

# Archaeological Services & Consultancy Ltd

# ARCHAEOLOGICAL EVALUATION: RAF MOLESWORTH MOLESWORTH CAMBRIDGESHIRE

NGR: TL 0769 7719

on behalf of Mott MacDonald Ltd



Martin Cuthbert BA (Hons) PIFA

February 2011

ASC: 1391/MWH/2



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## Site Data

ASC site code:	MWH		Project no:	1391			
OASIS ref:	Archaeol2-	92894	Event/Accession no:	ECB3533			
County:		Cambrid	geshire				
Village/Town:		Moleswo	orth				
Civil Parish:		Brington	and Molesworth				
NGR (to 8 figs):		TL 0769	7719				
Extent of site:		c.1.4 hec	tares				
Present use:		Grassland					
Planning proposal:		Erection of a two storey building					
Planning application	ref/date:	1001459FUL					
Local Planning Autho	ority:	Huntingdonshire District Council					
Date of fieldwork:		February 2011					
Commissioned by:		Mott MacDonald Ltd,					
		Mott MacDonald House,					
		St. Mary's Rd.,					
		Sheffield,					
		S2 4AP					
Contact name:		Simon Shaw					

#### **Internal Quality Check**

Martin Cuthbert	Date:	16 <sup>th</sup> February 2011
	Date:	
00		
YAL -	Date:	16/02/2011
	Martin Cuthbert	Date:

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# CONTENTS

Su	mmary	.4
1.	Introduction	.4
2.	Aims & Methods	.7
3.	Archaeological & Historical Background	. 8
4.	Results.	11
5.	Conclusions	14
6.	Acknowledgements	15
7.	Archive	15
8.	References	16

## **Appendices:**

1.	Trench Summary Tables	17
2.	List of Photographs	18
3.	ASC OASIS Form	.19

### **Figures:**

1.	General location	3
2.	Site plan	5
3.	Proposed development	6
4.	Trench location plan	13

### Plates:

Со	ver: General site shot, looking northwest	
1.	General site conditions, looking northwest	.12
2.	Typical trench stratigraphy	.12
3.	Backfilled trenches, looking west	.12

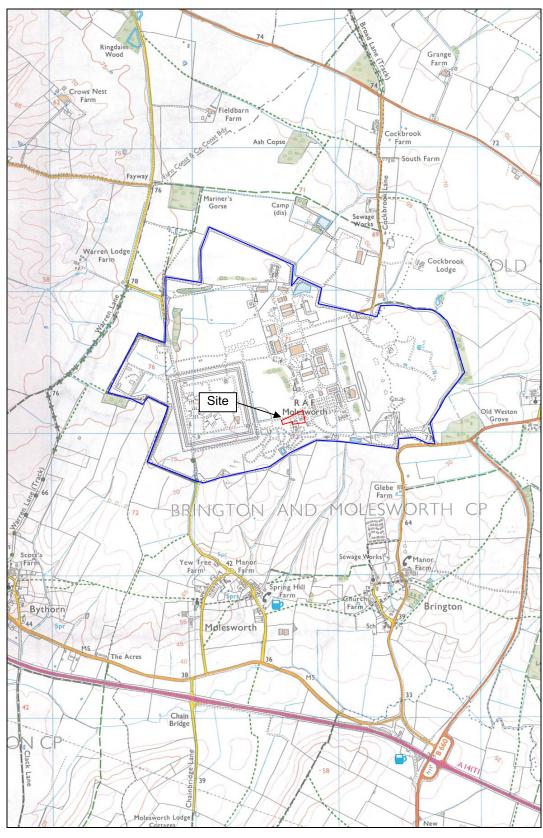


Figure 1: General location (*scale 1:25,000*)

# Summary

In February 2011 Archaeological Services and Consultancy Ltd undertook a trial trench evaluation at RAF Molesworth, Cambridgeshire prior to the construction of a new administration block. Three trenches were excavated within the footprint of the new building and the proposed access road. It was revealed that the site had been highly truncated and no natural soil profiles survive. This most likely occurred during the construction of the airfield prior to WW2. No archaeological remains were observed within the trenches.

## 1. Introduction

1.1 In February 2011 Archaeological Services and Consultancy Ltd (ASC) carried out an evaluation at RAF Molesworth, Cambridgeshire. The project was commissioned by Mott MacDonald Ltd, and was carried out according to a brief (McConnell, 2010) prepared on behalf of the local planning authority (LPA), *Huntingdonshire District Council*, by their archaeological advisor (AA), Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA), and a project design prepared by ASC (Cuthbert 2010).

