PROPOSED HORSE TRIALS COURSE DADFORD COMMON

Archaeological Desk-Based Assessment

Prepared by

NETWORK ARCHAEOLOGY

For

Stowe School

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NON-TECHNICAL SUMMARY

This archaeological assessment relates to the proposed construction of a new horse trials course at Dadford Common, Stowe, Buckinghamshire at (NGR 467000 238000). The report presents the results of a desk-based study of published archaeological information in the public domain. The desk-based study was carried out relative to a Study Area comprising a 500m buffer zone centred on the Proposed Development Area.

Searches of national and county databases, the study of modern and historic mapping, aerial photography and written accounts, and the results of field survey, have identified a total of 126 sites of archaeological significance within the Study Area.

Fourteen of the sites identified are located within or immediately adjacent to the proposed development area, these consisted of Stowe Conservation Area, a shrunken medieval village, the canalised course of the Dad stream, two footbridges, two areas of ridge and furrow, two areas of past garden plots/property boundaries, two past pond sites, the remains of a past avenue of tree, and the site of a holloway.

Of these, Stowe Conservation Area is considered to be subject to indirect adverse impact and Stowe Registered Park to direct minor adverse impact. Both impacts would ordinarily carry a medium level of significance, but proposed enhancements to boundaries within Dadford Common may reduce the overall significance of impact to low.

There is a minor direct impact upon one area of ridge & furrow, which is considered to carry a low level of significance. Affects upon six other sites of local importance are uncertain. The potential significance of affect upon three sites is in the range low-medium, whilst for a further three it is considered low.

Recommendation is made for ongoing liaison with Buckinghamshire County Council in order to agree any further archaeological investigation and mitigation.

1 INTRODUCTION

1.1 Purpose of the Report

This report presents the results of an archaeological desk-based assessment undertaken in advance of the proposed laying out of a horse trials course at Dadford Common, Stowe, Buckinghamshire (Figure 1).

1.2 Commissioning Bodies

The archaeological assessment was commissioned by Stowe School. The archaeological contractor was Network Archaeology, a professional organisation providing consultancy advice and a full range of archaeological field services.

1.3 Proposed Development

The proposed horse trials course will be constructed on land in between the village of Dadford and Stowe Park.

The works will include:

- Construction of five new horse jumps, including banks, ditches and pond areas;
- Stoning up of access points;
- Installation of land drainage;
- Chain harrowing of ground surface in some areas, and
- Renewal/ replacement of existing fencing and gates.

1.4 Site Description, Location and Geology

The Proposed Development Area (PDA) is situated in between Dadford and Stowe Park. The Study Area includes part of Stowe Landscape Gardens, a post-medieval designed landscape of international significance. Under the

terms of the Historic Landscape Characterisation project for Buckinghamshire, the PDA lies within Aylesbury Vale District, described as a "classic 'planned' rural landscape of surveyed fields, small towns and villages with little woodland' (Buckinghamshire County Council 2006, 9). However, more locally, it is the presence of Stowe Park that determines the character of the landscape.

The development area is currently occupied by sheep pasture, with occasional trees and some small areas of scrub.

The northern part of the PDA is underlain by limestone and mudstone of the Forest Marble Formation, with White Limestone present in the southern part. Glaciofluvial sand and gravel deposits are present across the PDA, with a strip of clay, silt, sand and gravel alluvium running alongside the Dad stream that forms the eastern boundary of the PDA (BGS 2012).

Topographically, the PDA occupies the side of a narrow valley that slopes down to the east from about 117m to 106m above sea level. The western limit of the PDA is marked by the road running between south from Dadford towards Stowe; the eastern side is bounded by the Dad stream that issues from springs to the north and flows into the ornamental lake known as Oxford Water, which is part of Stowe Landscape Gardens

1.5 Legislation, Regulations & Guidance

The proposed development falls under the following national, regional, and local policies, with further details provided in Appendix A:

National Policies

- Ancient Monuments and Archaeological Areas Act (1979)
- Listed Buildings and Conservation Areas Act (1990)
- Town and Country Planning Act (1990)
- The National Planning Policy Framework (2012).

The National Planning Policy Framework was published on 27 March 2012, coming into immediate effect and replacing all previous Planning Policy Guidance notes (PPGs) and Planning Policy Statements (PPSs). Principles concerning the treatment of heritage assets within the planning system are laid out in section 12 of the NPPF.

Regional Policies

Buckinghamshire County Council Structure Plan (1991-2011). Regional planning is provided for under those policies saved from the original BCC Structure Plan. Specifically, policy HE1 states that permission will not be given for any development which would endanger, or have a significant adverse effect on the character or appearance and/or setting of any of the following: a) listed buildings; b) scheduled ancient monuments and other important archaeological sites; c) historic parks or gardens; and d) conservation areas. Proposals, which would lead to the enhancement of any of these features, are generally encouraged provided that there is no significant conflict with any other relevant policies within the Plan.

Local Policies

Aylesbury Vale District Council (2007-2011). Local planning is provided for under those policies saved from the original Local Plan. Most relevant are: paragraphs 4.143-4.148 'Listed Buildings and Other Structures'; 4.149–4.156 / GP.53 'Conservation Areas'; paragraphs 4.159–4.162 / GP.59 'Archaeology and Ancient Monuments'; and paragraph 4.163 / GP.60 'Historic Parks and Gardens'.

1.6 Aims

The overall purpose of this document study is to consider the cultural heritage implications of the proposed development. This will be achieved by:

- Identification and definition of the extent of known archaeological remains within the Study Area;
- Assessment of their significance;
- Assessment of the overall impact of the proposed development on the known and potential archaeological constraints;
- Assessment of the need for further evaluation and mitigation

prior to and during ground-disturbing activities; and

 Making recommendations for further evaluation and mitigation, where necessary.

1.7 Resourcing

Remote electronic data collection and report writing were undertaken in late June/ early July 2012.

2 METHOD OF ASSESSMENT

2.1 Frameworks and standards

The present Study Area falls within the catchment provided for under the South-East Research Framework (SERF). The framework aims to produce a Resource Assessment: a statement of current knowledge of the archaeology and history of the region. This will serve to highlight the gaps in current understanding, and identify research questions and topics in order to form a Research Agenda for the future. A Research Strategy can then be developed for effectively investigating and interpreting the historic environment of the South East.

All archaeological work pertaining to the present desk-based assessment has been undertaken in accordance with professional codes, standards and guidance documents (IfA 2008a, 2008b).

2.2 Desk Based Assessment Study Area

A 500m buffer was centred on the fields that will be occupied by the proposed horse trials course, in order to form a Study Area.

2.3 Desk Based Data Collection

Baseline data was collected for the entire Study Area, so as to better contextualise the archaeological heritage of the PDA. Data was sought from statutory and non-statutory bodies, as summarised in Table 2.1.

Table 2.1 Summary of data sources and data collected during the assessment

Source	Data type	Data in Study Area
British Museum (BM)	Portable Antiquities Database	Y
Council British Arch. (CBA)	Defence of Britain Database	N
	List of Buildings of Special Architectural or Historic Interest held by the Department of Culture, Media and Sport	Y
	National Monuments Register (NMR) Events database of archaeological works	Y
English Heritage	NMR Monarch database of registered archaeological sites	Y
Lingiloti Floritago	Schedule of Ancient Monuments (SMs) of England	N
	Register of Historic Battlefields	N
	Register of Parks and Gardens of Special Historic Interest in England	Y
	World Heritage Sites	N
	Ancient Woodland	N
Dualinahamahina Caustu	Historic maps (tithe, OS etc)	Y
Buckinghamshire County Council	Various websites listed in section 10.2	N
	Historic Environment Records (HER)	Y
WWW	Google maps / Bing	Υ

2.4 Field reconnaissance Study Area

Full field reconnaissance was undertaken only within the field in which the horse jumps are planned, this being the field located between Vancouver Lodge and the trackway which runs northwest from Home Farm to Dadford Road (Figure 4). A rapid walkover of the fields to the southwest of Home Farm, where several field boundaries may be affected, was also undertaken at the time of the survey.

2.5 Field reconnaissance Data Collection

Visual examination of all plots potentially affected by the scheme took place, where access had been permitted by landowners and where it was safe to enter.

Extant earthworks, structures, vegetative anomalies, soil discolourations, finds concentrations, land use, visible geology, general topography and health & safety issues, were recorded using pro-forma Plot Record sheets. All features identified during the field reconnaissance survey were located using hand held GPS units with an accuracy of +/- 5m.

Visual examination took place of all plot boundaries within the survey area, where access had been permitted by landowners and where it was safe to enter. Boundary elements, such as walls, hedges, fences, ditches, banks and terraces were recorded using pro-forma Boundary Record sheets.

2.6 Field Reconnaissance Limitations and Suitability

Several factors may inhibit the recording of observations within plots during a reconnaissance survey. These include;

- Limited accuracy of the GPS handsets due to overhead obstacles or climatic events;
- Differential levels of 'archaeological visibility' within the survey area and areas comprising woodland, thick vegetation or thorn bushes:
- The lack of clarity surrounding the extent of some sites makes it difficult to provide a precise assessment of potential impact; and
- Making subjective interpretations of the archaeological significance of field observations is problematic.

At the time of the survey, all designated fields were fully accessible and surveyed. The field fully surveyed contained short pasture across the majority of its area with an area of boggy-ground and tall marsh-grass concentrated along its northeast edge.

The fields through which a rapid walkover was undertaken also comprised short pasture. Livestock was evident in all but one of the fields surveyed.

Overall the conditions for survey were considered to be good.

2.7 Data management and presentation

2.7.1 Definition of a 'site'

The term 'site' is used throughout this report to refer to ancient monuments; buildings of architectural and historical importance; parks; gardens; designed landscapes; battlefields; public spaces; historic landscapes; historic townscapes; find spots of artefacts and any other heritage asset.

Unless otherwise stated the term 'site' refers to the location where a site was situated and not to extant remains (e.g. a field boundary means the location of a former field boundary, and a pond means the location of a former pond). The only exception relates to structures, which can be taken to be extant unless otherwise stated.

2.7.2 Reference conventions

The information gathered from the data sources listed in Table 2.1 is uniquely referenced throughout this report and on all of the figures. Information retrieved from public databases is prefixed by a two, three or four letter code, followed by their original source number. Sites found during the course of this desk-based assessment that are not currently listed in a public database are referred to as DBA sites, identified by a two-letter suffix. Sites recognised only by field survey (i.e. not present in any database or identified in the DBA) are referred to as FSU sites (Table 2.2).

