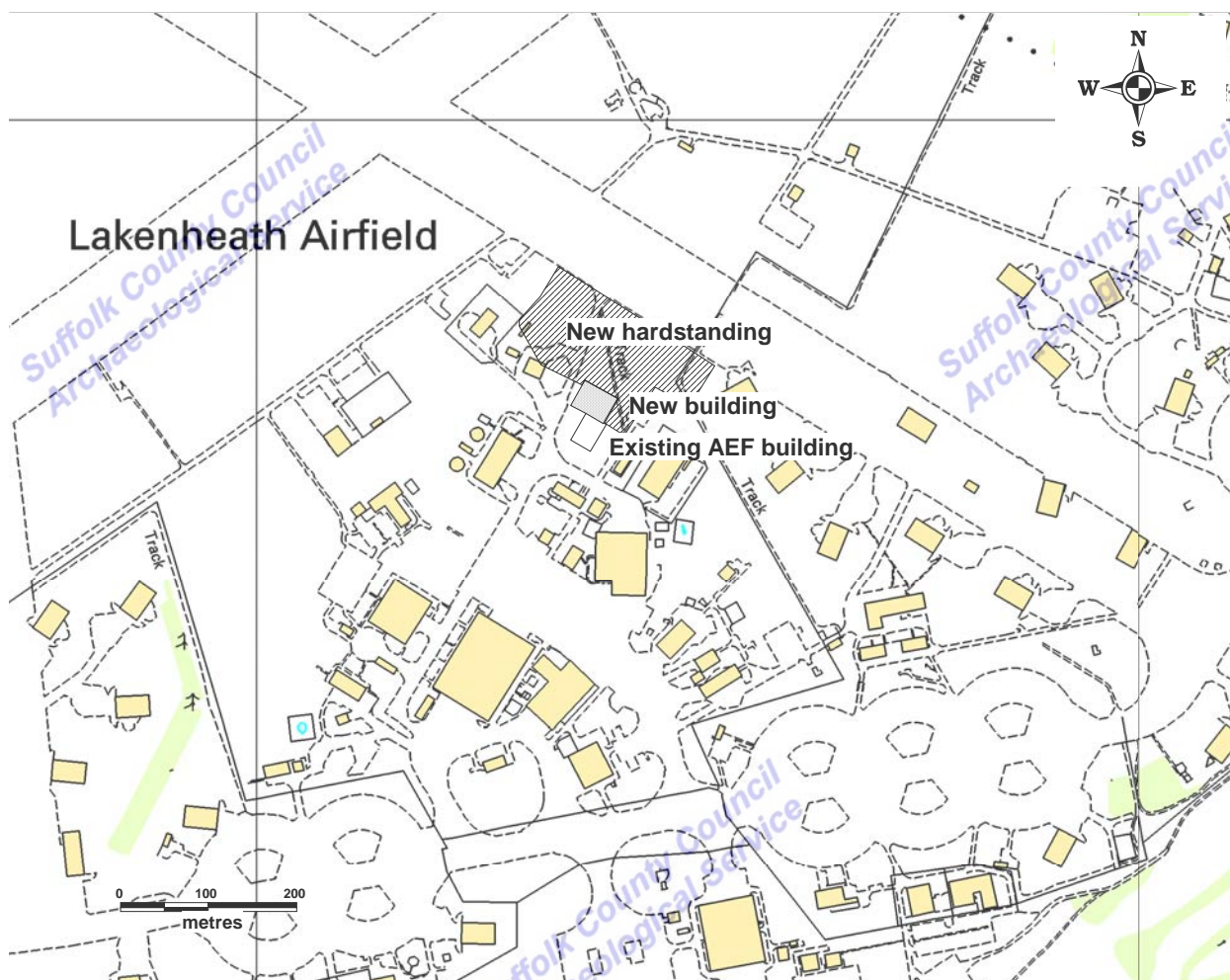
©Crown Copyright. All Rights Reserved.
Suffolk County Council Licence No. 100023395 2006

Figure 1 Site location

Methodology

Monitoring was carried out over a period of c. 6 months, during which time periodic visits were made to monitor the site strips for the building and hardstanding, and footing trenches for the building. All soil changes were recorded on an overall plan of the site and sample sections of the footing trenches recorded. Some digital photographs of soil sections were taken.