### 1.2 Planning Background

This evaluation was required under the terms of *Planning Policy Statement 5* (PPS5), as a condition of planning permission for the development of the site. The relevant planning application reference is 1001459FUL.

#### 1.3 Archaeological Services & Consultancy Ltd

ASC is an independent archaeological practice providing a full range of archaeological services including consultancy, field evaluation, mitigation and post-excavation studies, historic building recording and analysis. ASC is recognised as a *Registered Organisation* by the Institute for Archaeologists and is also accredited ISO 9001, in recognition of its high standards and working practices.

### 1.4 The Site

#### 1.4.1 Location & Description

The development site is on the RAF base which is located in the parish of Brington and Molesworth, in the administrative district of Huntingdonshire (Fig. 1). It is situated c.1km to the north of the village of Molesworth, centred on Ordnance Survey National Grid Reference TL 0769 7719 (Fig. 2).

The proposed development area comprises a roughly rectangular plot of land, c.1.4 hectares, on the southern side of the base. It is surrounded to the south and east by existing buildings and to the north and west by grass.

### 1.4.2 *Geology & Topography*

The soils of the area belong to the Hanslope Association, which are characterised as *slowly permeable calcareous clayey soils*. Some slowly permeable non-calcareous clayey soils. Slight risk of water erosion. over chalky till (Soil Survey 1983, 411d). The underlying geology comprises

Oxford Clay (BGS, Sheet 171). The site is flat and lies at an elevation of c.74m AOD.

1.4.3 Proposed Development

The proposed development principally consists of the erection of a two storey modular administration facility, and access road (Fig. 3).

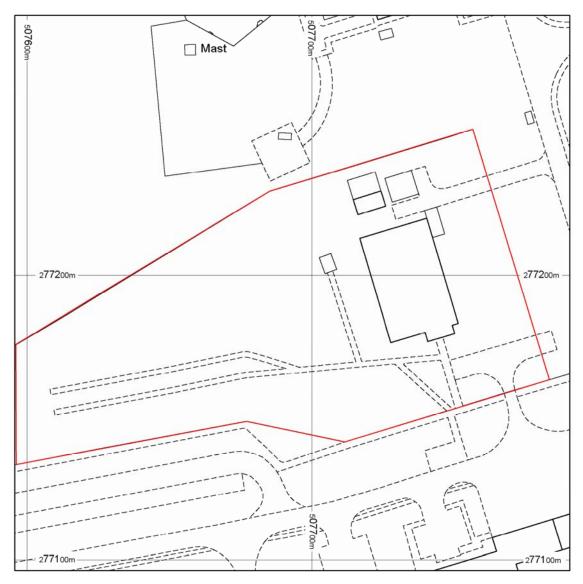


Figure 2: Site plan (scale 1:1250)

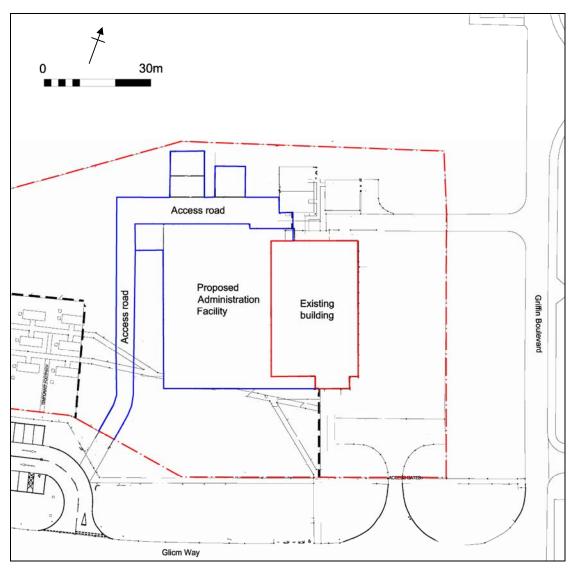


Figure 3: Proposed development (scale 1:1000)

# 2. Aims & Methods

### 2.1 *Aims*

As described in the project design (Section 3.1), the aims of the evaluation were:

- To determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.
- Attention to be paid to the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features, and to soil pollen analysis; to the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits located
- Provision for the absolute dating of critical contacts will be made: e.g. the basal contacts of peats over former dryland surfaces; distinct landuse or landmark change in urban contexts.
- To consider any artefact or economic information, in particular the survival of faunal evidence, and provide an assessment of the viability for further study of such information
- To provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment will also be provided.