Table 2.2 Summary of site reference codes

Reference code	Terms of reference	Example site reference
DBA	Desk-Based Assessment Site	DBA:AA
DBP	Defence of Britain Project	DBP S0013298
FSU	Field reconnaissance survey	FSU 15
LS	Listed Structure	LS 489422
NTSMR	National Trust Sites and Monuments Record	NTHER 599006
NMR	English Heritage National Monuments Record of sites and events	NMR 1309749
PA	Portable Antiquities Scheme	PA 46789
BHER	Buckinghamshire Heritage Environment Record	SMR 1118
RPG	Registered Park or Garden	RPG 1105
NMR	English Heritages National Monuments Register	MON 1131879

2.7.3 Archaeological constraint gazetteer

Known archaeological sites located within the Study Area are summarised in a gazetteer in Appendix C. The gazetteer is structured in alphanumeric order. The gazetteer provides the source, cross-references, description, period and location of each site. The location is given as a 12 figure national grid reference to the centre of the point, area or linear. The gazetteer also gives a category of importance (see Section 2.6.1), an assessment of impact (see Section 2.6.2) and an assessment of the significance of impact (Section 2.6.3).

2.7.4 Archaeological figures

The archaeological sites listed in the gazetteer are presented in Figure 2 & 3. These figures use OS MasterMap vector mapping at 1:2.5k and 1:10k raster. Each site is represented by a star, shaded area or dashed/dotted line, depending on the type of data held. The symbols and corresponding labels are coloured according to the importance of the site (see section 2.6.1).

2.7.5 Accuracy of displayed data

Site data may originally have been captured at a different scale to that at which it is now displayed. This should be borne in mind when interpreting the exact location of constraint points and polygonal boundaries. Table 2.3 presents estimated accuracy levels based upon visual comparison with plots.

Table 2.3 Summary of accuracy levels for displayed data

Source	Source type	Source scale	Positional accuracy in relation to current OS mapping	Accuracy in relation to position on the ground
DBA	OS map	1:10 000 1:10 560	1mm	± 10m
DBA	OS map	1:2500	1mm	± 2.5m
DBA	AP vertical	1:5000 - 1:10 000	1-5mm	± 5 - 50m
DBA	AP oblique	1:1000 - 1:2500	1-5mm	± 5 - 50m
DBA	Tithe/enclosure map	1:5000 - 1:10 000	1-5mm	± 5 - 50m
DBP	digital points	-	-	?
LS	digital points	-	-	? ± 10m
NMR	digital points	-	-	? ± 10m – 1000m
SMR	Annotated maps, digital points and text data	(1:10 000)	±1-200mm	? ± 10m – 2000m

2.8 Impact assessment process

Development will have direct and indirect impacts upon known and potential archaeological remains. Direct impacts are those whereby the archaeological site will be directly physically altered by the construction process, i.e. damaged, partially destroyed or wholly removed. Indirect impacts are those whereby the archaeological site may remain physically unaffected by the development, yet where alterations to its immediate environment may still have an effect, e.g. by causing the deterioration of its historical landscape setting.

Archaeological impact assessment is the process by which the impacts of a proposed survey upon the archaeological resource are identified. Each site has been assessed in relation to its wider heritage landscape, taking account of identity, place, and past and present perceptions of value.

A three-stage process was adopted:

Stage 1: Assessment of importance

Stage 2: Assessment of impact

Stage 3: Assessment of significance of impact

2.8.1 Importance

The sites listed in the Archaeological Constraints Gazetteer have been rated according to their perceived importance into categories A to D and U (as shown in the table below).

Where possible, each site has been assessed on the following characteristics:

- complexity (i.e. diversity of elements and relationships)
- condition (i.e. current stability and management)
- period
- physical form
- rarity
- setting
- survival (i.e. level of completeness)

Table 2.3 Site category definitions

Grade	Description	Examples	Investigation and mitigation
А	Statutory protected	Conservation Area, Listed Building, Scheduled Ancient Monument	Avoidance essential
В	Nationally important	Grade I and II* Registered Park and Garden, Registered Battlefield, Major settlements (e.g. villas, deserted medieval villages), Burial grounds, Standing historic buildings (non-listed) World Heritage Site	Avoidance preferable
С	Regionally important	Grade II Registered Park and Garden, Some settlements, finds scatters, Roman roads, sites of historic buildings	Avoidance desirable, otherwise investigation necessary
D	Locally important	Field systems, ridge-and-furrow, trackways, wells	Avoidance unlikely/investigation recommended
U	Ungraded	Non-archaeological site held by data source	Avoidance and investigation not envisaged

The grade awarded to each site considers the scale at which the site may be judged significant (i.e. in terms of local, regional and national policies, commitments and objectives); representational value, diversity and potential; and existing local, regional and national designations (e.g. Scheduled Monuments).

The process of importance categorisation has been adopted as a tool in

determining appropriate mitigation. The categories should not be taken as a statement of fact regarding the importance or value of a particular site. The use of examples of types of site is simply a guideline. The inclusion of a site in a particular category often involves a degree of subjective judgment and is based upon the current level of information. Categories are not fixed or finite, and the classification of a site may change as a result of findings made during later stages of investigation.

2.8.2 Impact of the proposed development

The potential impact of the proposed development upon a site has been assessed at three levels:

- nature of impact (see Table 2.4)
- type of impact (see Table 2.5)
- magnitude of impact (see Table 2.6)

Table 2.4 Nature of impact definitions

Impact	Description
Beneficial	Beneficial contribution to the protection or enhancement of the archaeological and historical heritage
Adverse	Detrimental to the protection of the archaeological and historical heritage
Neutral	Where positive and negative impacts are considered to balance out
None	No or negligible impact due to distance from proposed survey, and/or construction technique which negates the impact

Table 2.5 Type of impact definitions

Туре	Description
Direct	Physical damage, including compaction and/or partial or total removal. Severance, in particular linear sites
Indirect	Visual intrusion affecting the aesthetic setting of a site. Disturbances caused by vibration, dewatering, or changes in hydrology etc.
Uncertain	Where the physical extent or survival of a site is uncertain, or where the visual impact of the proposed survey on the setting of sites or the landscape has not been determined

Table 2.6 Magnitude of impact definitions

Magnitude	Description	
Severe	Entire or almost entire destruction of the site	
Major	A high ratio of damage or destruction to the site	
Minor	A low ratio of damage to the site	
Indeterminate	Where the data level does not allow any secure calculation (e.g. because the quality and extent of the site is unknown, or because construction techniques have not yet been decided)	

Factors affecting the assessed magnitude of impact include:

- the proportion of the site affected;
- the integrity of the site; impacts may be reduced if there is preexisting damage or disturbance, and
- the nature, potential and heritage value of a site

2.8.3 Significance of impact

The 'significance' of impact has been assessed as the product of site importance and the assessed impact upon each site. The levels of significance of impact are defined in the table below. Significance of impact definitions are provided only for negative impacts. The significance of impact rating does not take account of potential mitigation.

Table 2.7 Significance of impact determination

Stage 1	Stage 2			Stage 3
Importance of site	Nature of impact	Type of impact	Magnitude of impact	Significance of impact
А	Negative	direct	severe	high
			major	high
			minor	high
			indeterminate	high
		indirect	severe	high
			major	high
			minor	medium
			indeterminate	high or medium
В	Negative	direct	severe	high
			major	high
			minor	medium
			indeterminate	high or medium
Ь		indirect	severe	high
			major	medium
			minor	medium
			indeterminate	high or medium
	Negative	direct	Severe	medium
			major	medium
			minor	low
С			indeterminate	low or medium
		indirect	severe	medium
			major	low
			minor	low
			indeterminate	low or medium
D	Negative	direct	severe	medium
			major	low
			minor	low
			indeterminate	low or medium
		indirect	severe	low
			major	low
			minor	low
			indeterminate	low

Stage 1	Stage 2			Stage 3
Importance of site	Nature of impact	Type of impact	Magnitude of impact	Significance of impact
U	Negative	direct	severe	n/a
			major	n/a
			minor	n/a
			indeterminate	n/a
		indirect	severe	n/a
			major	n/a
			minor	n/a
			indeterminate	n/a

2.9 Limitations of assessment

2.9.1 Reliability of the data

Information held by public data sources can normally be assumed to be reliable, but uncertainty can arise in a number of ways:

- The Historic Environment Record (HER) can be limited because it depends on random opportunities for research, fieldwork and discovery;
- Documentary sources are rare before the medieval period, and the few that do exist must be considered carefully in order to assess their veracity;
- Primary map sources, especially older examples, often fail to locate sites to modern standards of accuracy;
- There may be a lack of dating evidence for sites;
- The usefulness of aerial photographs depends upon the geology and land use of the areas being photographed, as well as the season and prevailing weather conditions. Many types of archaeological remains do not produce crop, soil or vegetation marks and the aerial photographs themselves necessarily involve some level of subjective interpretation.

2.9.2 Potential limitations of an impact assessment

Limitations of impact assessment can include:

- Inaccuracies of map sources which make it difficult to provide a precise assessment of potential impact;
- Uncertainty regarding the survival and current condition of some sites. This means that the importance of some sites cannot be finalised until reconnaissance and/or evaluation has taken place;
- Uncertainty regarding the precise methodologies of the development proposals;
- The possibility that hitherto unknown archaeology will be encountered.

3 ARCHAEOLOGY WITHIN STUDY AREA

3.1 Previous archaeological work within the Study Area

The National Monuments Record (NMR), maintained by English Heritage, indicates that there have been 15 archaeological investigations within the Study Area. Of these investigations, 7 were watching briefs, 1 was an excavation, 2 were evaluations and a further 5 were earthwork surveys.

The Buckinghamshire HER contains records of 13 archaeological investigations within the Study Area, these being 10 watching briefs, 2 excavations and 1 evaluation. Close inspection of the records reveals that 5 watching briefs appear in both lists. This means that the total number of previous archaeological investigations within the Study Area is 23.

When looking at previous archaeological investigations within the Study Area, there is a slight complication in that the Stowe Park Estate – which has been subject to much past work, only partially sits within the Study Area and a number of the previous archaeological investigations have not been located beyond being listed as having taken place within Stowe Park. This makes relating them to the exact Study Area problematic. As a consequence, the actual number of previous archaeological investigations within the Study Area may be higher than 23.

Nevertheless, this is a large number of archaeological investigations in relation to the size of the Study Area, and is a reflection of the richness of the local heritage and the intensity with which it has been explored.

Finally, in addition to the investigations listed above, a desk-based assessment was recently carried out in response to the proposed construction of a music facility by Stowe School (Network Archaeology 2011). The music school Study Area overlaps with that of the current project.

3.1.1 Stowe Conservation Area

The Proposed Development Area lies just outside of the Stowe Conservation Area (DBA: AA) – sitting on its north western edge, However the DBA Study area does take in part of the conservation area. The conservation area is *c.* 2.9km² in size and was designated as a conservation area in 1990. Its consists of *c.*558 acres of estate land – much of which consist of parks and gardens containing lakes and ponds, temples, bridges, follies and grottos, the majority of which are Listed Grade I, as well as the 1676 Grade I listed estate house, and Grade II* listed 1744 Church of St. Mary.

