

Appendix D - Landscape and Visual

Environmental Appraisal
Volume II

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RPS

TADLEY – SITE A: HEFF

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

TECHNICAL REPORT

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1 Introduction

1.1 This technical report describes the existing baseline landscape and visual receptors of the existing development infrastructure and proposed re-development site at AWE Aldermaston. The report describes the mitigation measures and the resulting residual landscape and visual effects associated with the HEFF proposal.

1.2 The principal objectives of the landscape and visual impact assessment are:

To describe, classify and evaluate the existing landscape likely to be affected by each of the construction and operational phases;

- ☐ To identify visual receptors with views of the proposed re-development;
- ☐ To assess the significance of the effects on the landscape and views, taking account of the measures proposed to mitigate any effects identified.

1.3 The assessment methodology is set out in Part 1 of the Appendices to this report.

1.4 This report also considers the proposed development in the context of the 10 year programme of redevelopment as set out in the Site Development Context Plan (SDCP) November 2005. The SDCP identifies *"the principle physical components of the redevelopment programme and the way in which they are proposed to be accommodated at the site". It provides the proposed context in which elements of the programme will be brought forward over the next three years. The whole programme is expected to be completed by 2015.*" (Extracts from the SDCP Summary).

1.5 The overall approach to the redevelopment and modernisation programme as set out in the SDCP relevant to this report seeks to (para 2.1):

- ☐ Improve standards of design;
- ☐ Enhance environmental performance; and
- ☐ Reduce environmental impact.

2 Development Context

- 2.1 AWE Aldermaston lies wholly within the district of West Berkshire and abuts the Hampshire County border and lies approximately 15km south-west of Reading and 13km south-east of Newbury. It is situated immediately north of the settlements of Tadley (separated by Tadley Common) Pamber Heath and Heath End all within Hampshire and less than 1km south of Aldermaston Village within Berkshire. The site forms part of Aldermaston Parish. The site is contained and bounded by the A340 to the west and south; Reading Road to the south; Red Lane to the east; and the grounds associated with Portland House and Aldermaston Court to the north.
- 2.2 AWE Aldermaston is the headquarters of AWE's operations. This site has long been associated with defence. During World War II, an airfield was built on the site, which was used by the United States Army Air Force for glider operations on D-Day. Spitfire fighters were also assembled here. Today, the site is the centre of design and research for AWE and also provides sophisticated manufacturing facilities to produce a variety of defence components.
- 2.3 The site lies south of the Kennet Valley on a well-wooded east-west orientated, broad gravel plateau at approximately 100-105m AOD. The topography drops away from the plateau to the south and east and more steeply to the north and north-west. There are several ponds within the eastern section of the site, which relate to the sloping land as described above. The topography around 'Decoy Pond' to the south dips southward and continues in a minor valley beyond the site boundary. The eastern part of the site also includes part of the ancient earthworks known as Grim's Bank which continues off site to the east.
- 2.4 A dense infrastructure of roads and buildings makes up the central and western part of the site and contains large expanses of unrelieved hard surfaces dating back to the 1950's, which are now worn and lack quality. The western corner of the site is used for recreational purposes. The eastern half of the site comprises development set within a landscape framework, some of which relates to the original parkland associated with Aldermaston Court Estate. There are two principal straight roads on the site, one extending east-west and the other north-south. These are former runways and give an indication of the site's previous use as an airfield. Further information on the site's development is contained in a separate Heritage Report prepared by Atkins.
- 2.5 The existing vehicular site entrances are located on Reading Road (the main gate); A340 (Western gate and a minor access opposite Youngs Business Park); and Red Lane. There is an additional pedestrian only gate on Reading Road. The entire site is bounded by high security fencing and is subject to stringent security controls.
- 2.6 The site lies within a predominantly rural location, within an area previously occupied by the Aldermaston Court Estate. The site retains some of the original landscape features associated with the estate, including Decoy Pond and Fish Pond. The site is surrounded by gravel plateau heathland and woodland with some heathland pastures, with settlements adjacent and beyond. A large percentage of the boundary is defined by mature dense vegetation. Further

containment is provided by treebelts associated with the adjacent road corridors and the adjoining woodland blocks beyond the site boundary. Some sections of the boundary are more open in places due to either intermittent mature boundary vegetation or recent planting that has yet to establish and mature. These woodland blocks and groups of trees, predominantly positioned around the boundaries provide a well-treed setting to much of the site. (Refer to Part 2 of the Appendices – Vegetation Appraisal).

- 2.7 There are several landscape features that are worthy of retention, conservation and enhancement, including the two ponds and associated copses, a remaining section of Grim's Bank and a mature pine plantation. An initial assessment of the existing site wide vegetation has been carried out to identify its amenity value and this is included at Part 2 of the Appendices.

3 Landscape Planning Policy Context

Introduction

- 3.1 This section identifies the national, regional and local landscape policies that have informed the baseline assessment and subsequent landscape impact assessment for the re-development. The site lies wholly within the county of Berkshire and administrative boundary of West Berkshire Council, the southern boundary of the site abuts the Hampshire county boundary and the Basingstoke and Deane District administrative area.
- 3.2 The site does not fall within any nationally or locally designated landscape areas. There are, however, several Areas of Special Landscape Importance and Registered Parks beyond the site boundary to the north and north west. The North Wessex Downs Area of Outstanding Natural Beauty lies approximately 2.5km beyond the site boundary to the north, 12km to the west (within Berkshire) and 4km to the south west (within Hampshire). The various relevant environmental designations within the study area are shown on Figure 13.1.

National Context

- 3.3 The government publishes a series of Planning Policy Guidance Notes and Planning Policy Guidance Statements which are intended to set out national policies on different aspects of land use planning in England and Wales.
- 3.4 *Planning Policy Statement 1: Delivering Sustainable Development* (2005) states that planning should "...protect and enhance the natural and historic environment, the quality and character of the countryside and existing communities". Planning policies should seek to "... protect and enhance the quality, character and amenity value of the countryside and urban areas as a whole." Planning authorities should seek to "... enhance as well as protect biodiversity, natural habitats, the historic environment and landscape and townscape character."