#### 2.2 Standards

The work conformed to the project design, to the relevant sections of the Institute for Archaeologists' *Code of Conduct* (IFA 2000) and *Standard & Guidance Notes* (IFA 2001), to the Association of Local Government Archaeological Officers East of England Region *Standards for Field Archaeology in the East of England* (ALGAO 2003), and to the relevant sections of ASC's own *Operations Manual*.

### 2.3 *Methods*

The work was carried out according to the project design (Section 3.3), which required:

- A programme of linear trial trenching and/or test-pitting to adequately sample the threatened available area.
- Three trial trenches were excavated within the footprint of the proposed new building and access road taking care not to hit any current underground services that cross the development area. All three trenches were *c*.20m long and their locations are shown on figure 4.

### 2.4 *Constraints*

Trench 1 was shortened in length by 3m at its southern end due to an unexpected underground service cable. No other constraints, other than those indicated in the project design, were identified during the evaluation stage.

# 3. Archaeological & Historical Background

3.1 The following section provides a summary of the readily available archaeological and historical background to the development site and its environs. The site lies within an area of archaeological and historical interest, and has the potential to reveal evidence of a range of periods (Page 1908)

This section has been compiled with information from Cambridgeshire County Council *Historic Environment Record* (HER) and other readily available sources.

### 3.2 Undated

Only a small amount of archaeological excavation has taken place in the vicinity of the development site, but the archaeological importance of the area is illustrated by the existence of groups of cropmarks, at various locations within the parish, which at present are undated. Traces of a trackway and an enclosure, or enclosures, are visible in aerial photographs of land c.1.7km to the southwest of the site (HER 10037). They appear to form parts of an extensive and linked system of features. At least one rectangular enclosure is represented as cropmarks 1.9km north of the site (HER 00526). Other apparently associated marks are located adjacent to it. Approximately 500m to the southeast of these features is another rectangular enclosure and ditch. (HER 00333). None of the cropmark dimensions are recorded, but from visual inspection they appear to be c.200m in length. To the south of Molesworth village, c.2km from the site, cropmarks form the remnants of what may be a pair ring ditches (ploughed-out burial mounds) (HER 00319a).

### 3.3 *Iron Age* (600BC-AD43)

No specifically dated Iron Age features have been identified in the immediate vicinity of the site. However, it is possible that some of the undated cropmarks originate from this period, or indicate a continuation of occupation from that time.

#### 3.4 **Roman** (AD43-c.450)

The site is situated close to the Roman road which ran between Godmanchester and Leicester, and *c*.3km from the Romano-British settlement of Thrapston. Roman pottery has been recovered during fieldwalking to the east of the church in the village of Old Weston, *c*.2km west of the site (HER 00348b). However, it has been dated to a broad period, ranging from 43AD to 409AD.

#### 3.5 **Saxon** (c.450-1066)

The village of Old Weston is mentioned in the Domesday survey (1086), though apparently deserted in the late Saxon to medieval period, according to documentary evidence in existence in Leighton Bromswold. The remains of the old settlement are thought to be south of the church, which is now detached from the core settlement (HER 00361). Fieldwalking to the south of the village produced a substantial quantity of early to mid Anglo Saxon pottery sherds (HER 00348a).

#### 3.6 *Medieval* (1066-1500)

The surrounding villages of Molesworth, Old Weston and Brington all have medieval origins, and some existing archaeological features dating from that period.

St. Peter's Church, Molesworth, and St. Swithin's Church, Old Weston, both date to the 14<sup>th</sup> century (HER 08661 & HER CB15036). All Saints Church in Brington dates to the 12<sup>th</sup> century (HER CB14869) (Pevsner 1970, 213).

Within Molesworth, at Spring Hill Farm there are a number of features. Well preserved ridge and furrow, and earthworks which have been interpreted as at least two fish ponds and a possible moated manor house, are thought to be present c.100m to the north of the village (HER 00319). More ridge and furrow is situated to the northeast of the village (HER 00329), and to the south (HER 00331). Further earthworks to the south of the village may represent the remnants of a moated village, which includes ridge and furrow, fish ponds and possibly the village itself (HER 00330).

St. Swithin's Church in Old Weston is detached from the village, suggesting the settlement has relocated to the east. Close to the parsonage, which lies immediately north of the church, a substantial quantity of 12<sup>th</sup>-14<sup>th</sup> century pottery was recovered during fieldwalking. Close by are earthworks which may suggest the presence of four house platforms (HER 00384). A medieval headstone is also present in the graveyard (HER 00347).