3.1.2 Previous heritage surveys

Numerous heritage surveys have been undertaken within Stowe parish. These include:

- The Whittlewood Project: a survey of medieval rural settlement in the Whittlewood environs. The scope of this investigation included Stowe parish, and the draft results are published online at www.le.ac.uk/elh/whittlewood (Dyer et al 2001 & 2003).
- English Heritage survey of Stowe Park, undertaken on behalf of the National Trust, with the results fed through to the Buckinghamshire County Council HER (Riley 2001)

3.2 Palaeolithic (c. 500 000 – 8300 BC)

3.2.1 The Palaeolithic Period: Overview

Mobile hunter-gatherer communities are evidenced in Britain from around half a million years ago. Stone tools were knapped for the purposes of hunting, gathering and fishing, as well as for a multitude of other functions such as food preparation. It is a combination of these stone tools as well as the remains of prey animals that form most of the evidence for this period.

In Buckinghamshire, local Palaeolithic activity is attested to by numerous finds of stone tools. Though these are largely limited to the area of the

Thames valley in the south of the county, a number have been located in the Great Ouse valley. In Northamptonshire, Palaeolithic finds are found largely concentrated within the Nene Valley to the north. No Palaeolithic remains have been identified in the parish of Stowe itself, or in any of the immediately surrounding parishes.

3.2.2 The Palaeolithic Period: Known sites

No sites dating to this period are known within the Study Area.

3.3 Mesolithic (c. 8300 – 4000 BC)

3.3.1 The Mesolithic Period: Overview

Across Britain, Mesolithic settlement tended towards coastal, riverside and lakeside locations, with river valleys such as those of the Great Ouse and its tributaries in north Buckinghamshire being favoured locations (Mithen 1999). Evidence for Mesolithic activity occurs primarily in the form of flint scatters (Mithen 1999).

As in the preceding Palaeolithic, the vast majority of Mesolithic sites are clustered around the Thames valley in the south of the county. However, a small number of Mesolithic flints have also been recovered within the valleys of the Great Ouse and its tributaries in the Milton Keynes area. No sites are recorded within Stowe parish itself, or, with the exception of Milton Keynes, anywhere else in Buckinghamshire north of Aylesbury.

3.3.2 The Mesolithic Period: Known Sites from within the Study Area

No sites dating to this period are known within the Study Area.

3.4 Neolithic (c. 4200 – 2400 BC)

3.4.1 The Neolithic Period: Overview

Throughout the Neolithic period, communities across much of Britain

adopted an increasingly sedentary lifestyle, with agriculture gaining primacy over hunting and gathering as the principal subsistence method. Domestic structures and associated field systems are rarely found (Darvill 1996) and the major evidence type consists of flint scatters, clusters of pits, and monuments, such as long barrows and henges (Whittle 1999).

There are records of *c*.400 Neolithic sites across Buckinghamshire. However, the vast majority of these are located within the Chilterns and Thames valley to the south. No sites are recorded within the parish of Stowe itself, the nearest being a small assemblage of flints at Silverstone Racing Circuit to the north (HER 0670300000), and a cluster of possible Neolithic enclosures at Biddlesden to the west (HERs 0505900000 and 0195601000).

The greatest local concentration of Neolithic sites follows the line of the Great Ouse valley to the south. These sites consist primarily of ring ditches identified on aerial photographs (e.g. at Water Stratford: HER 0551500000).

3.4.2 The Neolithic Period: Known Sites

No sites dating to this period are known within the Study Area.

3.5 Bronze Age (c. 2400 – 800 BC)

3.5.1 The Bronze Age: Overview

With the exception of a new metalworking technology, an essentially Neolithic lifestyle continued on into the early Bronze Age in the Buckinghamshire region, as nationally. From the middle of the period, settlement remains increase in number, while visible ritual sites decrease. Funerary ceremonies came to focus on the individual, with round barrows being characteristic features of this period. Land divisions became increasingly marked by ditched field systems, and large areas of the Thames valley were enclosed in this way (Yates 2007). Deposition of fine metalwork into the Thames and other watercourses occurred during the Bronze Age, and a ritual preoccupation with water might be envisaged.

As for the Neolithic, the majority of Bronze Age sites in Buckinghamshire

are located within the Chilterns and Thames valley. A possible Bronze Age barrow is recorded near to Luffield Abbey Farm to the north of the Study Area (HER 0072700000), though this may as well have been a Saxon territorial marker. To the east, the well-documented prehistoric landscape of Milton Keynes includes nearly four hundred Bronze Age sites (e.g. MKSMRs 1896 and 2192). The nearest concentration of sites to the Study Area follows the line of the Great Ouse valley.

3.5.2 The Bronze Age: Known Sites

No sites dating to this period are known within the Study Area.

3.6 Iron Age (c. 800 BC - AD 43)

3.6.1 The Iron Age: Overview

Iron-working, coinage and the potter's wheel were among the new technologies introduced to Britain from the Continent during the Iron Age. The landscape largely remained one of enclosed roundhouse settlements, field systems and mixed farming communities (Haselgrove 1999). With sustained population growth came increased competition for land, and a highly territorial society emerged (Cunliffe 2004).

The vast majority of the Iron Age sites recorded in Buckinghamshire are located across the Chilterns and along the Thames valley in the south of the county. Across the north Buckinghamshire region, the much smaller number of sites largely comprises spot finds of coins and pottery such as finds of early to late Iron Age pot sherds from nearby Akeley (HERs 0971700000 and 0971300000). Numerous earthwork / cropmark enclosures have also been identified on aerial photographs.

Again, the closest sites to the Study Area would appear to be concentrated along the course of the Great Ouse valley and across the Milton Keynes area. In particular, the latter provides evidence of extensive Iron Age occupation a relatively short distance to the east of Stowe parish (e.g. MKSMR 1508).

3.6.2 The Iron Age: Known Sites

No sites dating to this period are known within the Study Area.

3.7 Prehistoric Period (*c*. 500 000 BC – AD 43)

3.7.1 Prehistoric Period: Overview

For the purposes of this assessment, the term 'prehistoric' is applied to sites which are clearly prehistoric in nature (i.e. pre-AD43) but which cannot be more closely dated to the Palaeolithic, Mesolithic, Neolithic, Bronze Age or Iron Age.

3.7.2 Prehistoric Period: Known Sites

No sites dating to this period have been identified within the Study Area. However, fieldwalking for the Whittlewood Project (2003) did locate five worked flint flakes in a field to the north of Stowe School and a further two in a field south of Lamport.

3.8 Roman (AD 43 – 410)

3.8.1 The Roman Period: Overview

The Roman invasion in AD 43 was followed by a rapid implementation of centralised administration, based on towns such as Leicester, St. Albans and Cirencester, and supported by a network of roads. Communities were able to engage in large-scale trade and exchange networks, adopting a wealth of new items, fashions and customs, while maintaining a degree of continuity with their Iron Age past (Esmonde Cleary 1999).

Across north Buckinghamshire, large Roman settlements and forts are few in number. Other types of Roman remains are more common, with several known villas, e.g. at Foscott north-east of Buckingham and at Radclive to the west (HER 0008700000), where a temple and baths are also suspected. Agricultural features such as drainage ditches and settlement structures have also been recorded in some numbers, suggesting a significant

expansion of occupation into the north Buckinghamshire / south Northamptonshire region during this period.

There are a wealth of Roman sites recorded within the nearby Milton Keynes area, including the small towns of Fenny Stratford (Magiovinium) and Towcester (Lactodorum), the major Roman road 'Watling Street' and a number of known industrial sites. The area in and around Stowe itself contains several sites of Roman date, most related to the manufacture of ceramics. At Biddlesden, five kilns were identified (HER 0442600000), while further pottery and tile kilns are known at Buckingham Industrial Estate (HER 0582200000) and Dadford (HERs 0684700000, 0580100000 and 0580102000).

In greatest proximity is a cluster of known Roman sites in the north-east of Stowe Landscape Gardens. This includes the remains of two kilns, a pit containing two pieces of tegula as well as other probable Roman brick/tile debris; two other pits and a number of ditches. A possible Roman funerary urn was found near Stowe in the 19th century (HER 0467800000), and may relate to a roadside burial, a common funerary context in the Roman period. Field walking associated with the Whittlewood Project has also recovered an assemblage of Romano-British pottery sherds. This profusion of Roman activity comes in stark contrast to the lack of prehistoric sites.

3.8.2 The Roman Period: Known Sites

A total of three sites dating to this period are known within the Study Area. Two of these are roads, the Fenny Stratford (Magiovinium) to High Cross road, which runs NW-SE through the PDA, and the Towcester to Alchester road (NMRs 1325696 and 1333118; 160a under Margary's nomenclature), which runs NE-SW through the eastern part of the Study Area. This, or its successor, was referred to as the Buggerode in the Middle Ages. The only Roman artefact recorded within the Study Area is a quernstone found built into a rockery at Home Farm (SMR MBC29486).

3.9 The Anglo-Saxon Period (AD 410 – 1066)

3.9.1 The Anglo-Saxon Period: Overview

Roman authority in Britain had begun to disintegrate at the beginning of the 5th century, and after the cessation of the official supply of coinage in AD 410, Britain was effectively no longer a part of the Roman Empire. Internecine fighting and Saxon raids exacerbated the destabilising effects of the breakdown. By the mid-fifth century, Saxon warriors had been joined by numbers of colonising farmers. The Upper Thames valley region was possibly the most important area of inland, early Saxon settlement. South and south-east Britain were brought under Anglo-Saxon control during the later fifth and sixth centuries.

Former Roman towns and villas were abandoned and destroyed; smaller rural settlements of timber-built structures with associated cemeteries appeared (Powlesland 1998) in their place, and a landscape of large strip field systems developed and persisted into the subsequent medieval period.

Buckinghamshire County may have been established to provide support for the new fortified town (burgh) built at Buckingham in AD 914. Evidence of early Saxon settlement has been found in Walton, just south of Aylesbury, and numerous Saxon cemeteries have also been excavated across the county, such as that revealed during construction of the Aston Clinton bypass. Minsters were established at Aylesbury and Buckingham, and a few churches in Buckinghamshire provide evidence of Saxon stonework, including at Wing, Hardwick and Iver.

3.9.2 The Anglo-Saxon Period: Stowe Parish

An excellent study of the historical development of Stowe parish, including its Domesday records, was produced during the course of the Whittlewood Project and this is freely available online. As such, there is no need to revisit the results here, but the following salient points should be reiterated:

 There is currently insufficient evidence to understand the landscape in the Romano-British period or the transitions it went through prior to its emergence in the Domesday Survey.

- At the time of Domesday Survey there were six manors in the parish of Stowe: one each in Stowe and Boycott and two each in Dadford and Lamport.
- Domesday records suggest that the area was rather poor and scantily populated; the countryside would have been heavily wooded, with occasional clearances for woodland grazing and a limited number of arable fields.
- It is possible that at the time of the survey the landscape was undergoing a planned programme of reorganisation involving the clearance of isolated farmsteads, prior to the creation of a compact village surrounded by open fields (Dyer et al. 2001 & 2003).