AONB

- 3.5 Areas of Outstanding Natural Beauty (AONB) are designated (under the National Parks and Access to the Countryside Act, 1949) in order to conserve and enhance the country's finest landscapes. Government Guidance contained within PPS7 'Sustainable Development in Rural Areas', 2004 reaffirms AONB's as having "the highest status of protection in relation to landscape and scenic beauty".
- 3.6 At its closest point, the North Wessex Downs AONB lies just over 2.5km beyond the site boundary to the north sweeping in an arc around the site to the north, west and south and extends across the counties of Berkshire and Hampshire.
- 3.7 The North Wessex Downs AONB Partnership has prepared the 'North Wessex Downs Management Plan' (January 2004) (Part 3 of the Appendices). The document specifically deals with the AONB and its landscape character, but also sets out objectives in relation to minimising in-direct effects on the AONB from those areas outside it. Policy DP3, states: "Retaining the quality of views from and to the North Wessex Downs" seeks "...to resist intrusive development within

the main views from and to the AONB." This policy is also reflected in the 'Action Plan' document of the Management Plan which systematically sets out the policy approach which will deliver the objectives for the North Wessex Downs AONB. It provides a set of actions; components of actions; targets and responsibilities; and considers direct and indirect influences.

- 3.8 Whilst the site is outside of the AONB, the effects on views to and from the AONB will be considered in line with the policies set out in the AONB Management Plan.

Registered Historic Parks and Gardens

- 3.9 The Register of Parks and Gardens is a national record maintained by English Heritage. The main purpose of this register is to help ensure that features and qualities of national importance are safeguarded during on-going management or if any change is being considered which could affect them. The sites on the register are divided into three grade bands to give added guidance on their significance. Most sites identified through the Register as being of a sufficiently high level of interest to merit a national designation are designated Grade I or Grade II. There are several Registered Parks or Gardens within the study area. Those that are within 2km of the site are within the county of Berkshire and are Grade II. These include:

Aldermaston Court: Immediately abutting the northern site boundary. Remnants of mid and late 19th century gardens within medieval parkland, at most extensive 250ha, now 55ha, considerably changed by extensive mid and later 20th century building.

Wasing Park: Approximately 2km to the north-west of the site. 19th and 20th Century garden set within a larger estate comprising parkland, woodland and agricultural uses.

Regional Context

- 3.10 *Regional Planning Guidance for the South East (RPG 9) (March 2001)* provides a regional framework for the preparation of local authority development plans. It states that "Priority should be given to protecting areas designated at international level either for their intrinsic nature conservation value, their landscape quality or their cultural importance," and that development plans should accord with the guidance in PPG/PPS with regards to "protecting and enhancing existing and new areas designated for their landscape value... and/or ...cultural value."
- 3.11 The draft *South East Plan* (submitted to government 2006) which will replace RPG 9 states that, under Policy C2, "Priority should be given to conservation and enhancement of natural beauty in the region's Areas of Outstanding Natural Beauty and planning decisions should have regard to their setting."

Berkshire Structure Plan 2001-2016 (Adopted 2005)

- 3.12 The structure plan was prepared by the Berkshire Joint Strategic Planning Unit, which carries out the core strategic planning functions of the former Berkshire County Council.

- 3.13 Policy EN1: Landscape states that *"The distinctiveness of county and district level Landscape Character Types and Areas will be maintained inline with the strategy option developed for each area... and that...within the North Wessex Downs AONB the primary aim of conservation of the natural beauty of the landscape will be given priority over other considerations. Development which affects the AONB will only be permitted where it would support the conservation or enhancement of the AONB..."*
- 3.14 The Structure Plan makes reference to the Berkshire Landscape Character Assessment (BLCA) and to the North Wessex Downs AONB Integrated Landscape Assessment and states that the BLCA will act as "...the context for the development of district-level assessments..., which themselves ...should act as a guide to local plans and development control by indicating the particular local qualities of the landscape, which development proposals should respect. Development proposals should be informed by and fully justified in terms of the BLCA".
- 3.15 Policy EN4: Historic Environment states that "...historic features and areas of historic importance and their settings will be conserved and where appropriate enhanced. The Councils will only allow development if it has no adverse impact on features or areas of historic importance. Proposals will be expected to have regard to the wider historic environment and will only be permitted when they would conserve or enhance the character or setting of Berkshire's historic and built environment."

Hampshire Structure Plan 1996 – 2011 (Adopted February 2000)

- 3.16 The environment chapter of the Hampshire Structure Plan sets out the policies in relation to the landscape as follows:

Policy E6

"To ensure that development maintains and enhances areas of distinct landscape character, local planning policies will pay particular regard to:

- a) the need to respect scenic quality, sense of remoteness and historic landscapes;*
- b) the sense of place, including local character of buildings and settlements; and*
- c) the setting of settlements;*

in the whole of the countryside."

- 3.17 Policy E7 deals with Areas of Outstanding Natural Beauty and states:

"In determining proposals for development within or adjacent to Areas of Outstanding Natural Beauty, the conservation of the natural beauty of the landscape will be a major consideration whilst having regard to the economic and social well-being of the area."

The site is not located within or adjacent to the boundary of the AONB. The nearest boundary is some 2.5km from the site.

- 3.18 The subsequent review of the Structure Plan maintains the wording of these policies.

Local Context

West Berkshire District Council Local Plan (Adopted 14 June 2002)

- 3.19 Policy OVS.2 states that development proposals should *"...show a high standard of design including landscape treatment which respects the character and appearance of the area; and retain and protect important landscape and nature conservation features and provide for further landscape treatment where relevant to the safeguarding of local amenity..."*

- 3.20 The key landscape aims of the Local Plan as set out in Chapter 2, Section A are as follows:

"(i) to sustain, conserve and enhance the landscape diversity, character and quality of West Berkshire's countryside;

a) to protect and enhance the natural beauty and special landscape qualities of the North Wessex Downs Area of Outstanding Natural Beauty...

b) to protect important landscape, nature conservation and heritage features from damage due to the adverse effects of development and to encourage their proper management where appropriate;

c) to provide for development and change that would benefit the rural economy while protecting and enhancing the landscape and overall environment of the area."

- 3.21 Policy ENV.1 states that "The Council in considering proposals for development will seek to conserve and enhance the special features and diversity of the different 'landscape character areas' found within West Berkshire." Details of the landscape character areas can be found in the Newbury District-Wide Landscape Assessment.

- 3.22 The Local Plan also includes two tracts of land beyond the site boundary to the north, as Areas of Special Landscape Importance. This designation 'promotes the principles of landscape conservation, enhancement and creation'.