The site is recorded on the Suffolk County Council Sites and Monuments Record under the site code LKH 246 and the site archive is kept in the Archive store. A copy of the report is lodged with the OASIS on-line database, reference: suffolkc1-8349



©Crown Copyright. All Rights Reserved.
Suffolk County Council Licence No. 100023395 2006

Figure 2. Layout of new development

Results

Date	Description
12/10/04	Mobilisation meeting
9/05/05	Saw topsoil strip for the building. This showed that the ground was largely made-up (c. 30cm) although a final reduced level strip (c.35cm in total) exposed a mixture of yellow and black (mineralised) sand. An area of concentrated dark grey-black sand was seen in the N corner.
13/05/05	This was ill-defined but suggests a hollow. No archaeological features seen.
17/5/05	
19/05/05	Saw footing trenches for building. The soil profile throughout the building showed black, mineralised sand, with vertical intrusions into the underlying yellow sand which had frequent marbled horizontal lenses of black sand. Generally the black sand was thin, no more than 10cm, but in the north-west corner it was deeper, up to 20cm. This layer is still preserved in all but the footing locations of the building.
20/05/05	
24/05/05	
25/05/05	
26/05/05	Topsoil strip for area up to road and taxiway. This showed the same mixed yellow and black sand with many areas of modern redeposited materials and disturbances, particularly on the east side of the site. To the western side some patchy dark grey buried topsoil is visible. Over the whole area the bulk of the topsoil was modern redeposited to a depth of c.30cm.
31/05/05	
2/06/05	
9/09/05	Saw topsoil stripped surface for remaining area, west of the road. This all showed mixed yellow and black sand with larger areas of grey-black homogeneous sand towards the western side of the site. Where holes were dug through this it could be seen to come down onto yellow and orange sands, much with fine black sand horizontal banding. A deep section through these layers was recorded adjacent to the road. Another hole near building 1395 showed natural sand within 25cm of the surface. The upper part of a section of pipe trench was visible between the new building and 1390 and this showed 40cm of modern built-up material over an ancient topsoil. No archaeological features seen.

Date	Description
14/09/05	Saw final site trim prior to the concrete laying starting in the NW corner. This removed a further c. 20cm removing much of the black sand and revealing bright yellow natural sand in many places. In addition extensive areas of dense grey-black sand were seen. See plan for location.
16/09/05	
20/09/05	
28/09/05	
5/10/05	The final visit saw the area immediately adjacent to the new building. This showed a surface of mixed purple, yellow and darker sand in extensive patches between bright yellow natural. The purple sand was mineralised in places.
18/10/05	
25/10/05	
11/11/05	

Table 1. Diary of visits



Figure 3. Photograph of trench section showing mineralised sand.

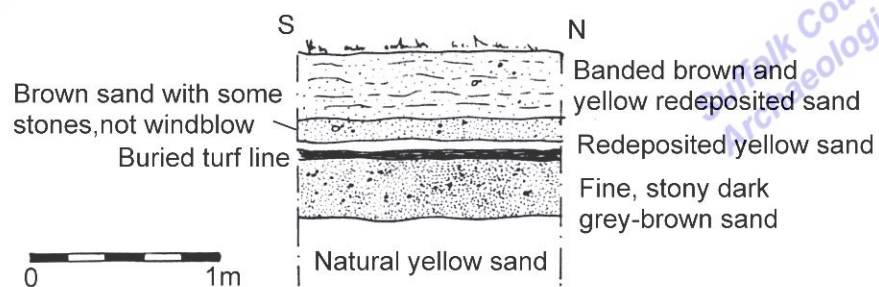
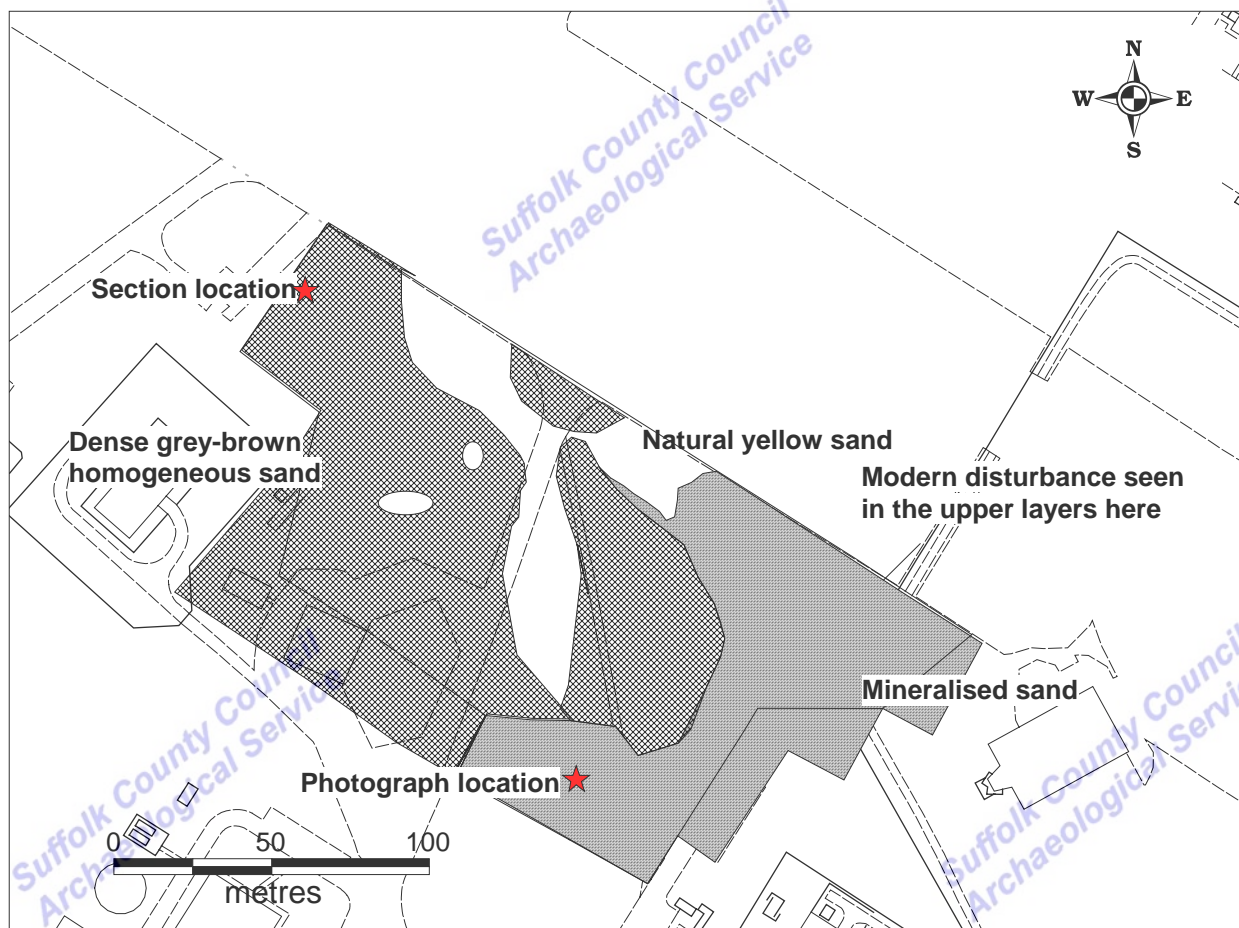