3.9.3 The Anglo-Saxon Period: Known Sites

There are no sites dating to the Anglo-Saxon period known within the Study Area.

3.10 Medieval (AD 1066 – 1540)

3.10.1 The Medieval Period: Overview

Following the Norman Conquest in 1066, a strategy of military and political consolidation was imposed on the country; this included the Domesday survey, and the construction of earthwork castles. Between the 11th and 13th centuries, the expansion of the feudal system led to increasing manorialisation and nucleation of settlement. This part of central southern England lay within the 'planned' landscape of open field agriculture and the region was relatively affluent.

Following the Conquest, a period of almost three centuries saw rapid population growth across much of Britain. The arrival of the Black Death, however, led to a dramatic decrease in population and the abandonment of many villages. Increasing urbanisation was characteristic of the latter part of

the period, with large numbers of people leaving the countryside in favour of towns.

The medieval rural landscape was one of small villages clustered around parish churches; its basic agricultural and social unit was the township, administered by the local manor. Together, townships and manors formed largely self-sufficient economic blocks, and created a highly organised system for the management and control of the natural and human resources of the rural landscape (Moorhouse 1981). Today, its characteristic remnants include churches, castles, moated manors, fishponds, patches of ridge-and-furrow, deserted medieval villages, and houses. With the exception of standing castles, examples of all of these sites exist in Buckinghamshire. Being a fortified town, it is likely that there was once a castle in Buckingham itself, though this is unproven.

3.10.2 The Medieval Period: Stowe Parish

The Whittlewood Project has charted the historical development of the Stowe landscape during the medieval period, and the findings most relevant to the Study Area are summarised below.

The Domesday Survey had recorded rather primitive conditions within Stowe parish, but by the 13th century its fortunes had been transformed and the inhabitants occupied a well-organised and relatively prosperous landscape consisting of nucleated villages surrounded by open fields. These villages were named Stowe, Boycott, Dadford, and Lamport.

The medieval village of Stowe was located close to the church. The church still stands but has been subsumed within Stowe Park. Following the creation of the landscape gardens in the 18th century, few traces of the village remain.

Boycott is the only one of the four settlements within the parish of Stowe for which the medieval boundaries can be securely located. Although the location of the core of the settlement is not known for certain, it is thought to coincide with the present position of either Boycott Farm or Boycott Manor.

Dadford was the largest of Stowe's medieval settlements. In 1279 the village consisted of at least 39 cottages, and its extensive open fields are largely visible today as the distinctive corrugations of ridge-and-furrow earthworks, some of which lie within the PDA. The Roman road between Towcester and Alchester, by this point called the Buggerode, probably separated the open fields of Dadford from those of Stowe and Lamport.

Modern-day Dadford has a rather dispersed form and this may be the result of its origins as two manors, with two distinct centres. The topographical detail within medieval charters assists in the reconstruction of the landscape of medieval Dadford, especially given the well-preserved earthworks that still exist within and around the modern-day village.

All four settlements experienced a contraction of arable cultivation in the 14th century, largely as a result of the Black Death, when up to a half of the population of England died. This and further economic and social changes in the 15th century encouraged sheep farming — in particular wool production — at the expense of arable cultivation. This was to have enormous implications for the local landscape in the post-medieval period (Dyer et al 2001 & 2003).

3.10.3 The Medieval Period: Known Sites

A total of 13 medieval sites are known within the Study Area. Principal among these are;

Two areas of ridge-and-furrow lie within the PDA, one block toward the north west corner (MON 1350627), and another more centrally located (DBA:BR). The earthworks toward the north west run east-west; those toward the centre run northwest-southeast and are slightly curved, perhaps indicating they date to earlier within the medieval period. The two blocks of ridge-and-furrow are separated by a hollow way (SMR MBC 22812), which probably once formed part of the route between the villages of Dadford and Stowe.

Further south within the PDA three further areas of ridge and furrow exist (MON 1350248, 1350883 and 1350848). Perhaps the most significant of

these is that located just to the west of Home Farm (MON 1350848). Here, the width between the strips is around 7m, and they curve slightly to form a 'C' shape. The strips run for some 100m west-east, down the gentle slope to the Dad stream. Other Medieval sites include parts of a known deer park, and elements of both the Medieval Manor and Village of Dadford.

3.11 Post-Medieval and Early Modern (AD 1540 – 1939)

3.11.1 Post-Medieval and Early Modern Period: Overview

Nationally, the post-medieval and early modern periods saw sustained population growth, increased urbanisation, technological advances and the commercialisation of agriculture (Whyte 1999). From the 18th century onwards, the industrial revolution brought even more dramatic changes, all of which had a huge impact across the whole of Britain. Industrial architecture, factories, mines, mills, quarries and other production sites came into being. Urban centres continued to expand to the point where the majority of the population lived in towns and cities, a reversal of earlier circumstances.

3.11.2 Post-Medieval and Early Modern Period: Stowe Parish

During the latter part of the 16th century, a family of wealthy wool merchants, the Temples, first leased and then bought the manor of Stowe. Initially, the Temples maintained the established patterns of settlement and farming on the estate. Yet, from the 17th century onwards, the family, used their considerable wealth to create at Stowe an outstanding stately home and landscaped grounds. The gentrified landscape of Stowe evolved over time, a reflection of the tastes and aspirations of the estate's successive and successful owners

The implications of this for the archaeological heritage are two-fold and contradictory. On the one hand, the scale and scope of this work led to the remodelling if not erasure of much of the medieval landscape: for instance, the village of Stowe was razed in the late 18th century and few traces

survive today. On the other hand, what was created represents 'one of the world's greatest landscape gardens' (National Trust 2012) and Stowe today contains one of the largest concentrations of Grade I listed buildings in England.

The late 1790s or early 1800s saw the construction of Home Farm, a 'model farm' located just to the east of the PDA. The farm was altered and extended during the 19th and 20th centuries (English Heritage 2007). The various buildings and other structural elements of Home Farm account for many of the early modern sites within the Study Area.

The maintenance of sheep-farming in Stowe Park, probably undertaken as much for aesthetic as economic reasons, has allowed for the preservation of those earthwork features that survived the original programmes of landscaping.

In 1923, Stowe School was founded within Stowe House; the school remains there today.

3.11.3 Post-Medieval and Early Modern Period: Known Sites

A total of 47 post-medieval/early modern sites have been identified within the Study Area. Of these, only one – earthworks indicative of possible garden plots or property boundaries (SMR MBC 22814) sits within the PDA.

Beyond the PDA, within the wider study area, post medieval remains are largely associated with the grounds of the Stowe Estate and consist of such things as gardens (SMR MBC 22791, 22826) garden features, ponds tracks, buildings and footbridges (SMR MBC 22785, 22840, 22844, DBA: BA, BG, BI, MON 1350357) areas of planting (MON 1350890, 1350326, DBA: BDS, BE, BF, SMR MBC 22838) as well as a ha-ha (SMR MBC 22706) a quarry (SMR MBC 22836) sand pit and gravel pit (DBA: BM, BN) and elements of the post medieval village of Dadford such as a school (DBA: BH), smithy (DBA: BK) cart shed, cottage workshop, forge and garage and privies (MON 1132131).

3.12 Modern (AD 1939 to present)

3.12.1 The Modern Period: Overview

Today, Dadford exists much as it always, a small village within the Buckinghamshire countryside. Stowe House and its gardens are now maintained by the National Trust. The estate operates as a school while remaining one of the key heritage tourist attractions in Buckinghamshire. Changes and alterations to the landscape have been limited to renovation and enhancement of the estate, and the development of school facilities, buildings and open / recreation areas such as the golf course to the southeast of the PDA. The surrounding land remains largely rural and agricultural.

3.12.2 The Modern Period: Known Sites

There are nine sites of modern date within the Study Area. The majority are agricultural in function and relate to boundary definition or land drainage. Further details are presented in Appendix C. In addition, probable practice trenches dating from WWII have been identified close to the north front of Stowe House (MON 1350793).

3.13 Sites of Undetermined Date

A total of 26 sites of undetermined date have been identified by the desk-based assessment. These comprise: Stowe Conservation Area (BA:AA); 7 areas of ridge and furrow (DBA:AB, DBA:AH, DBA:AI, DBA:AJ, DBA:AW, DBA:AL, DBA:AZ); 2 areas of tree planting (DBA:AQ, DBA:AC); 2 possible quarries (DBA:AM, DBA:AN); a possible sheep fold (DBA:AX); a possible sheep shed (DBA:AK); a possible enclosure (DBA:AD); possible garden plots or property boundaries (DBA:BQ); a track or field boundary (DBA:AS); a former stream course (MON 1350860); 3 ponds (DBA:AT, DBA:AV, DBA:AY) and 2 possible ponds (DBA:AP, DBA:AR); 2 areas of field drains (DBA:AG, DBA:AU) and 1 area of possible field drains (DBA:AO).

The possible garden plots or property boundaries (DBA:BQ), located within

the northeast corner of the field, are visible on aerial photographs as a meandering linear 110m long), oriented northwest to southeast with up to three adjoining, perpendicular, walls (each 15-30m long) and all oriented northeast to southwest heading towards the river.

Field reconnaissance survey located the meandering "wall", as being an intermittent linear mound with occasional large limestone fragments (approximately 0.4m wide and 0.1m high).

It is interesting to note that roughly south of the main NW-SE aligned wall the ground level rises slightly and the ground conditions are dry. Beyond the wall, toward the river, the ground level drops and the conditions are wet and boggy.

The SMR identified a number of Post-Medieval property boundaries (SMR:MBC22814 – see 3.11.3) within the PDA. The "walls" described above (DBA:BQ) may represent the levelled remnants of those Post-Medieval property boundaries. However, the main northwest to southeast wall appeared to form a division between the low, boggy ground to the east from the higher, drier ground to the west and may therefore have been the remnant of an earlier flood defence or some form of structure(s) used for water retention, such as for fish ponds.

4 ARCHAEOLOGICAL POTENTIAL OF THE STUDY AREA

4.1 Introduction

This chapter discusses the archaeological potential of the Study Area. Archaeological potential is a combination of the likelihood of encountering archaeological remains and the possible archaeological significance of those remains. In the sections that follow, determination of potential is made specific to period and an overall assessment is expressed in terms of a 'high', 'medium' or 'low' classification. There follows an assessment of potential for palaeo-environmental / organic remains and an assessment of potential by site type within each period.

4.1.1 Palaeolithic (c. 500 000 - 8300 BC)

Palaeolithic finds are rare in Britain, partly because of their great antiquity and partly due to the low level of population and the sporadic and transitory nature of settlement at this time. The paucity of finds means that the Palaeolithic is the least understood period of human history and therefore always a research priority.