- 3.23 Policy ENV. 3 relating to this designation states: *"The Council recognises the ... areas shown on the Proposals Map to be of special landscape importance and will not permit any development which would detract from their rural character or special landscape qualities."*
- 3.24 Policy ENV.5 states that *"The Council will balance development proposals against the criteria for settings in the District-Wide Landscape Assessment and against their effects on the open or rural appearance or character, in the areas listed below which are of special significance in maintaining the setting or individual character of settlements...locations to which this policy will be applied are... c) the northern edge of Tadley and Pamber Heath."*
- 3.25 Key conservation aims of the plan include:
- (ii) *to have special regard to the preservation of listed buildings;*
 - (iv) *to preserve and enhance the Conservation Areas in West Berkshire. Any new development in Conservation Areas need to be appropriate and sympathetic to the special character of the area. It must also address the quality of the townscape as well as the protection of individual buildings and preserving a sense of place;*
 - (v) *to support the preservation, restoration and management of historic parks and gardens including their settings;*
 - (vi) *to support the preservation and management of historic landscapes and battlefield sites...*
- 3.26 A series of Conservation Areas are present throughout Berkshire and Hampshire. In particular, those within 2km of the site includes one within historic core of Aldermaston village to the north-west of the site within Berkshire and several in Hampshire, at Tadley and Silchester, south of the site. Policy ENV.33 states: *"The Council will not permit development which would harm or prejudice the special character or appearance of a Conservation Area."*
- 3.27 Policy ENV.35 states that *"The Council will normally refuse development which would have an adverse effect on the site, setting or character of any part of the grounds of historic parks and gardens. The locations to which this policy will apply include...Aldermaston Court...Wasing Place."*

Basingstoke and Deane Borough Adopted Local Plan 1996-2011 (Adopted 2006)

- 3.28 As the proposed HEFF project site is located outside the Borough boundary, the policies contained within the Local Plan are not directly applicable to the proposed development. The most relevant policies are set out below to inform and add context.

- 3.29 Policy E3 states that *"Development within Conservation Areas, or on sites outside where development would affect the setting of the Conservation Area, will be permitted provided that the proposals preserve or enhance their special character or appearance..."*
- 3.30 Policy E6 states that *"Planning permission will only be granted where it is demonstrated that the proposals will be sympathetic to the landscape character and quality of the area concerned...Development proposals should...respect and improve...the particular qualities of the relevant Landscape Character Area as defined in the Basingstoke and Deane Landscape Assessment, visual amenity and scenic quality...the setting of a settlement, including important views to, across and out of settlements...the local character of buildings and settlements, including important open areas...trees, hedgerows, water features and other landscape elements and features...historic landscapes, features and elements...Consideration will also be given to the impact that development would have on a sense of place, sense of remoteness or tranquillity, and the quiet enjoyment of the landscape from public rights of way...applications for development in the AONB will be determined in accordance with the policy in PPS7 also having regard to the setting of the AONB."*

4 Methodology

- 4.1 The methodology adopted in the preparation of this landscape and visual impact assessment is set out in Part 1 of the Appendices to this report.

5 Existing Baseline Conditions

Topography and drainage (refer to Figure 13.2)

- 5.1 The landform of the area is closely related to the underlying geology. The local area is characteristic of the London Basin sequence, comprising of a sequence of mudstones, limestones and sandstones, with fluvial gravel deposits. The basin is bounded by higher ground created by chalk outcrops which dominate the area topographically giving rise to the prominent escarpments.
- 5.2 The study area is dominated by the series of west-east ridges and escarpments forming the watershed catchments to the river valley floors, which are also characteristic features of the local landscape. The valleys are associated with the River Kennet in the north of the study area, broadly flowing west (through Newbury and Thatcham) to east. The River Loddon lies to the east of the study area, flowing from the south at Basingstoke north-eastwards. Both flow towards the settlement of Reading in the north-east of the study area to join the River Thames beyond and are set within valleys of less than 75m AOD.
- 5.3 The Kennet Valley is characterised by a series of watercourses, including the Kennet and Avon Canal, together with a series of waterbodies and associated valley floor activities. These are all set within a relatively broad valley floor, with locally incised valley sides, which form a complex, undulating landform to these slopes.
- 5.4 The river valleys are defined by a series of ridgelines both to the north (between 130 and 155m AOD) and south (between 175 and 260m AOD) of the study area. The site is based on a local ridgeline, forming a broad plateau at approximately 105m AOD which provides the watershed between the River Kennet and River Loddon corridors, broadly running south-west to north-east.

Land cover (refer to Figure 13.3)

- 5.5 The predominant land use in the study area is that of agricultural land, including farmsteads, arable and pasture, together with land associated with equestrian uses such as land dedicated to gallops and racing studs with paddocks. The significant blocks of woodland are shown on Figure 13.3. The wooded heathland blocks throughout the area are a combination of both heathland and woodland and are difficult to map precisely. Many contain commons.
- 5.6 Topography and vegetation pattern broadly correlate, with large, often mixed, woodland blocks associated with the ridgelines and with smaller deciduous woodland blocks associated with the valley sides. Deciduous treebelts (including poplars) are characteristic features of the River Kennet valley.
- 5.7 Heathland is generally associated with the large mixed woodland blocks in the centre of the study area.
- 5.8 Along the Kennet valley floor agriculture and mineral extraction are both clearly evident. A series of past and present sand and gravel extraction areas are

scattered along the valley, with past extraction evident in the presence of large water bodies, some of which are now used for recreation, or have been restored for wildlife conservation. The area also has extensive brick-clay, cement making, silica sand, chalk and limestone resources, all of which are actively extracted. In contrast, land uses associated with the River Loddon to the east are intensively managed for agricultural purposes.

- 5.9 Pockets of recreational land, beyond the Common land, include the golf courses at Woolhampton and Baughurst (to the north and central sections of the study area) together with the Rugby Pitches of Tadley Football Rugby Club immediately east of the site. A series of public rights of way criss-cross through the area and contribute to informal recreation and access to the countryside. A series of other non-agricultural land uses are also evident within the study area, such as the sites forming part of AWE, both at Aldermaston and Burghfield and the motorway service areas and the M4 and A4 transport corridors.

Settlement pattern

- 5.10 There is a broad correlation between topography and settlement pattern. The large settlements of Newbury and Reading have developed around the river valleys of the Kennet and Thames Rivers at the confluence of rivers and along the river valley sides, with Basingstoke having developed around the slopes associated with the head of the River Loddon.
- 5.11 The smaller settlements, such as Tadley, Mortimer and Burghfield Common, have developed on local ridgelines and valley sides. A series of small, nucleated settlements and individual properties are scattered throughout the study area – often related to agricultural holdings and estates or race horse studs.

Historic Landscape Characterisation

- 5.12 West Berkshire District Council have recently commenced work on the historic characterisation of the district landscape, working with the AONB Partnership. This is a desk based study being verified by fieldwork and is currently a working document for review and consultation. (The draft Characterisation Plan is contained in Part 4 of the Appendices).
- 5.13 The historic categorisation of the landscape is based on a GIS sieve analysis of both current and past land uses. The current land uses immediately around AWE Aldermaston display a mosaic of re-organised fields; new fields; ancient and replanted ancient woodland; other managed woodland; tree plantations; restored land; areas of modern built growth; paddocks; and rough grazing. Beyond the immediate setting of the site, these land uses continue but also include a number of amalgamated fields, together with some areas displaying evidence of parliamentary field systems and designed landscapes (those identified specifically relate to Wasing Park). AWE has been identified as military and therefore remains unclassified in historic terms.