Figure 4. Soil profile at west end of the development area

No archaeological features were found during this monitoring and despite careful examination of the stripped surfaces only 3 struck flints all of which were waste flakes were recovered. The monitoring demonstrated that the whole area has been built-up by between 30 and 40cm during the 20th century levelling of the airfield, and previous land surfaces have been preserved beneath this deposit. The eastern half of the development area was covered with black mineralised sand which is interpreted as a buried acid heath surface. In the western half were extensive patches of a denser more homogenous grey-brown sand and desiccated peat, interpreted as deeper deposits filling natural hollows. Under the mineralised sand was a marbled yellow sand characterised by very fine (up to 5mm) horizontal bands of black sand and this is interpreted as a section through sand-dunes, the banding representing various deposits of blown sands and periods of stabilisation throughout the landscape history. The absence of archaeological features, supported by the very limited finds recovery shows that this area is unlikely to have been occupied during the last 7-8,000 years and the evidence for the topography suggests that it was a low lying undulating landscape with a mixture of well drained acid heathland and shallow hollows possibly of more marshy ground.

Modern disturbance was identified in the upper layers, particularly on the east side of the site. This may relate to the original route of the Brandon Road, and former turnpike road, which ran through here.



©Crown Copyright. All Rights Reserved.
Suffolk County Council Licence No. 100023395 2006

Figure 5. Monitoring Results

Summary and Conclusion

This monitoring afforded the opportunity to examine an extensive area in the centre of the airfield. The results did not identify archaeological deposits and in conjunction with evidence from much smaller nearby archaeological works suggests that this part of Lakenheath has never been settled. The monitoring did however record valuable information about the former landscape demonstrating areas of both acid heathland and (possibly damp) hollows. This evidence will be combined with other base-wide topographic evidence to help build up a comprehensive picture of the landscape accompanying the periods of occupation identified to the north and south of the airfield.

Jo Caruth
February 2006

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

Suffolk County Council
Archaeological Service

SUFFOLK COUNTY COUNCIL

ARCHAEOLOGICAL SERVICE - CONSERVATION TEAM



Brief and Specification for Archaeological Monitoring of Development

CARGO DEPLOYMENT FACILITY, RAF LAKENHEATH

Although this document is fundamental to the work of the specialist archaeological contractor the developer should be aware that certain of its requirements are likely to impinge upon the working practices of a general building contractor and may have financial implications, for example see paragraphs 2.3.