No Palaeolithic sites are recorded within the Stowe parish environs, with the nearest known sites concentrated along the Thames Valley to the south and the Nene Valley to the north. The archaeological potential of the Study Area with regard to the Palaeolithic period is therefore considered **low**.

4.1.2 Mesolithic (c. 8300 - 4000 BC)

Given the riverine settlement focus at this time, the proximity of the River Great Ouse and its tributaries to the Study Area raise the possibility of Mesolithic material lying undiscovered locally. However, no Mesolithic sites have previously been recorded within the Stowe Parish environs, and so the archaeological potential of the Study Area with regard to the Mesolithic period can only be considered **low**.

4.1.3 Neolithic (c. 4000 BC - 2400 BC)

Identified Neolithic sites are few in number in this area of north Buckinghamshire, with none recorded in Stowe parish itself. However, those sites that are recorded locally seem to cluster along the Great Ouse valley, which passes a relatively short distance to the south of the Study Area. This raises the possibility of undiscovered sites within the parish. The overall archaeological potential for the Study Area with regard to the Neolithic period is still considered **low**.

4.1.4 Bronze Age (c. 2400 - 800 BC)

As for the Neolithic, evidence for local Bronze Age settlement activity has been identified along the course of the Great Ouse valley to the south of the Study Area. This increases the likelihood of further settlement remains within Stowe Parish, though none have been previously identified, and the archaeological potential of the Study Area with regard to the Bronze Age is therefore considered **low**.

4.1.5 Iron Age (c. 800 BC - 43 AD)

As throughout earlier prehistory, observed Iron Age activity is absent within the Stowe Parish environs, with the nearest sites concentrated along the Great Ouse valley to the south. A considerable Iron Age landscape has also been uncovered in the area of Milton Keynes to the east. Overall, the Stowe landscape would appear to have been consistently on the periphery of local settlement activity throughout prehistory, though the scale of Post-Medieval landscaping and the subsequent academic focus on these later features may be a distorting factor.

The archaeological potential of the Study Area with regard to the Iron Age is therefore considered **low**.

4.1.6 Roman (AD 43 - 410)

It is during the Roman period that occupation of the Stowe landscape first becomes visible. This comes in stark contrast to the seemingly depopulated prehistoric landscape and suggests a movement of people into the north Buckinghamshire region at this time. Two Roman roads run through the Study Area and one of these (MON. NO. 1325696, the Roman road from Fenny Stratford to High Cross) appears to pass directly through the PDA. Settlements often came to be built alongside roads in the Roman period. In addition, the find of a pottery kiln (HER 0580100000) just to the east of the Study Area might also signal settlement in the vicinity.

It is possible that the ridge-and-furrow earthworks that swathe much of the Study Area have succeeded in obscuring remains from earlier periods.

The archaeological potential of the Study Area with regard to the Roman period is considered **medium**.

4.1.7 Anglo-Saxon (AD 410 - 1066)

The four villages recorded in Stowe parish by the Domesday survey attest to settlement of the area at least by the close of the Saxon period. The Domesday entries suggest that the local landscape was mostly wooded, with only a little arable agriculture. Such conditions undoubtedly existed earlier within the Anglo-Saxon period proper.

It is possible that some of the boundary and agricultural earthworks within the Study Area and PDA are early medieval in date, or are reiterations of elements of the early medieval landscape.

Considering that no known Anglo-Saxon remains have been recorded in the Study Area, the somewhat underdeveloped state of the landscape as recorded by the Domesday Survey, and the tendency of the Anglo-Saxon period to be often somewhat archaeologically elusive, the potential of the PDA with regard to Anglo-Saxon archaeology should be regarded as **low**.

4.1.8 Medieval (AD 1066 - 1540)

Both archaeological and historical sources attest to concerted occupation and exploitation of the Stowe parish landscape during the medieval period. Land belonging to three of the four medieval villages documented within Stowe parish falls within the Study Area, with the former cores of Dadford and, probably, Boycott situated close to the PDA. Agricultural remains, principally remnant field systems, ridge-and-furrow and rural settlement features are present as earthworks throughout the Study Area and within the PDA.

As the Whittlewood Project highlights, there is a wealth of medieval documentary evidence relating to the landscape of Dadford, and this augments the historical value of many of its earthwork features: 'sufficient topographical information survives to make the reconstruction of the landscape of medieval Dadford a real possibility' (Dyer et al. 2001). The archaeological potential of the village's surviving medieval earthworks is therefore enhanced by this substantial corpus of medieval charters.

Given the above, the archaeological potential of the Study Area with regard to the medieval period is **high**.

4.1.9 Post-Medieval and Early Modern (AD 1540 - 1939)

The proximity of Stowe House, its associated listed structures, ornamental gardens and parkland to the parish landscape, means that the vast majority of sites identified within the Study Area are Post-Medieval / Early Modern in date. Given this, it is highly probable that further remains dating to this period await discovery. In particular, both structural and ornamental sites should be anticipated.

The landscape of Stowe constitutes a prime resource for exploring the impact that houses of the gentry had on the local landscape, economy and social structure. Such issues are likely to form a key focus of the forthcoming South East Research Framework for the post-medieval period (SERF 2012).

In light of above, the archaeological potential of the Study Area with regard to the Post-Medieval and Early Modern period is considered **high**.

4.1.10 Modern (AD 1939 - present)

Records for the developments of this period are sound by comparison with those of earlier periods and so it would be surprising to encounter substantial modern remains that are entirely unrecorded. Furthermore, the Study Area is located within a landscape that is well-administered on the basis of its heritage value. Nevertheless, it is possible that some modern features may lie undetected, and any that do are likely to be structural in nature.

The archaeological potential of the Study Area with regard to the remains of the Modern period is considered to be **low to medium.**

4.1.11 Summary of potential

A summary of archaeological potential by period, presented below (table 4.1), shows potential as ranging from 'low' to 'high'. The overall archaeological potential of the site of the proposed horse trials course is considered to be **medium**.

Table 4.1 Summary of archaeological potential by period

Period	Potential
Palaeolithic	low
Mesolithic	low
Neolithic	low
Bronze Age	low
Iron Age	low
Roman	medium
Anglo-Saxon	low
Medieval	high
Post-Medieval/Early Modern	high
Modern	low to medium

4.2 Palaeo-environmental and organic remains

There have been no palaeo-environmental studies carried out within the Study Area.

In certain regards the PDA does not carry a particularly high potential for organic preservation given the relatively steep pitch of the land and the generally permeable substrata beneath it.

However, proximity of the PDA to the canalised course of the Dad stream, the potential for valley bottom alluvium and colluvium, the existence of springs to the north of the PDA (1.4) and the identification of an area within it identified within the "Scope of Works" document (provided by the client) as requiring drainage might suggest a propensity to localised waterlogging. Such ground conditions might be conducive to anaerobic preservation of palaeo-environmental and organic remains. Such remains might be preserved within former stream channels along the north east side of the PDA.

The general potential for palaeo-environmental survival within the PDA is therefore considered **medium**.

4.3 Summary of potential for encountering different classifications of archaeological remains

An overall summary of potential is presented below (table 4.2). Beyond determinations of potential for encountering period-specific archaeology, it is also possible to make an informed assessment of the likely nature of any archaeological remains in terms of their wider functional classification or 'type'. A better idea of the types of features likely to be encountered aids the formulation of appropriate mitigation strategies.

On current understanding, there is an enhanced possibility that prehistoric lithic remains and later prehistoric land boundaries (likely to comprise backfilled ditches) might be present. There is a low potential for other prehistoric remains to be identified.

There is a generally low to moderate potential for encountering remains related to the enclosure and farming of the landscape from the Iron Age onwards until the medieval and post-medieval/early modern periods when the potential is considered high. Ridge-and-furrow, field boundaries and other agricultural earthworks should be anticipated within the PDA.

Table 4.2 Potential encounter rate for different feature classifications by period

Classification/Period	Agricultural	Boundaries	Communications	Funerary	Industrial	Lithic scatters	Military	Settlement
Palaeolithic						•		
Mesolithic						•		
Neolithic						•		
Bronze Age		•				•		•
Iron Age	•	•						•
Roman	•	•						•
Anglo-Saxon								
Medieval	•	•						
P-Med/E-Mod	•	•						•
Modern	•						•	

Blank = negligible potential

• = medium to high potential • = low to moderate potential

5 IMPACT ASSESSMENT

5.1 Importance

In total, 126 sites have been identified by this assessment. Of these, 1 site - Stowe Conservation Area (DBA:AA) benefits from statutorily protection (Grade A), 1 site - Stowe Registered Park (RPG 1105) is of national importance (Grade B), 1 site - the Towcester to Alchester Roman road (NMR 1333118) is of regional importance (Grade C), and 123 are of local importance (Grade D). No sites are ungraded (Grade U) (Table 5.1).

Table 5.1 Summary of importance

Grade	No. of sites	%
А	1	0.8
В	1	0.8
С	1	0.8
D	123	97.6
U	0	0
Total	126	100.0

The PDA is located entirely within Stowe Park but immediately outside of Stowe Conservation Area. The boundary of the former marks the western boundary of the PDA, whilst the boundary of the latter runs along the southwest boundary of the PDA.

Of the 123 Grade D sites identified, the canalised course of the Dad stream (SMR MBC 22713) forms the northeast and east sides of the PDA. Two footbridges (DBA:BG and DBA:BO) are situated on the canal.

A shrunken medieval village (SMR MBC 1458), two areas of garden plots/property boundaries (DBA:BQ, SMR MBC 22814), two areas of ridge & furrow (DBA:BR, MON1350627), a hollow way (SMR MBC22812), a tree avenue (SMR MBC 22813) and a pond (DBA:AY) fall within the PDA and may be affected by it.

5.2 Impact Assessment

Of the 126 sites identified, 13 are considered subject to adverse effects.

No beneficial or neutral impacts are envisaged (Table 5.2).

Table 5.2 Summary of nature of impacts

Impact type	Number of Impacts
Beneficial Impacts	0
Neutral Impacts	0
Adverse Impacts	13

5.2.1 Adverse impacts

The PDA is considered to have an adverse impact on 9 sites. Of these, 2 are considered subject to direct adverse effects and 1 to indirect adverse effects, while the effects on 6 sites are considered uncertain (Table 5.3).

The level of impact on these sites is discussed below in grade order and summarised below in Table 5.3.

Table 5.3 Summary of adverse impacts of the scheme by grade

		Total no. sites	No. sites impacted by the PDA			
Grade	Description	collated	Uncertain impacts	Indirect impacts	Direct impacts	
Α	Statutory protected	1	0	1	0	
В	Nationally important	1	0	0	1	
С	Regionally important	1	0	0	0	
D	Locally important	123	6	0	1	
U	Ungraded	0	0	0	0	
TOTALS		126	6	1	2	

Grade A Sites – adverse impacts

Of the 13 sites benefiting from statutory protection within the Study Area, one – Stowe Conservation Area – is indirectly impacted by the proposed development. The level of this impact is considered to be minor. The extent to which it is affected by the proposed development will rely on factors such as the precise construction methodology, the duration of construction and, not least, the eventual appearance of the jumps.