AWE Site Description (refer to Figure 13.4)

- 5.14 AWE Aldermaston lies to the south of the Kennet Valley on the flat gravel plateau, between 100 to 105m AOD, sloping to 85m in its far north-eastern corner. Some of the landform within the site has been modified by human intervention to create both individual and groups of mounds. It is surrounded by gravel plateau heathland and woodland with some heathland pastures. To the north, the site abuts the parkland estate of Aldermaston Park, whose influence once extended into the north-eastern section of the site itself. This is evidenced by the existence of groups of mature parkland trees and individual exotic specimen trees, which are still located in this sector of the site. The south-eastern sector of the site contains remnant heathland with some fine groups of trees, which are typical of the local heaths – Birch, Pine and Oak. Where the grassland has been left unmown, noticeable heathland regeneration is occurring with a variety of heathland flora visible. The north-eastern corner changes in character and topography to provide an area dipping to a large pond and watercourse surrounded by a rhododendron dominated shrub layer with Birch, Oak, Willow and Pine. To the east of this corner, on the opposite side of the local highway forming part of the site, lies an area of heathland woodland, dominated by Spanish Chestnut, Oak and Birch.
- 5.15 The large-scale central areas are rather urban in scale and contain very little vegetation of any stature. That which exists is characterised by standard clear-stemmed trees and low-level grass or shrubs. The hard surfaces are also poor in quality. This lends an air of sterility to the site landscape.
- 5.16 The site is generally well contained in the local landscape by extensive layers of vegetation. The scale of the site is significant in the local landscape and the developed zones are large in scale and at times in mass. Whilst the site is set within a well wooded plateau, it is important to note that the larger buildings and stacks are visible in middle to long distance views from local scarps or ridgelines above the tree canopy. Existing views of the site are described in the Visual Assessment Schedules in Appendix Part 6. Refer to Figure 13.13 for Visual Effects Summary of the Existing baseline situation, Figure 13.16 for Photo Location Plan and photographs Figure 13.7).

Application Area Description (Refer to Figure 13.4)

- 5.17 The HEFF application boundary contains the contractors site entrance via the West Gate to the AWE site and construction workers car park. The layout of these areas is already approved by West Berkshire District Council for temporary use as contractors access and parking. Access between this zone and the construction site and compounds in the eastern sector of the site would be via a network of existing roads and tracks. These run along the northern boundary of the site which in places abuts the A340. This access route joins the northern end of Griffin Road. Although these areas are within the proposed HEFF red line application boundary they already have planning consent and/or are existing site access routes. They are therefore not assessed in detail as part of this landscape and visual impact assessment.

- 5.18 Griffin Road was formerly a runway and it bisects the AWE site north south. The proposed red line boundary includes two proposed contractors compounds which abut Griffin Road to the east and west.
- 5.19 The site compound to the west of Griffin Road is visually contained to the north by a large mounded and vegetated area separated from the compound by a fence line. To the south and west this compound is contained by the central urban developed zone comprising large scale industrial buildings and hard unrelieved paved areas and perimeter fencing.
- 5.20 To the east of Griffin Road lies the eastern sector of the AWE site. This sector contains many concrete and grass mounds (which are approximately 10m tall) set in a large area of grassland with low single and two storey brick built flat roofed buildings which are scattered and in groups on the boundaries. There are scattered pine, birch and oak trees and a network of access tracks fence lines and various services infrastructure throughout the area. The proposed HEFF development site and a second associated contractors compound and site access lie within this zone. The proposed HEFF site lies centrally within this sector of the AWE site which is bordered to the north by Aldermaston Court, to the east by the Red Lane and to the south by Reading Road. A description of the proposed construction works is included in Chapter 6 and a description of the proposed development is included in Chapter 5 of the Environmental Statement Volume 1.
- 5.21 The proposed HEFF site comprises grassland with services and access tracks and scattered deciduous trees. These trees are predominately mature birch with a few semi mature to mature oaks. In many cases the birch are reaching the end of their useful life and several have suffered damage or been knocked over by recent storms. They are very characteristic of this heathy landscape area and may be a remnant part of the Aldermaston Park which would have been associated with Aldermaston Court to north. However this 'parkland' has been significantly altered by manmade development relating to its' past uses as an airfield and more recent uses as part of the AWE complex.

National and Regional Landscape Character Context

- 5.22 The term 'landscape' commonly refers to the view or appearance of the land. However, the landscape is a combination of both cultural and physical characteristics or components, which give rise to patterns that are distinctive to particular localities and help to define a 'sense of place'. The landscape is not therefore simply a visual phenomenon but relies upon other influences including topography, land use and management, ecology and historical and cultural associations.
- 5.23 Landscape is not only a rural phenomenon as it encompasses the whole external environment, including cities, towns and small settlements. The character of the urban environment can be defined as 'townscape' and is also relevant to this particular assessment in light of the urban nature of much of the site. Physical characteristics include urban structure and grain and the spaces between buildings which together combine to create the layout of the urban environment. Other physical characteristics include the height and mass or scale of buildings and their appearance in terms of both construction materials and detailing or decoration. The social characteristics of a townscape are determined by how

these physical characteristics are used and it is the interrelationship of these characteristics that give a place its character and distinctive identity.

- 5.24 A desktop study was initially undertaken to identify the national, county and district wide landscape character areas within which AWE Aldermaston sits to understand the landscape character context to the site.
- 5.25 The following sections set out the landscape character framework of the study area from the national and regional level through to county and district scale based upon existing character assessments undertaken and published by the Countryside Agency, Berkshire and Hampshire County Council, West Berkshire District Council and Basingstoke and Deane Borough Council. The boundaries of the County and District Wide Landscape Character Areas are shown on Figures 13.5 and 13.6 respectively.

National Landscape Character Assessment

- 5.26 The general character of the English countryside has been described at a national level in the Countryside Agency publication 'Countryside Character'. Of which Volume 7 covers the South-East and London (1999). The site is set entirely within national Character Area 129: Thames Basin Heaths.
- 5.27 The Thames Basin Heaths extend from the south-western suburbs of London to the south of the Thames Valley to beyond Newbury to the west. They form a diverse landscape that is typified by the high incidence of forestry and heathland, often unenclosed, with the largest heaths being on MoD training areas or large commons. The area includes extensive areas of development and substantial transport corridors, particularly in its eastern half. The central part of the area, in which the site lies, is less populated with extensive areas of oak, birch, pine plantation woodland, as well as the wide grazed floodplain of the Kennet Valley west of Theale. Arable pasture farmland is typically enclosed in relatively small and irregular fields, divided by hedgerows and small woodlands.