Within the confines of the base, 1.5km to the east of the site, a tanged and socketed iron arrowhead was recovered, which is thought to be medieval (HER 00367). Fragments of horseshoe and hand-made nails were also found nearby.

#### 3.7 **Post-medieval - Modern** (1500- present)

Both the Inclosure map of 1797 (2100/15/21) and the 1<sup>st</sup> edition OS map of 1885 (sheet XII.14) show the site to have been occupied by large irregular shaped fields, one or more of which may have boundaries which cross the proposed development area. These boundaries remain relatively intact until the construction of the air base.

#### 3.8 General

The base dates from 1917 but was significantly upgraded during the Second World War. The extended runways were subsequently closed in 1957 and demolished in the early 1970's to make way for Cruise missile bunkers, resulting in much of the current layout. A photograph of the site taken in 1977 shows that the development area is in the vicinity of the now demolished main runway (Freeman 1978, 169).

The lack of entries on the HER located on the base itself, relative to its surroundings, may be a consequence of the nature of the development that occurred there. Large areas are under concrete or substantial buildings, thereby obscuring cropmarks. Site security has prevented findspots being identified in the usual manner.

#### 3.9 **Previous Archaeological Work**

In January 2010 a trial trench evaluation was undertaken within the confines of the base, c.400m to the northwest of the development site. Four trenches were excavated within the footprint of a new building

and proposed access road. It was revealed that the site had been highly truncated and no natural soil profiles survived. This most likely occurred during the 1970's when the development area formed part of a large area of concrete hardstanding. No archaeological remains were observed within the trenches (Cuthbert 2010, 4).

# 4 **Results**

#### 4.1 *General*

- 4.1.1 This section provides a summary of the results of the evaluation. Full descriptions of the trenches, in tabulated form, are provided in Appendix 1.
- 4.1.2 Three trenches were excavated across the development site. The trenches were opened using a mechanical excavator fitted with a 1.6m wide toothless ditching bucket, working under archaeological supervision. Following excavation each trench was cleaned sufficiently to determine if archaeological remains were present. Basic trench information was recorded on pro-forma sheets and a photographic record was compiled. The spoil heaps were scanned with a metal detector looking for the presence of archaeological artefacts, but none were recovered.

#### 4.2 **Trenches 1-3** (Fig. 4: Plates 1-3)

The general stratigraphy of the trenches was the same across the whole site, comprising 0.15-0.25m of topsoil overlying the natural bedrock of light brown orange clay with occasional flint inclusions.

No archaeological finds or features were observed within the trenches.



Plate 1: General site conditions, looking northwest



Plate 2: Typical trench stratigraphy



Plate 3: Backfilled trenches, looking west

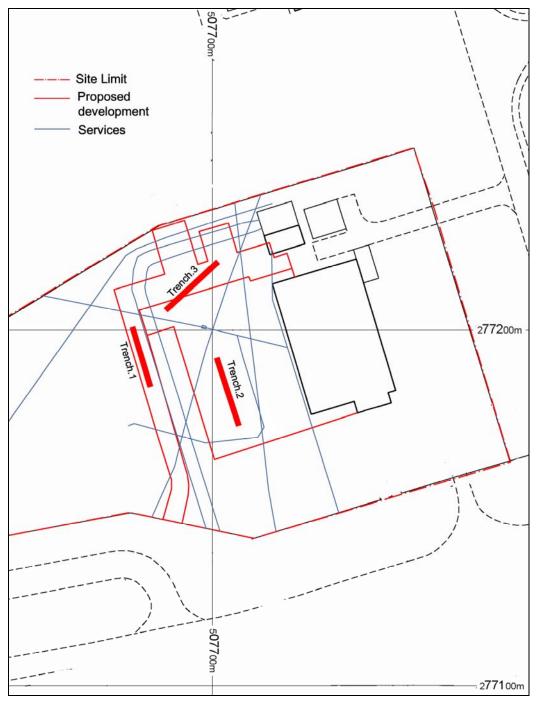


Figure 4: Trench location plan (*scale 1:1000*)

# 5. Conclusions

5.1 During WW2 the development area was open grassland with the main runway to the north, it remained this way during the airbase extensions in 1977.
5.2 All three trenches showed that no natural soil profiles survived, and the site had been highly truncated, most likely during the airfields construction just prior to WW2.
5.3 No archaeological features were observed in the trenches. While the existence of individual isolated archaeological features away from the trenches cannot be specifically excluded, it is unlikely that large numbers of archaeological features were present on the site. It is unlikely that the proposed development will have a significant impact

on archaeological remains.