Construction methodology and duration should only adversely affect the Conservation Area in the short term, potentially disturbing visitors' enjoyment of the park. The completed jumps continue to have such an effect on a visitor's experience of this area of the Stowe landscape if it is perceived not to complement its surroundings. This is considered an unlikely outcome. The potential minor adverse effect may also be balanced by proposed improvements to the existing field boundaries. Any residual effect would be negligible.

Grade B Sites – adverse impacts

One nationally important site is located within the Study Area: Stowe grade I Registered Park (RPG 1105). The entirety of the PDA lies within the registered park, which is subject to a minor level of direct impact.

Grade C Sites – adverse impacts

The 1 regionally important site located within the Study Area - Towcester to Alchester Roman road (NMR 1333118) is unaffected by the proposed development.

Grade D Sites – adverse impacts

A total of 123 locally important sites are located within the Study Area. Of these, 1 – an area of ridge & furrow (DBA:BR) is considered vulnerable to direct adverse impact.

A further 6 sites within the PDA – a shrunken medieval village (SMR MBC 1458), two areas of garden plots/property boundaries (DBA:BQ, SMR MBC

22814), a second area of ridge & furrow (MON1350627), a hollow way (SMR MBC22812), and a tree avenue (SMR MBC 22813) – are considered subject to uncertain impact, as the full extent of some are unrecorded and the jumps PDA may encroach upon elements of them.

Grade U Sites – adverse impacts

As there are no ungraded sites, there are no impacts upon sites of this grade.

5.2.2 Beneficial impacts

Although there are no overall beneficial impacts to any sites, proposed enhancements to boundaries within Dadford Common may give rise to small beneficial affects upon 2 sites (Stowe Park and Stowe Conservation Area) which may help to reduce overall adverse affects and significance of adverse effect upon these sites (5.3.1 and 5.3.2).

5.3 Significance of Impact

The overall levels of significance of adverse impact are summarised in Table 5.4.

Table 5.4 Summary of significance of beneficial impacts

Significance of impact	Grade					Count
Oignificance of impact	Α	В	С	D	U	Oddin
None	0	0	1	116	0	117
Unknown	0	0	0	6	0	6
Low	0	0	0	1	0	1
Low or Medium	0	0	0	0	0	0
Medium	1	1	0	0	0	2
Medium or high	0	0	0	0	0	0
High	0	0	0	0	0	0
Total	1	1	1	123	0	126

5.3.1 Grade A sites

The minor direct impact of the development upon Stowe Conservation area is considered to carry a medium level of significance. Beneficial affects

resulting from proposed enhancements to boundaries within Dadford Common, however, may reduce the overall significance to low.

5.3.2 Grade B sites

The minor direct impact of the development upon Stowe Grade I Registered Park is considered to carry a medium level of significance. Beneficial affects resulting from proposed enhancements to boundaries within Dadford Common, however, may reduce the overall significance to low.

5.3.3 Grade C sites

As the regionally important site is unaffected by the proposed development, the significance is none.

5.3.4 Grade D sites

The minor direct impact of the development upon the ridge & furrow is considered to carry a low level of significance.

The significance of the uncertain impacts upon the other 6 sites is unknown.

The potential significance of affect upon three sites – the shrunken medieval village (SMR MBC 1458), and the 2 areas of garden plots/property boundaries (DBA:BQ, SMR MBC 22814) is in the range low-medium.

The potential significance of affect upon the remaining three sites – the second area of ridge & furrow (MON1350627), the hollow way (SMR MBC22812), and the tree avenue (SMR MBC 22813) – is considered low.

6 RECOMMENDATIONS

It is recommended that:

- Liaison should be maintained with Buckinghamshire County Council
 in order to agree any future archaeological mitigation, and approve
 and monitor the implementation of any archaeological Written
 Scheme of Investigation;
- Consideration is given to the maintenance of a watching brief during any ground-disturbing works carried out during the construction of the horse trials course, particularly excavation of the jumps in the northernmost field:
- Any future archaeological work on this project should be conceived, where possible, within the context of any relevant regional and national frameworks, and should be carried out with reference to professional standards and guidance.
- 4. The likely extent of the shrunken medieval village (SMR MBC 1458), and the 2 areas of garden plots/property boundaries (DBA:BQ, SMR MBC 22814) within the PDA needs to be determined.
- 5. One snag item has been identified during the undertaking of this desk-based assessment, this being the 1843 Estate Map. This map should be checked at the earliest opportunity going forward.

7 ACKNOWLEDGEMENTS

Network Archaeology Ltd. would like to thank the following for their contribution to the project:

Table 7.1 Acknowledgements

Organisation	Name	Position	Contribution
Buckinghamshire County Council	Eliza Alqassar	Archaeological Planning Officer	Curatorial guidance
Buckinghamshire County Council	Julia Wise	HER Officer	Curatorial guidance
English Heritage		Archive Services	Provision of AP and NMR data
Network Archaeology	David Bonner	Company Director & Senior Project Manager	Project management
	Susan Freebrey	Project officer and IT/GIS luminary	GIS, figures

8 BIBLIOGRAPHY

8.1 Primary sources

Table 8.1 Pre-OS maps

Title	Surveyor	Year
Stowe Tithe	?	1845
General Plan of the Woods, Park & Gardens of Stowe	Sarah Bridgeman	1739

Table 8.2 OS maps

County	Sheet / type	Year	Scale
Buckinghamshire	8SW	1885	1:10560 (6 inch to 1 mile)
Buckinghamshire	13NW	1885	1:10560 (6 inch to 1 mile)
Buckinghamshire	13NW	1900	1:10560
Buckinghamshire	8SW	1900	1:10560
Buckinghamshire	13.1	1922	1:2500
Buckinghamshire	13NW	1923	1:10560
Buckinghamshire	8SW	1950	1:10560
Buckinghamshire	13NW	1950	1:10560
Buckinghamshire	13NW	1958	1:10560
Buckinghamshire	SP63	1960	1:25000

8.2 Aerial Photographs

Table 8.3 Aerial Photographs

Sortie number	Lib no.	Frame no.	Easting	Northing	Date	Gaz. Ref
RAF/106G/UK/1646	419	4193	474000	170200	10-Jul-46	AP. 1946
RAF/CPE/UK/1953	555	4096	473400	170900	25-Mar-47	AP. 1947a
RAF/CPE/UK/2307	737	5050	474000	170600	11-Sep-47	AP. 1947b
RAF/540/1392	1571	100	474300	170400	27-Aug-54	AP. 1954
OS/63195	11461	78	474500	170500	30-Jul-63	AP. 1963
RAF/106G/UK/1646	419	4194	473300	170100	10-Jul-46	
RAF/CPE/UK/1953	555	4097	474000	171200	25-Mar-47	
RAF/CPE/UK/2307	737	5051	473600	170600	11-Sep-47	
RAF/CPE/UK/2330	739	5035	473400	171100	27-Sep-47	
RAF/CPE/UK/2330	739	5036	473600	171100	27-Sep-47	
RAF/CPE/UK/2330	739	5037	473900	171100	27-Sep-47	
RAF/CPE/UK/2330	739	5038	474200	171100	27-Sep-47	
RAF/82/866	1514	365	473800	169900	12-Mar-54	
RAF/540/1392	1571	59	473500	170400	27-Aug-54	
RAF/540/1392	1571	60	473500	170700	27-Aug-54	

Sortie number	Lib no.	Frame no.	Easting	Northing	Date	Gaz. Ref
RAF/540/1392	1571	99	474300	170700	27-Aug-54	
RAF/58/4646	2204	438	474100	170100	28-Aug-61	
RAF/58/4646	2204	439	473200	170000	28-Aug-61	
RAF/543/1426	2213	275	473400	170700	28-Aug-61	
RAF/543/1426	2213	276	474100	170700	28-Aug-61	
US/7PH/GP/LOC35	6791	5044	471100	171500	19-Aug-43	
US/7PH/GP/LOC208	6886	5043	474500	171300	08-Mar-44	
RAF/HLA/321	8399	676	474300	170900	11-Sep-41	
RAF/HLA/654	8586	5001	473800	170800	13-Feb-43	
RAF/HLA/654	8586	5058	473900	170700	13-Feb-43	
OS/63195	11461	79	473800	170500	30-Jul-63	
OS/86153	12863	1	473800	170900	01-Jul-86	
RAF/543/3859	15228	484	473800	171100	13-Jun-67	
RAF/543/3859	15228	723	474300	169800	13-Jun-67	
RAF/543/3859	15228	724	473400	169900	13-Jun-67	
RAF/58/8196	15229	16	474200	170600	24-Jul-67	
RAF/58/8196	15229	17	473500	170700	24-Jul-67	
OS/98023	15400	149	473300	170600	19-Mar-98	
OS/98023	15400	150	473800	170600	19-Mar-98	
OS/98023	15400	151	474200	170600	19-Mar-98	
OS/53T28	20234	101	473600	170500	23-Apr-53	
OS/53T28	20234	102	473800	170500	23-Apr-53	
OS/53T28	20234	103	474000	170500	23-Apr-53	
OS/53T28	20234	119	473900	170700	23-Apr-53	
OS/53T28	20234	120	473700	170700	23-Apr-53	
OS/53T29	20404	146	474100	171000	23-Apr-53	
OS/53T29	20404	147	473900	171000	23-Apr-53	
OS/53T29	20404	148	473600	171000	23-Apr-53	
OS/53T29	20404	149	473400	171000	23-Apr-53	
ADA/156	26235	207	474400	170500	04-Aug-83	
ADA/156	26235	208	473500	170600	04-Aug-83	
ADA/267	26421	123	473500	171100	30-Sep-85	
ADA/267	26421	124	474600	171100	30-Sep-85	
EA/AF/91C/016	40013	3574	473500	170300	01-Mar-91	
EA/AF/91C/016	40013	3575	473600	170500	01-Mar-91	
EA/AF/91C/016	40013	3576	473800	170700	01-Mar-91	
EA/AF/91C/016	40013	3577	473900	170900	01-Mar-91	