County Landscape Character Assessment (refer to Figure 13.5)

- 5.28 The site lies wholly within the county of Berkshire, with its southern boundary abutting Hampshire. The site lies on the southern edge of the H5 Burghfield (Woodland and Heathland Mosaic) character area, as set out in the Berkshire Landscape Character Assessment (November 2003) the key characteristics for this area are:
- ☐ An undulating landscape south of the Kennet Valley;
 - ☐ Large scale pastoral and arable field pattern;
 - ☐ Large interlinked woodland blocks, dominated by mixed and formal coniferous geometric plantation woodlands;
 - ☐ Heathland pockets;
 - ☐ Settlement of Tadley straddling the southern character area boundary;
 - ☐ Large areas of Ministry of Defence controlled land;
 - ☐ Parklands of Aldermaston Park and Wasing Park;
 - ☐ Numerous prehistoric features of barrows and earthworks, including Grim's Bank.

The need to restore the declining heathland and deciduous woodland habitats is identified, along with enhancement of the boundaries of the Ministry of Defence controlled land.

- 5.29 The site's southern boundary abuts the Hampshire landscape character area number 5. - North Hampshire Lowland and Heath (as determined in 'The Hampshire Landscape - A Strategy for the Future'). The key characteristics of this area are:

- ☐ Predominance of farmland comprising arable and grazing;
- ☐ Undulating;
- ☐ Well wooded;
- ☐ Irregular field patterns and winding lanes;
- ☐ Heathlands and unimproved meadows.

North Wessex Downs Landscape (April 2002) (Refer to Part 3 of the Appendices for excerpts from the Plan)

- 5.30 A further tier of landscape character assessment for the north Wessex Downs AONB has been carried out by The Countryside Agency.

- 5.31 The area of AONB which lies 2.5km to the north of the site within Berkshire is identified as Lowland Mosaic Type and 'Hermitage Lowlands and Heath' Area. The most relevant key characteristic of which are:

- ☐ A low-lying, undulating area enclosed by the chalk to the north, south and west and forming part of the Thames Basin Heaths which extend to the east of the AONB;
- ☐ A mosaic of landcover including fragments of remnant heathland, extensive woodlands and pasture, as well as more open areas of arable land;
- ☐ Varied field pattern with irregular fields, interspersed with parcels of woodland and commons indicative of medieval and post medieval assarts. Fields with sinuous boundaries predominate ... plus large regular fields of Parliamentary enclosure;
- ☐ One of the most densely settled landscape types, with a diverse range of settlements ranging from large manor houses, villages, numerous hamlets and lines of houses along the roads and lanes;
- ☐ An intricate network of wooded rural lanes, plus a large number of footpaths, bridleways, and byways.

- 5.32 Within Hampshire the AONB area which lies over 5km away, south west of the site is divided in to Downland with Woodland type (which contains the Hannington Downs; Litchfield Downs; Wallbury / Watership Down Scarp character areas). The key characteristics of the Downland and Woodland Type are:

- ☐ A strongly rolling landform with domed hill tops, dry valleys and scarps;

- Enclosure provided by hedgerows and mosaic of woodland cover, notably on the col summits and as sinuous hangers along steep slopes;
- A diverse range of woodlands, including wooded pasture, parkland, plantation and shelterbelts.
- A wide range of field patterns, assarted fields, large, wavy sided fields and field bounded by tracks and roads, all typical medieval enclosure, set against a more open landscape dominated by Parliamentary enclosure fields.
- Small villages nestled in sheltered valleys or strategically located on ridgetops with widespread scattered farmsteads and hamlets.
- An intricate network of rural lanes, including characteristic sunken lanes overhung by deep grassy banks and woodland.
- Recreational opportunities characterised by a high density of footpaths, bridleways and byways.
- A peaceful and tranquil rural landscape.

District Wide Landscape Character Assessment (refer to Figure 13.6)

- 5.33 Whilst the majority of the site lies within the West Berkshire District Council administrative Area, the southern boundary of the site abuts Basingstoke and Deane District Council. A district wide landscape assessment of these administrative areas was carried out in 1993 and 2001 respectively. The following paragraphs describe the district wide landscape character areas.

Newbury (West Berkshire) District Landscape Character Assessment (1993)

- 5.34 Over 50% of the area of the site is unclassified in the character assessment. However, the site is set within the following areas:

13. Gravel Plateau Woodland with Pastures and Heaths

This character area bounds the site on its eastern, south-eastern and western site boundaries and also extends in to a small section of the site on its western edge. Its key characteristics are:

- Intimate scale, flat to undulating plateau with abrupt escarpments and small incised valleys with streams;
- Complex pattern of landscape dominated by woodland;
- Pastures, paddocks, remnant heathland and commons;
- Linear settlements with wooded areas and some sub-urban areas;
- Large private houses and educational establishments;
- Straight ridge top roads and complex winding lanes.

14. Plateau Edge Transitional Matrix

This area bounds the site on its north-eastern boundary and has the following key characteristics:

- ☐ A small to medium scaled complex landscape;
- ☐ Transition between the Plateau Woodlands and lower open farmlands;
- ☐ Gradation of deciduous and mixed woodland to pasture and arable land;
- ☐ Many parklands and large private estates;
- ☐ Clustered farmsteads, private residences and small villages marked by churches.

18. Parkland

This character area bounds and extends into the site on its northern side. Its key characteristics are:

- ☐ Well established pastures with mature free standing trees;
- ☐ Associated with large private estates;
- ☐ Often sited on hillside slopes;
- ☐ Located between wooded ridges and lower open farmland

Basingstoke and Deane District Landscape Character Assessment (2001)

- 5.35 Settlement: 2 - Tadley / Baughurst / Pamber Heath bounds the site on its southernmost edge. Its key characteristics are:

- ☐ Small settlements located along winding lanes interspersed with patches of common;
- ☐ Set within a mixed farmland and woodland landscape with heathland common;
- ☐ Use of traditional materials, predominantly brick and plain clay tile;
- ☐ Mostly modern residential development;
- ☐ Linear character;
- ☐ Some heath and woodland remains within the built-up areas.

Local Landscape Character (refer to Figure 13.7)

- 5.36 A more detailed assessment of the local landscape character areas set within the regional and district character area assessments has been carried out on the basis of desk studies and field survey work by Atkins (September 2005).