### 5.4 Confidence Rating

The evaluation took place in clear and sunny weather conditions. Full co-operation was received from the contractors and a high degree of confidence is attached to the results of the evaluation

## 6. Acknowledgements

The evaluation was commissioned by Mott MacDonald Ltd. The writer is grateful to Simon Shaw of Mott Macdonald Ltd for his assistance. The project was monitored by Dan McConnell (CAPCA) on behalf of the local planning authority. Thanks are also due to Michael Picard and Andrew Elsbury the airbase liaison officers and Jim Pawte of Huntingdon Plant Hire.

The project was managed for ASC by David Fell BA MA MIFA. Fieldwork was carried out by Martin Cuthbert BA PIFA and Calli Rouse BA PIFA. The report was prepared by Martin Cuthbert and edited by Bob Zeepvat BA MIFA.

### 7. Archive

- 7.1 The project archive will comprise:
  - 1. Brief
  - 2. Project Design
  - 3. Initial Report
  - 4. Clients site plans
  - 5. Site records
  - 6. List of photographs
  - 7. B/W prints & negatives
  - 8. CDROM with copies of all digital files.
- 7.2 The archive will be deposited with *Cambridgeshire County Store*.

## 8. References

#### Standards & Specifications

- ALGAO 2003 Standards for Field Archaeology in the East of England. East Anglian Archaeology Occasional Paper 14.
- Cuthbert, M 2011 Project Design for Archaeological Evaluation at RAF Molesworth, Molesworth, Cambridgeshire ASC/1391/MWH/1
- EH 1991 The Management of Archaeological Projects, 2<sup>nd</sup> edition. English Heritage (London).
- IFA 2000a Institute for Archaeologists' Code of Conduct.
- IFA 2001 Institute for Archaeologists' Standard & Guidance documents (Desk-Based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings, Finds).
- McConnell, D 2010 Brief for Archaeological Evaluation: RAF Molesworth, Cambridgeshire CAPCA

#### Secondary Sources

BGS British Geological Survey 1:50,000 Series, Solid & Drift Geology.

- Cuthbert M 2010 Archaeological Evaluation at RAF Molesworth, Molesworth, Cambridgeshire ASC/1243/MWH/2
- Freeman, R.A. 1978 Airfields of the Eighth. Battle of Britain Prints International Ltd, (London)
- Soil Survey 1983 1:250,000 Soil Map of England and Wales, and accompanying legend (Harpenden).
- Page, W. (ed) 1908 Victoria History of the County of Cambridgeshire Vol. 3 Dawsons (London)
- Pevsner, N. 1970 *The Buildings of England. Cambridgeshire,* (Second Edition). Yale University Press, (New Haven & London).

# **Appendix 1: Trench Summary Tables**

				Trench	1				
Max Dimensions (m)									
	St.	A Contraction of the second se	Length	17.5m	Width	1.6m		Depth	0.2-0.55m
A CARE		The state			L	evels			
	Jan		Trench to	p North		74.67m	OD		
		in the	Trench ba	ase North		74.12m	OD		
· Sille			Trench top South 74.61m OD						
	122		Trench base South			74.41m OD			
- A	111				NGR C	o-ordina	tes		
and a second		Est.	N	507679/277	201	S	507	684/277185	
C	TET, MARK		Orientation N-S						
Context	Туре	Description and In	terpretation			Widtl (max: n		Thickness (max: mm)	Depth (BGL: mm)
101	Layer	Dark brown silty cla	y loam – To		-		0.15m	0m	
102	Layer	Light brown orange nodules – Natural s		occasional fli	nt and chalk	-		-	0.15m

				Trench	2				
Max Dimensions (m)									
	- James		Length	20.5m	Width	1.6m		Depth	0.25m
the p	1	The DEPART			L	evels			
and the second	1		Trench to	p North		74.71m	OD		
1		the states	Trench ba	ase North		74.46m	OD		
	and the second	£	Trench top South			74.59m	OD		
		1	Trench base South			74.34m OD			
2		Str. C	NGR Co-ordinates						
			N			S	507	707/277172	
			Orientati	on		N-S			
Context	Туре	Description and In	nterpretation			Widtl (max: n		Thickness (max: mm)	Depth (BGL: mm)
201	Layer	Dark brown silty cla	ıy loam – To		-		0.20m	0m	
202	Layer	Light brown orange nodules – Natural s		occasional flir	nt and chalk	-		-	0.20m