8.3 Secondary Sources

Table 8.4 Printed secondary sources

Author	Year	Title	Journal/ Publishers
Cunliffe, B	2004	Iron Age Communities in Britain.	London: Routledge
Darvill, T	1996	Neolithic buildings in England, Wales and the Isle of Man. In T Darvill and J Thomas (eds), Neolithic houses in northwest Europe and beyond. 77-111.	Oxford. Oxbow Books
Dyer, C, Gardiner, M, and Rippon, S,	2001 & 2003	The Whittlewood Project	See table below
Esmonde Cleary, S	1999	Roman Britain: Civil and Rural Society in J. Hunter & I. Ralston (eds.), The Archaeology of Britain.	London: Routledge.
Haselgrove, C	1999	The Iron Age, in J. Hunter & I. Ralston (eds.), The Archaeology of Britain.	London: Routledge
Institute for Archaeologists	2008a	Code of Conduct.	IFA
Institute for Archaeologists	2008b	Standard & Guidance documents (Desk-based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings, Finds, Waterlogged Wood).	IFA
Margary, I D	1967 edition	Roman Roads in Britain	London: Gollancz
Mithen, S.	1999	Hunter-Gatherers of the Mesolithic, in J. Hunter & I. Ralston (eds.), The Archaeology of Britain.	London: Routledge.
Moorhouse, S	1981	Rural Medieval Landscape. In Faull, M L, and Moorhouse, S (eds) West Yorkshire: an Archaeological Survey to AD 1500, Vol 3.	West Yorkshire Metropolitan County Council
Network Archaeology	2011	Stowe School Music School: Archaeological Desk-Based Assessment and Field Reconnaissance Survey. NAL Report No 456	Unpublished
Powlesland, D J	1998	West Heslerton - The Anglian Settlement: Assessment of Potential for Analysis and Updated Project Design.	Internet Archaeology 5
Riley, H.	2001	Stowe Park, Stowe, Buckinghamshire: An Archaeological Survey	English Heritage: unpublished
Whittle, A	1999	The Neolithic Period, in J. Hunter and I. Ralston (eds.), The Archaeology of Britain.	London: Routledge
Whyte, I	1999	The Historical Geography of Britain from AD1500, in J. Hunter & I. Ralston (eds.), The Archaeology of Britain.	London: Routledge
Yates, D	2007	Land, Power and Prestige; Bronze Age Field Systems in Southern England.	Oxford. Oxbow Books

Table 8.5 On-line sources

Site	Address	Accessed
Bucks. Historic Landscape Characterisation Report (Referenced as Buckinghamshire County Council)	scape acterisation rt (Referenced as nghamshire http://www.buckscc.gov.uk/bcc/archaeology/Buck s+HLC+report.page?	
Geology of Britain Viewer (referenced as BGS 2012)	http://maps.bgs.ac.uk/geologyviewer/	June 2012
Google Maps UK (aerial photos)	http://maps.google.co.uk/	June 2012
Heritage Gateway	http://www.heritagegateway.org.uk/gateway/	June 2012
Pastscape (referenced as English Heritage 2007)	http://www.pastscape.org	June 2012
South East Research Framework	https://shareweb.kent.gov.uk/Documents/L eisure-and-culture/heritage/serf-research- agenda-conference/serf-conference-topic- post-medieval-and-modern.pdf	July 2012
Stowe (Referenced as National Trust 2012)	\ http://www.pationaltruct.org.uk/ctowo/	
Whittlewood Project	www.le.ac.uk/elh/whittlewood	July 2012

APPENDIX A

Explanation of Phased Approach to Archaeological Investigation and Mitigation

EXPLANATION OF PHASED APPROACH TO ARCHAEOLOGICAL INVESTIGATION AND MITIGATION

Stage 1: Study Area Investigation Study

An appraisal of archaeological potential

Stage 2: Desk-based Assessment

A thorough desk based synthesis of available information

Aerial photographic study:

Identification and mapping of palaeochannels from aerial photographs should be undertaken as part of the desk-based assessment.

Stage 3: Field Surveys

Field reconnaissance survey

This is a visual inspection of the proposed development, in order to:

- locate and characterise archaeology represented by above ground remains (e.g. earthworks and structures); and
- record the nature and condition of existing field boundaries crossed by the development, to establish their potential antiquity.
- A walkover of the entire development area should normally take place.

Fieldwalking survey

The distribution of finds found by fieldwalking can indicate areas of archaeological activity, which are not represented by above ground remains.

A programme of structured fieldwalking should normally take place across all available arable land to recover archaeological artefacts. A minimum of five transects at 10m separation based upon the centreline of the proposed development should normally be walked.

Geophysical survey

Geophysical survey methods are non-intrusive and can detect and precisely locate buried archaeological features.

Magnetometry is the most cost-effective technique for large scale surveys. *Recorded* magnetometer survey, supplemented by background magnetic susceptibility survey is normally recommended.

Unrecorded magnetometer scanning is not recommended because it requires spontaneous, subjective interpretation as the unrecorded scanning survey progresses. This method does not therefore provide a secure basis for eliminating areas that produce negative results from further consideration.

Auger survey

Geotechnical borehole survey supplemented by hand auger survey could:

- generate stratigraphic profiles and establish the depth of alluvium;
- look for 'islands' of solid geology which are elevated in comparison with their contemporary landscape;
- look for former river channels;
- look for evidence of buried land surfaces;
- assess the viability of using targeted magnetometer survey on the floodplain.

Ideally, an environmental archaeologist would consult with the geotechnical team in order to develop a strategy which would enable the opportunistic and immediate examination of the geotechnical team's soil cores, in conjunction with a *hand auger survey* tailored to meet archaeological objectives listed above.

Radiocarbon dating and palaeo-environmental assessment

Soil samples recovered may require radiocarbon dating and assessment of potential for preservation of palaeo-environmental important remains.

Stage 4: Evaluation

Field evaluation should normally take place at the sites of positive findings made during earlier stages of archaeological assessment and field survey, which it may not be possible or desirable to avoid. Evaluation might involve machine-excavated trenches, hand-dug test-pits and/or hand auguring. The objectives are to confirm the presence or absence of archaeological remains, to determine their character, extent, date and state of preservation, and to produce a report on the findings. The choice of technique(s) will depend upon site-specific factors.

Stage 5: Mitigation

Excavation

It may not be possible or desirable to avoid significant archaeological sites identified by previous survey work and/or evaluation. Ideally, *excavation* of such sites should take place in advance of construction. Excavation would involve machine-stripping of limited, open areas, followed by archaeological investigation. The objectives would be to obtain a full record of the archaeological remains prior to construction, and to produce a report on the findings.

Earthwork survey

This work is undertaken to produce a topographic record of extant earthworks. These sites might include known earthworks identified by the Desk based Assessment, or previously unknown earthworks found during the Field Reconnaissance Survey. The sites may include settlement earthworks or agricultural earthworks (such as, ridge and furrow and lynchets).

Two methods are commonly employed; plane table survey which obtains a hachure survey, or total-station theodolite survey which produces a close contour plot.

Stage 6: Watching Brief

A permanent-presence watching brief will be required during all ground disturbing activities of the construction phase of the project, to record unexpected discoveries, and known sites which did not merit investigation in advance of construction. The main phases of monitoring for the development will be topsoil stripping, trench excavation and the opportunistic observation of the pre-construction drainage. The objectives are to obtain a thorough record of any archaeological remains found during construction, and to produce a report on the findings. Contingencies should allow for salvage excavation of significant, unexpected archaeological sites found during construction.

Stage 7: Archive, Report and Publication

On completion of all archaeological fieldwork associated with the redevelopment, a comprehensive programme of post-excavation assessment, analysis, reporting and publication will be implemented. The post-excavation programme will be subject to a written scheme of investigation to be agreed in advance with the Senior Planning Archaeologists and will be in line with 'The Management of Archaeological Projects', English Heritage 1991.

APPENDIX B

Statutory and Non-Statutory Protection of Archaeological Sites

STATUTORY AND NON-STATUTORY PROTECTION OF ARCHAEOLOGICAL SITES

Legislation

Ancient Monuments and Archaeological Areas Act 1979 (as amended by the National Heritage Act of 1983)

Under this Act, the Secretary of State, in consultation with English Heritage, maintains a schedule of monuments deemed to be of national importance. In practice, most Scheduled Monuments fall into the category of Scheduled Ancient Monuments (SAMs), defined as 'any Scheduled Monument and any other monument which in the opinion of the Secretary of State is of public interest by reason of the historic, architectural, traditional, artistic or archaeological interest attaching to it' (Section 61 [12]). Scheduled Monuments also includes Areas of Archaeological Importance (AAIs). Only portable items are beyond the protection of scheduling.

The present schedule of just over 13,000 sites has been compiled since the first statutory protection of monuments began in 1882. The criteria for scheduling have been published but there are many sites of schedulable quality, which have not yet received this status.

Any action which affects the physical nature of a monument requires Scheduled Monument Consent, which must be sought from the Secretary of State. Consent may be granted after a detailed application to the Secretary of State. Failure to obtain Scheduled Monument Consent for any works is an offence, the penalty for which may be a fine, which may be unlimited.

The National Heritage Act 2002

This enables English Heritage to assume responsibilities for maritime archaeology in English coastal waters, modifying the agency's functions to include securing the preservation of ancient monuments in, on, or under the seabed, and promoting the public's enjoyment of, and advancing their knowledge of ancient monuments, in, on, or under seabed. Initial duties will include those formerly undertaken by the Government's Department of Culture, Media and Sport (DCMS), in respect to the administration of The Protection of Wrecks Act 1973.

http://accessibility.english-heritage.org.uk/default.asp?WCI=Node&WCE=8197

Planning (Listed Buildings and Conservation Areas) Act, 1990

Listed Buildings and Conservation areas benefit from statutory protection under this Act.

Listed buildings

Under this Act, the Secretary of State, in consultation with English Heritage, is responsible for the compilation of the List of Buildings (and other structures) of Special Architectural or Historic Interest. Listing gives buildings important statutory protection.

Buildings are classified in grades to show their relative importance as follows:

- Grade I Buildings of exceptional interest
- Grade II* Particularly important buildings of more than special interest
- Grade II Buildings of special interest, which warrant every effort being made to preserve them

The grading of listed buildings is non-statutory; the awarding of grades is simply a tool to assist in the administration of grants and consents. The list is used by local planning authorities in conjunction with PPG 15 Planning and the Historic Environment as the basis upon which decisions on the impact of development are made on historically and architecturally significant buildings and their settings.

Any work that involves the demolition, alteration or extension of a listed building (or its curtilage) requires listed building consent, which must be sought from the Secretary of State, usually via the local planning authority. Consent may be granted after a detailed application to local planning authority or the Secretary of State. Carrying out work on a listed building (or its curtilage) without consent is an offence and can be punishable by an unlimited fine.

Conservation Areas

There are activities that may be considered inappropriate within or adjacent to Conservation Areas; for example by disrupting important views, or generating excess traffic. Development within a Conservation Area is likely to be resisted if considered inappropriate in terms of scale, setting, massing, siting, and detailed appearance in relation to surrounding buildings and the Conservation Area as a whole. High standards of design are expected in all Conservation Areas, whether for new or replacement buildings, extensions, alterations or small scale development. Planning permission is normally resisted for small scale development which could lead to a number of similar applications, the cumulative effect of which would be detrimental to the character and appearance of the area. Demolition of unlisted structures within Conservation Areas is usually only permitted where removal or replacement would preserve or enhance the character and appearance of the area, or where the structure is beyond economic repair. Development which would adversely affect the character or appearance of buildings of local interest is likely to be resisted. Demolition would almost certainly only be permitted in exceptional circumstances.