1. Background

- 1.1 Planning permission to develop on this site has been granted conditional upon an acceptable programme of archaeological work being carried out (application F/2004/0200/GOV). Assessment of the available archaeological evidence indicates that the area affected by development can be adequately recorded by archaeological monitoring.
- 1.2 The development is at TL 743 817 in the central part of the airfield at c.10m OD height; the area affected is (very approximately) 200m x 110m. The only features recorded in the Sites and Monuments Record in this vicinity are the route of the former turnpike road and the north-western medieval warren boundary bank, which crosses the development area (LKH 174), and a post medieval lodge (LKH 221, possibly relating to the medieval warren). However, there are scattered prehistoric finds (dating from the Mesolithic onwards) in the airfield area and there is good potential for preservation of unrecorded sites as there has not been 20th century agricultural damage. There is thus fairly high potential for unrecorded archaeological deposits, particularly of prehistoric date, within the development area.
- 1.3 Detailed standards, information and advice to supplement this brief are to be found in “Standards for Field Archaeology in the East of England” Occasional Papers 14, East Anglian Archaeology, 2003.

2. Brief for Archaeological Monitoring

- 2.1 To provide a record of archaeological deposits which are damaged or removed by any development [including services and landscaping] permitted by the current planning consent.

- 2.2 The main academic objective will centre upon the potential of this development to produce evidence for earlier occupation of the site.
- 2.3 The significant archaeologically damaging activities in this proposal are the stripping of extensive areas for aircraft hardstanding, marshalling yard and other hardstanding, plus groundworks for a smaller area of new building. Soil removal is planned to c.500mm, i.e. below likely topsoil depth. Initial soil stripping should, therefore, take place under archaeological supervision and with appropriate (backacter) machinery, and a contingency (time and costs) allowed for the recording of any deposits exposed within the construction programme.. Archaeological recording will be constrained to the maximum planned soil removal level.

3. **Arrangements for Monitoring**

- 3.1 To carry out the monitoring work the developer will appoint an archaeologist (the archaeological contractor) who must be approved by the Conservation Team of Suffolk County Council's Archaeological Service (SCCAS).
- 3.2 The developer or his archaeologist will give the Conservation Team of SCCAS 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. The method and form of development will also be monitored to ensure that it conforms to previously agreed locations and techniques upon which this brief is based.
- 3.3 Allowance must be made to cover archaeological costs incurred in monitoring the development works by the contract archaeologist. The size of the contingency should be estimated by the approved archaeological contractor, based upon the outline works in paragraph 2.3 of the Brief and Specification and the building contractor's programme of works and time-table.
- 3.4 If unexpected remains are encountered the Conservation Team of SCCAS must be informed immediately. Amendments to this specification may be made to ensure adequate provision for archaeological recording.

4. **Specification**

- 4.1 The developer shall afford access at all reasonable times to both the County Council Conservation Team archaeologist and the contracted 'observing archaeologist' to allow archaeological observation of building and engineering operations which disturb the ground.
- 4.2 Opportunity must be given to the 'observing archaeologist' to hand excavate any discrete archaeological features which appear during earth moving operations, retrieve finds and make measured records as necessary.

- 4.3 All archaeological features exposed must be planned at a minimum scale of 1:50 on a plan showing the proposed layout of the development.
- 4.4 All contexts must be numbered and finds recorded by context.
- 4.5 The data recording methods and conventions used must be consistent with, and approved by, the County Sites and Monuments Record.

5. Report Requirements

- 5.1 An archive of all records and finds is to be prepared consistent with the principles of *Management of Archaeological Projects (MAP2)*, particularly Appendix 3. This must be deposited with the County Sites and Monuments Record within 3 months of the completion of work. It will then become publicly accessible.
- 5.2 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.
- 5.3 A report on the fieldwork and archive, consistent with the principles of *MAP2*, particularly Appendix 4, must be provided. The report must summarise the methodology employed, the stratigraphic sequence, and give a period by period description of the contexts recorded, and an inventory of finds. The objective account of the archaeological evidence must be clearly distinguished from its interpretation. The Report must include a discussion and an assessment of the archaeological evidence. Its conclusions must include a clear statement of the archaeological value of the results, and their significance in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 5.4 A summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute of Archaeology*, must be prepared and included in the project report.
- 5.5 County Sites and Monuments Record sheets must be completed, as per the county SMR manual, for all sites where archaeological finds and/or features are located.
- 5.6 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.
- 5.7.1 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: Judith Plouviez

Suffolk County Council
Archaeological Service Conservation Team

Environment and Transport Department
Shire Hall
Bury St Edmunds
Suffolk IP33 2AR

Date: 27 April 2004

Reference: /RAFLaken-Cargo04

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.