- 5.37 The AWE site sits primarily within two areas as follows:

Aldermaston Park West – Principally the more densely developed half of the site, which contains many buildings of industrial and office character, including several that are substantial. The quality of the buildings varies. The road system reflects the former use of the site as an air force base. Heating pipes that run above the surface also add to the cluttered nature of the site. Tree cover is generally limited to the boundary plantations and some small copses. The area includes some adjacent developments to the west of the site.

Aldermaston Park East – Principally the less densely developed sector of the site, where most buildings are contained within concrete and earth mounds, apart from some industrial buildings near the eastern boundary. The heating pipes are again apparent. Tree cover scattered but is more extensive than on the western part of the site and creates an open heathland wooded character to the central and northern parts of the area.

- 5.38 The site is contained within the context of three identified landscape character areas:

Aldermaston Park Pasture and Woodland Fringe – An area of parkland, heath associated paddocks, plantations and woodland on and around the boundaries of AWE with a flat to gently undulating topography. This area includes part of the Grade II registered Park of Aldermaston Court. Historical landscape elements include Grim's Bank and the course of a Roman Road. Occasional urban fringe land uses such as offices, garden centres and business parks are also typical. Small ponds and lakes have been created in some of the valleys, set amongst attractive woodlands and marginal planting. The ponds and trees reflect the area's parkland origins. Views tend to be constrained by vegetation. This is an area of good landscape quality; medium to high landscape value and moderate sensitivity to change.

Tadley Urban Area – The settlement of Tadley, which contrasts sharply with the surrounding agricultural and heathland landscapes. The town has predominantly developed since the 1950's although there are scattered thatched cottages dating from the 17th century. Historically, the area supported a brick industry at Tadley Common. The development is generally one and two storeys and suburban in character, with views restricted by the built form. This is of low landscape quality, value and sensitivity to change.

Haughurst Hill Heath-associated Pasture and Woodland – lying to the west of the site this character areas comprises mixed agricultural, residential and wooded area ranging from the local hill tops at Brimpton Common and Ashford Hill to the south-facing hillside at Inhurst. The area is structured by relatively straight roads with paddocks and the low-density linear settlement patterns typical of heathland enclosure. Mature oak and pines are common along roadsides, restricting hilltop views. This area is of good landscape quality, of medium value and moderate sensitivity to change.

Site Wide Landscape Character (refer to Figure 13.8)

- 5.39 A more detailed site based character survey was carried out by RPS in June 2005 to determine the broad character areas across the site. The character areas have been classified in relation to current land-use, landform and vegetation cover together with other landscape characteristics within each area. The information collected in the field was recorded on survey sheets providing the opportunity to record both the objective elements within the landscape and the subjective impressions of the viewer (Refer to Part 5 of the Appendices). A representative photograph was also taken from each survey point wherever possible and an assessment made as to the quality, value and sensitivity to change of the character area in question in accordance with the guidance provided in the GLVIA publication (2002). This baseline information was then used to describe the

character of the landscape / townscape within the site in order to help assess the relative local significance. This baseline assessment has been updated to take account of the NOA redevelopment which was granted planning permission early in 2007.

- 5.40 The proposed HEFF application site lies within or adjacent to the following landscape character areas, which are described in terms of their key landscape characteristics, their landscape quality, value and sensitivity to change.

Table 5.1 Site Landscape Character Areas

Landscape Character Area	Key Characteristics	Landscape Quality	Landscape Value	Sensitivity to Change
1. Contained Intensive Industrial Plateau	<ul style="list-style-type: none"> Area of concentrated industrial buildings; Chimneys, lighting columns, floodlights and double fencing; Flat topography; Occasional small isolated trees. 	Poor	Low	Low
2. Disturbed plateau	<ul style="list-style-type: none"> Area of disturbed ground; Series of car parks and contractors cabins Flat topography; Minimal vegetation. 	Poor	Low	Low
3. Urban Core	<ul style="list-style-type: none"> Wide road with on street parking One, two storey and three storey office buildings with flat roofs, interspersed with car parks; Lighting columns; Flat topography; Occasional street trees; Wide verges containing pedestrian paths. 	Ordinary	Medium	Low
7. Plateau Formal Open Space	<ul style="list-style-type: none"> A large open area containing grass pitches; Large expanse of car parking with a cluster of small buildings and portacabins contained by formal hedges; Flat topography; Framed by fastigate tree lines. 	Ordinary	Medium	Moderate
8. Contained Open Space	<ul style="list-style-type: none"> Open hard landscape area containing roads, car parking and a helipad; Flat topography; Contained by significant birch and oak woodland belt. 	Ordinary	Medium	Moderate
9. Intimate Enclosed Parkland	<ul style="list-style-type: none"> Terraced office buildings and car park set within a landscape dominated by heath woodland species and rhododendron; Sunken topography with steep slopes containing the area; Parkland landscape associated with the local area; Large pond feature. 	Good	Medium	Moderate

Landscape Character Area	Key Characteristics	Landscape Quality	Landscape Value	Sensitivity to Change
10. Open Grassy Heath Plateau	<ul style="list-style-type: none"> Extensive area of heathy grassland; Mounds and low grouped scattered single storey flat roofed buildings; Sporadic groups of mature trees, including a few more ornamental species; Landscape features include Grim's Bank contained by low fence, a pine plantation and a large pond and associated woodland; Single track roads, steam pipelines, fencing; Predominantly flat topography. 	Ordinary/ good	Medium	Moderate
11. Wooded Plateau Edge	<ul style="list-style-type: none"> Man-made mound and water treatment works contained by dense treebelts; Roads, fencing; Steeply undulating topography. 	Ordinary/ good	Medium	Moderate
12. Wide Plateau Corridor	<ul style="list-style-type: none"> Wide road with on street parking – former runway; Contained by high fencing on either side. 	Poor	Low	Low

Night-time Landscape Character

- 5.41 The dusk and night-time landscape character within the wider study area is influenced by the existing sky-glow above Newbury, Thatcham and Reading. The lit A4 also has an influence upon the landscape character, with road lighting and vehicle headlights visible where roadside vegetation is sparse. The landscape beyond these settlements, especially that designated as AONB, are characteristically dark landscapes, with an occasional isolated light indicating a dwelling, farmstead or hamlet.
- 5.42 The main sources of light locally around the site includes the settlement of Tadley to the south, which contains both high pressure and domestic scale sodium street lighting to the main roads and residential streets, together with lighting of individual buildings and road junctions, such as roundabouts, together with the car parks associated with the town centre uses, which all contribute to the night glow.
- 5.43 Lighting in the village of Aldermaston is limited to that associated with individual properties and the Post Office along the main street, together with the up lighting of the Hinds Head Public House. The plant nursery to the north of the village is also lit with a series of low level sodium lighting.
- 5.44 The AWE Aldermaston site is currently lit by a high percentage of sodium lighting, together with occasional white lights associated with replacement or new lighting provisions. Lighting is generally concentrated to the western, more developed, section of the site, clearly identifying the routes through the site. More sporadic lighting is also evident on the eastern section of the site, with the lighting of the perimeter fence and the main entrance areas extending the perception of the site to the boundaries. Much of the lighting is non-directional and domestic in scale. The sodium lighting is interspersed with the white lighting contained within individual buildings, which provides the lighting to stair wells, office spaces and

the upper floors of the larger industrial scale buildings scattered throughout the site and which all contributes to sky glow in the area. The edges of the site are more evident at night in the immediate local landscape through the lighting of the perimeter fence. However, due to the extensive layers of woodland blocks in the area, the effects of the lighting on the wider countryside are reduced to its immediate setting.