The Protection of Military Remains Act 1986

This Act makes it an offence to interfere with the wreckage of any crashed, sunken or stranded military aircraft or designated vessel without a licence. This is irrespective of loss of life or whether the loss occurred during peacetime or wartime. All crashed military aircraft receive automatic protection, but vessels must be individually designated. Currently, there are 21 vessels protected under this Act, both in UK waters and abroad, and it is likely that the Ministry of Defence will designate more vessels in the future.

There are two levels of protection offered by this Act, designation as a Protected Place or as a Controlled Site.

Protected Places include the remains of any aircraft which crashed while in military service or any vessel designated (by name, not location) which sank or stranded in military service after 4th August 1914. Although crashed military aircraft receive automatic status as a Protected Place, vessels need to be specifically designated by name. The location of the vessel does not need to be known for it to be designated as a Protected Place.

Diving is not prohibited on an aircraft or vessel designated as a Protected Place. However, it is an offence to conduct unlicensed diving or salvage operations to tamper with, damage, remove or unearth any remains or enter any hatch or other opening. Essentially, diving is permitted on a 'look but don't touch' basis only.

Controlled Sites are specifically designated areas which encompass the remains of a military aircraft or a vessel sunk or stranded in military service within the last two hundred years. Within the controlled site it is an offence to tamper with, damage, move or unearth any remains, enter any hatch or opening or conduct diving, salvage or excavation operations for the purposes of investigating or recording the remains, unless authorised by licence. The effectively makes diving operations prohibited on these sites without a specific licence.

The Protection of Wrecks Act 1973

The Protection of Wrecks Act is in two sections. Section 1 provides protection for designated wrecks which are deemed to be important by virtue of their historical, archaeological or artistic value. Approximately 56 wrecks around the coast of the UK have been designated under this section of the Act. Each wreck has an exclusion zone around it and it is an offence to tamper with, damage or remove any objects or part of the vessel or to carry out any diving or salvage operation within this exclusion zone. Any activities within this exclusion zone can only be carried out under a licence granted by the Secretary of State, who receives advice from the Advisory Committee on Historic Wreck Sites (ACHWS). There are four levels of licences: a visitor licence, a survey licence, a surface recovery licence and an excavation licence.

Administration of this Act and associated licenses is the responsibility of English Heritage in England, Historic Scotland in Scotland, Cadw: Welsh Historic Monuments in Wales and the Environment and Heritage Service in Northern Ireland. Any of these organisations will be able to provide more in depth information (see useful addresses).

Section 2 of the Protection of Wrecks Act provides protection for wrecks that are designated as dangerous by virtue of their contents. Diving on these wrecks is strictly prohibited. This section of the Act is administered by the Maritime and Coastguard Agency through the Receiver of Wreck.

The Town and Country Planning Act 1990

Section 54a of the Act requires planning decisions to be taken in accordance with policies contained in the appropriate Local Development Plan. Material considerations, including national guidelines, should also be taken into account as they provide an overall context for the consideration of planning applications and set out Government policy.

Regulations

Hedgerow Regulations 1997 (Section 97 of the Environment Act 1995)

Under these Regulations, prior to work, which may damage or remove hedgerows, it is required to categorise the hedgerows according to a number of historical and ecological criteria which are laid out in the Regulations. District Councils are required to administer the Regulations and to maintain a map of hedgerows deemed to be 'important' under the criteria of the Regulations.

Under the regulations, a hedgerow is regarded as 'important' on archaeological or historical grounds if it:

- marks a pre-1850 parish or township boundary;
- incorporates an archaeological feature;
- is part of, or associated with, an archaeological site
- marks the boundary of, or is associated with, a pre-1600 estate or manor; or
- forms an integral part of a pre-Parliamentary enclosure field system (DOE, 1997).

An archaeological site is defined as a Scheduled Ancient Monument (SAM) or a site recorded in a County Sites and Monuments Record (SMR);

The Hedgerow Regulations define a pre-Parliamentary enclosure field system as any field boundary predating the *General Enclosure Act of 1845*.

The implication of this legislation is that virtually all hedgerows can be classified as being 'important' for historical purposes under the Hedgerows Regulations 1997.

The historical criteria, however, are presently under review.

Guidance Notes

Central government guidance on archaeological remains and the built historic environment was formerly provided for under the following documents:

- Planning Policy Guidance Note 15 (PPG 15): Planning and the Historic Environment (1994)
- Planning Policy Guidance Note 16 (PPG 16): Archaeology and Planning (1990).

However, these guidance notes have now been replaced by the following document:

• Planning Policy Statement 5 (PPS5): Planning for the Historic Environment (2010).

This PPS5 sets out the government's policy with respect to conservation of the historic environment and what it terms 'heritage assets'. This includes scheduled monuments, listed buildings, conservation areas and unscheduled archaeological remains. Specifically, Policy HE9.1 states that there should be a presumption in favour of the conservation of designated heritage assets and that the more significant the asset, the greater the presumption in favour of its conservation should be. Policy HE9.6 further states that the absence of designation for unscheduled archaeological remains does not indicate that they are of low significance.

Structure Plan and Local Plan Protection

Scheduled and non-scheduled sites of archaeological importance, listed buildings, and historic parks and gardens and their settings are also protected under policies contained within the relevant Structure Plan and Local Plans for the area:

- Buckinghamshire County Council Structure Plan (1991-2011)
- Aylesbury Vale District Council (2007-2011)

Guidance for sites having no statutory protection

The Register of Parks and Gardens of Special Historic Interest in England

This register was compiled by English Heritage between 1984 and 1988 and is maintained by them. Parks and gardens of special historic interest have no statutory protection.

Listed parks and gardens are classified in grades to show their relative importance as follows:

- Grade I –international historic interest
- Grade II* exceptional historic interest
- Grade II –national historic interest

The listing and grading process is designed to draw attention to important historic parks and gardens as an essential part of the nation's heritage for use by planners, developers, statutory bodies and all those concerned with protecting the heritage. However, no new controls apply to parks and gardens in the register, nor are existing planning controls to listed building affected in any way. It follows that structures such as fountains, gates, grottos and follies within gardens can also be listed as 'Listed Buildings' and whole parks and gardens can also be scheduled as Ancient Monuments.

Any work that affects the physical nature of registered parks and gardens requires consultation with the Garden History Society. English Heritage should be consulted in the case of those designated as Grade I or Grade II*.

The Register of Historic Battlefields

This register is maintained by English Heritage and currently includes forty sites. Registered battlefields have no statutory protection. Planning Policy Guidance note 15, however, offers a degree of protection to many of the known battle sites within England.

APPENDIX C Archaeological Constraints Gazetteer

ARCHAEOLOGICAL CONSTRAINTS GAZETTEER

Reference	Source	Cross reference	Description	Period	Import	Impact	Significance	National Grid Reference	Figure Number
DBA:AA	AVDC		Stowe Conservation Area	Undetermined	А	Adverse, indirect, minor	medium	467524 236187	2, 3
RPG 1105	EH	MON 1077113, SMR MBC11222	Stowe registered park, grade I	Post-medieval	В	Adverse, direct, minor	medium	467510 237626	2, 3
MON 1333118	EH		Towcester to Alchester road	Roman	С	None	n/a	461354 228682	2, 3
DBA:AB	AP.01		Ridge and furrow	Undetermined	D	None	n/a	466274 236825	3
DBA:AC	AP.02		Area of tree planting	Undetermined	D	None	n/a	467251 237648	3
DBA:AD	AP.02	AP.15	Possible enclosure	Undetermined	D	None	n/a	466953 237379	3
DBA:AE	AP.02		Tree planting	Modern	D	None	n/a	466893 237426	3
DBA:AF	OS. 1900	AP.02	Stowe burial ground	Early modern	D	None	n/a	466730 237671	3
DBA:AG	AP.02		Field drains	Undetermined	D	None	n/a	466818 238372	2
DBA:AH	AP.02		Ridge and furrow	Undetermined	D	None	n/a	466671 237804	2, 3
DBA:AI	AP.02		Ridge and furrow	Undetermined	D	None	n/a	466711 238688	2
DBA:AJ	AP.03		Ridge and furrow	Undetermined	D	None	n/a	466353 237753	2, 3
DBA:AK	AP.03		Possible sheep shed	Undetermined	D	None	n/a	466618 237450	3
DBA:AL	AP.03	AP.04	Ridge and furrow	Undetermined	D	None	n/a	466423 238173	2, 3

Reference	Source	Cross reference	Description	Period	Import	Impact	Significance	National Grid Reference	Figure Number
								238494	
DBA:BD	T.1845		Area of planting	Post-medieval	D	None	n/a	467049 238372	2
DBA:BE	T.1845		Area of planting	Post-medieval	D	None	n/a	466903 237330	3
DBA:BF	T.1845		Area of planting	Post-medieval	D	None	n/a	466994 237306	3
DBA:BG	OS. 1885		Footbridge	Post-medieval	D	None	n/a	466773 238140	2
DBA:BH	OS. 1885		School	Post-medieval	D	None	n/a	466765 238034	2
DBA:BI	OS. 1885		Pond	Post-medieval	D	None	n/a	466320 237973	2, 3
DBA:BJ	OS. 1885		Sluice	Post-medieval	D	None	n/a	467009 237782	3
DBA:BK	OS. 1885		Smithy	Post-medieval	D	None	n/a	466525 237319	3
DBA:BL	OS. 1900		Pond	Early modern	D	None	n/a	466732 238462	2
DBA:BM	OS. 1885	OS. 1900	Sand pit	Post- medieval/Early modern	D	None	n/a	466608 237396	3
DBA:BN	OS. 1885	OS. 1900	Gravel pit	Post- medieval/Early modern	D	None	n/a	466800 237129	3
DBA:BO	OS. 1900		Footbridge	Early modern	D	None	n/a	466863 238099	2
DBA:BP	OS 1922		Sluice	Early modern	D	None	n/a	466939 237647	3
DBA:BQ	Google maps	FSU	Possible garden plots or property boundaries	Undetermined	D	Uncertain	Unknown	466863 238084	2

Reference	Source	Cross reference	Description	Period	Import	Impact	Significance	National Grid Reference	Figure Number
			1720						
SMR MBC25390	BCC		C19 house, possible site of former residence of Capability Brown	Early modern	D	None	n/a	466943 238202	2
SMR MBC29486	EH	PA BUC- C4F6C0	Quern	Roman	D	None	n/a	467000 237600	3
SMR R&F1919	всс		Ridge and furrow	Post-medieval	D	None	n/a	467172 238133	2, 3

APPENDIX D

Figures 1 - 3