	Trench 3									
					Max Din	nensions	; (m)			
			Length	20.5m	Width	1.6m		Depth	0.4m	
ALX .	41	A Private			L	evels				
14 ····································			Trench to	op Northeast		74.76m	OD			
and the second of the	No man		Trench b	ase Northeas	t	74.36m	OD			
2 - 1 V			Trench to	op Southwest		74.67m	OD			
1 th Same		165	Trench base Southwest			74.27m OD				
1.				NGR Co-ordinates						
A COM			NW	507701/277	218	SE	507	688/277205		
		Confidence Sector Secto	Orientati	ion		NE-S	W			
Context	Туре	Description and In	terpretation			Widtl (max: n	-	Thickness (max: mm)	Depth (BGL: mm)	
301	Layer	Dark brown silty cla	y loam – To		-		0.25m	0m		
302	Layer	Light brown orange nodules – Natural s		occasional flir	nt and chalk	-		-	0.25m	

# **Appendix 2: List of Photographs**

SITE NA	IE: RAF	Moleswort	h, Molesworth, Cambridgeshire	SITE NO/CODE: 1391/MWH		
Shot B&W Digital				ject		
1		~	Marked out underground services			
2		~	Marked out underground services			
3		~	Marked out underground services			
4		~	Marked out underground services			
5		~	General site shot, looking northwest			
6	~	~	Trench 1 stratigraphy, looking west, 2x1m scale			
7	~	~	Trench 1 general shot, looking north, 2	2x1m scale		
8	~	~	Trench 2 stratigraphy, looking west, 2x	(1m scale		
9	~	✓	Trench 2 general shot, looking north, 2	2x1m scale		
10		~	Trench 2 stratigraphy, looking west, 2x	(1m scale		
11	~	$\checkmark$	Trench 3 general shot, looking northeast, 2x1m scale			
12	~	~	Trench 3 stratigraphy, looking northwest, 2x1m scale			
13		~	Backfilled trenches			

# **Appendix 3: ASC OASIS Form**

	PROJECT DETAILS						
Project Name:	RAF Molesworth, Cambridgeshir	e	OASIS reference:	Archaeol2-92894			
Short Description: In February 2011 ASC undertook a trial trench evaluation at RAF Molesworth, Cambridgeshire prior to the construction of a new administration block. Three trenches were excavated within the footprint of the new building and the proposed access road. It was revealed that the site had been highly truncated and no natural soil profiles survive. This most likely occurred during the construction of the airfield prior to WW2. No archaeological remains were observed within the trenches.							
Project Type:	Trial trenching						
Previous work: (eg. SMR refs)	None		Site status: (eg. none, SAM, listed)	N/a			
Current land use:	RAF Airbase		Future work: (yes/no/unknown)	Unknown			
Monument type:	None		Monument period:	None			
Significant finds: (artefact type & period)	None						
PROJECT LOCATION							
County:	Cambridgeshire	OS refe	rence: (8 figs min)	TL 0769 7719			
Site address: (+ postcode if known)	RAF Molesworth, Molesworth, C	· ·					
Study area: (sq. m. / ha)	1.4 hectares	Height (	DD: (metres)	c.74m			
	PROJECT	CREATO	RS				
Organisation:	Archaeological Services & Consu	ultancy Ltd	1				
Project brief originator:	D. McConnell	Project	design originator:	M.Cuthbert			
Project Manager:	D. Fell	Director	/Supervisor:	M.Cuthbert			
Sponsor / funding body:	Mott MacDonald Ltd						
	PROJE	CT DATE					
Start date:	07-02-2011	End dat	e:	08-02-2011			
	PROJECT	ARCHIVE	ES				
	Location (Accession no.)	Content	t (eg. pottery, animal	bone, files/sheets)			
Physical:	Combridge County Store	none					
Paper:	Cambridge County Store ECB3533	Site rec	ords, report, photogra	phs			
Digital:	CD-ROM with copies of all digital files						
BIBLIOGRA	PHY (Journal/monograph, publis		•	. ,			
Title:	Archaeological Evaluation: RAF	Moleswort	h, Molesworth, Camb	ridgeshire			
Serial title & volume:	ASC Ltd Report ref. 1391/MWH/2						
Author(s):	Martin Cuthbert BA (Hons) PIFA						
Page nos	19	Date:		16-02-2011			