- 5.45 The application area is generally lit with boundary fence and street lighting and domestic scale lighting, which forms part of the site wide lighting and contributes to the effects on the night sky. The lighting of the perimeter fence is clearly evident at night.
- 5.46 In views from the AONB to the north, the whole site forms part of a lit ridgeline associated with settlement of Tadley, together with the white lighting of Portland House at Aldermaston Park clearly evident in this view, and a series of individual sodium lights set in the wider landscape. Individual lights associated with the application area are not discernible from the AONB, as these are set below the existing treed horizon or in the context of the wider lit area.

6 Landscape Evaluation

- 6.1 The various landscape, archaeological and ecological designations which help to define the value placed upon the existing landscape within the study area are shown on Figure 13.1.
- 6.2 There are no national or regional landscape designations, such as National Parks, Areas of Outstanding Natural Beauty (AONB) or Areas of Special Landscape Interest covering the site. However, the North Wessex Downs AONB lies 2.5km to the north and approximately 4km to the south west of the site. The closest boundary of the AONB is located north of the A4 adjacent to the settlement of Woolhampton. The North Wessex Downs AONB *"...reaches across the south west and south east of England in a broad arc... encircling Newbury, to encompass the northern reaches of the rolling chalk hills of the Hampshire Downs..."* (Extract from p5 of The North Wessex Downs Landscape: A landscape assessment of the Area of Outstanding Natural Beauty, The Countryside Agency, April 2002). There is no direct landscape impact on the AONB that would arise from the proposed development. The impact of the proposed development on key views from the AONB is assessed and included in the Visual Impact Schedules in Part 6 of the Appendices to this report.
- 6.3 In relation to historic landscape features, Figure 13.1 illustrates a number of Scheduled Ancient Monuments (SAM's) designated for their national importance throughout the study area. In particular, it identifies a series of linear SAM's relating to the remaining sections of an ancient earthwork, which extends from the north-east into the south-eastern corner of the site known as Grims Bank. Some of the surrounding villages contain Conservation Areas designated by the Local Authority for their special architectural or historic interest. Cultural Heritage issues are dealt within Chapter 14 of the Environmental Statement Volume 1.
- 6.4 The parkland and garden associated with Aldermaston Court north of the site boundary has been identified on English Heritage's Register of Parks and Gardens. Historically, the parkland associated with Aldermaston Court extended it's influence in to the eastern section of the AWE site, although it has now been significantly altered by built and infrastructure developments.
- 6.5 A number of sites have been designated as Sites of Special Scientific Interest (SSSI) within the study area for either their national ecological or geological interest. Further description on these is included in the Ecology Chapter of the Environmental Statement, Volume 1.
- 6.6 In order to assess the relative significance of the landscape effects associated with the proposed redevelopment, each landscape character area has been evaluated in relation to its quality, value or importance and sensitivity to change in accordance with the criteria contained within Tables 1.1 and 1.2 in Part 1 of the Appendices (Assessment Methodology). In accordance with the guidance provided in the GLVIA (2002), the sensitivity of the landscape is a reflection of the degree or capacity to which the particular landscape character area is able to accommodate change of the type and scale proposed.

- 6.7 An initial site wide vegetation appraisal of the existing vegetation was carried out in June 2005. This was not based on a topographic survey and therefore does not illustrate the actual location/number and canopy spread of the trees but provides a broad assessment of the existing groups of trees, categorising the stock in terms of amenity value from A – Retention most desirable, to D – Removal. This appraisal therefore, does not provide an assessment of the amenity value and condition of individual trees, it reflects the general amenity value of groups of trees in the site landscape.

Visual Analysis

- 6.8 The methodology for the visual assessment is set out in Part 1 of the Appendices. A summary description of the existing views together with an impact assessment for each of the receptors is set out in the Visual Impact Schedules in Part 6 of the Appendices, and shown on Figure 13.13.

7 Mitigation Proposals

- 7.1 The AWE Aldermaston site is located on a plateau at approximately 100-105m AOD. It benefits from the location and content of the woodland belts, copses and plantations which surround the site and frame the plateau for visual containment. In future some commercial plantation management and the importance attributed to heathland habitats may lead to some loss of tree cover in the area where biodiversity takes precedence.
- 7.2 Implementing new tree and native shrub planting to ensure future continuity of cover is therefore important for both the landscape and biodiversity of the site.
- 7.3 Mitigation measures have been developed as part of an iterative design process to help avoid or reduce the potential adverse landscape and visual effects of the proposed redevelopment. The location of the proposed buildings and access on previously developed land, the position and arrangement of the new buildings and their height, form and colour will have a considerable influence upon the potential impact of the proposed redevelopment. The new buildings and associated construction compounds would be wholly located within the existing site boundary within the eastern part of the site.
- 7.4 The proposed construction activities are described in Chapter 6 and the proposed development is described in Chapter 5, Volume 1 of the Environmental Statement. The main building would site centrally in the eastern sector. It would be approximately 42.5m x 90.1m with an east west orientation. The height of the proposed operational buildings has sought to be as low as possible at 8.0m and 11.975m in terms of satisfying the operational requirements of the development. The HEFF facility would be flanked by eight 28m tall lightning towers of a light weight metal lattice structure. The style and form of the buildings has allowed some functions to extend beyond the basic rectangular plan form, so that the building sides are broken up and the roofline is varied. The proposed temporary contractors construction facilities are to be limited to single storey height to minimise visual intrusion.
- 7.5 The landscape mitigation proposals for the redevelopment of the site are shown on the Landscape Strategy Plan Figure 13.9. They accord with the broad landscape principles illustrated on the Site Development Context Plan Figure 13.19. The redevelopment proposals take into consideration the location of the existing groups of trees, plantations and individual mature trees, as identified in the vegetation appraisal prepared in June 2005. Whilst around 40 number trees would be removed to enable the construction, the retention of adjacent groups of trees and the existing AWE site boundary vegetation would ensure a mature framework within which the redevelopment sits. The proposals for new tree and native shrub planting reinforce this framework in the immediate vicinity of the HEFF and eastern sector of the site and would contribute to reducing the landscape and visual impact of the redevelopment on the local landscape and for visual receptors within and immediately beyond the site boundary.
- 7.6 The landscape proposals in the central section of the application area seek (in accordance with the A Site Landscape Strategy 2006), to re-establish a landscape structure around the existing and proposed buildings through the reinforcement of

the mixed birch, oak and pine tree groups which are characteristic of this area of the AWE site.

- 7.7 The majority of the trees to be removed are mature and over mature birch. Whilst the loss of these trees will have an initial adverse effect, their replacement by a mix of new birch, oak and pine trees planted in copses and individually will ultimately improve the planting structure and provide future generations of tree cover and continuity of screening. The trees would be planted as mixed informal groups of feathered and heavy standard trees.
- 7.8 In addition to tree planting swathes of native understorey shrub planting would also be introduced to both provide additional screening and site containment and to add to the biodiversity of this area of the site. This will comprise a mix of hawthorn, willow, dogwood, field maple and hazel which can be managed with a rotational coppicing regime.
- 7.9 The grassland management in the eastern sector of the site would also be considered to encourage some limited additional areas of heathland regeneration through reduced mowing regimes.
- 7.10 The Sustainable Urban Drainage (SUDS) ponds are designed to attenuate the surface water drainage. They would also be landscaped to provide an attractive context to the development and will be planted with marginal vegetation for improved biodiversity.
- 7.11 A further mitigation measure under consideration is the removal of detracting features. As such the sequential removal of the redundant steam pipelines which run through the site area.
- 7.12 Topsoil stripping and site storage will be associated with the construction to protect this resource. Once the development is complete the topsoil would be reused and reseeded to reinstate the temporary contractors compound and construction area east of Griffin Road.
- 7.13 Earthworks generated by the excavation of the building foundations and SUDS ponds will be reused to form mounds which are characteristic of the eastern sector of the AWE site.
- 7.14 The choice of colour for the proposed buildings is important for the long distant elevated views from the AONB (light coloured buildings tend to reflect more in these views). Mid to darker colours which reflect the natural colours and tones found in the local landscape such as mid greys and browns would ensure the buildings blend into the landscape in the longer distance views particularly from the AONB to the south west.
- 7.15 Whilst a lighting design for the proposed redevelopment has not been prepared, this section sets out the requirements in order to reduce the night-time effects of lighting within the application area. Due to the unique operational requirements of the site, lighting of the proposed development is key to maintaining site security during the hours of darkness.

- 7.16 The lighting of the new buildings and security fencing has the potential to increase light levels, affecting the night-time perception of the site. The use of floodlighting and up-lighting to the buildings will sought to be minimised wherever possible. The guidance set out in *'Lighting in the Countryside: Towards Good Practice'* by the Institute of Lighting Engineers (1996) should be used to inform the lighting design. The use of flat-glass and hooded directional lanterns for the building and access circulation would reduce the night-time effects of light pollution. The number of lighting columns should be restricted wherever possible to minimise street clutter. The height of the columns should be limited to below the existing tree canopy to ensure that individual lights do not appear above the tree line, which would have an effect on the views from the AONB to the north of the site. These factors are to be considered in order to reduce the night-time effects.
- 7.17 Much of the site and the perimeter fence are currently lit with a range of different types of lighting, to aid site security. The existing perimeter fence will continue to be lit throughout the construction and operational phases. The design of the lighting will seek to minimise lighting impacts wherever possible.

8 Assessment of Effects

- 8.1 The proposed HEFF construction is programmed for a period of 24 months.

Temporary Effects

- 8.2 Temporary effects are associated with construction works and would include the construction of the two contractors compound areas, associated welfare facilities together with construction vehicles access, materials, topsoil and subsoil storage and any cranes used to construct the buildings.

Permanent Effects

- 8.3 The longer term effects would include the operation of the completed HEFF facility buildings, together with access. Night-time effects upon landscape character and visual amenity are also considered in order to assess the likely effects of lighting elements of the proposed development.
- 8.4 The assessment of landscape and visual effects takes into consideration the mitigation measures described in Section 7 to avoid, reduce and where possible remedy adverse effects.

Cumulative Effects

- 8.5 The assessment considers the proposed re-development in the context of the construction of the New Office Accommodation (NOA) which was granted planning permission in early 2007. It also considers the potential impact of HEFF in relation to the Site Development Context Plan (SDCP).

9 Landscape Effects

- 9.1 The landscape effects upon the local and site character areas during the construction and operational phases of the proposed development are summarised in Table 9.1 and further described and assessed in the following paragraphs.

Table 9.1 Landscape Effects

Local Landscape Character Areas	Nature of Effects		Scale of Change	Duration	Significance of Landscape Effects
	Type	Direct/Indirect			
Aldermaston Park Pasture and Woodland Fringe	Construction	Indirect	Minor	Temporary	Minor adverse
	Operation	Indirect		Permanent	Negligible/ neutral
	Night-time	Indirect			Negligible/ neutral
Tadley Urban Area	Construction	Indirect	Neutral N/A	Temporary	Neutral
	Operation	Indirect		Permanent	Neutral
	Night-time	Indirect		N/A	N/A
Haghurst Hill Heath Associated Pasture and Woodland	Construction	Indirect	N/A	Temporary	Neutral
	Operation	Indirect		Permanent	Neutral
	Night-time	Indirect		N/A	N/A

Site Landscape Character Area	Nature of Effects		Scale of Change	Duration	Significance of Landscape Effects
	Type	Direct/Indirect			
1. Contained Intensive Industrial Plateau	Construction	Direct	Negligible	Temporary	Neutral
	Operation	Direct		Permanent	Neutral
	Night-time	Direct			Neutral
2. Disturbed Plateau	Construction	Direct	Neutral	Temporary	Neutral
	Operation	Direct		N/A	N/A
	Night-time	N/A			N/A
3. Urban Core	Construction	Indirect	Minor Negligible	Temporary	Minor Adverse
	Operation	Indirect		Permanent	Minor Adverse/ Neutral
	Night-time	Indirect			Negligible
7. Plateau Formal Open Space	Construction	Indirect	Neutral	Temporary	Neutral
	Operation	N/A	N/A	N/A	N/A
	Night-time	N/A			N/A
8. Contained Open Space	Construction	Direct	N/A	Temporary	Neutral
	Operation	N/A		N/A	N/A
	Night-time	N/A			N/A
9. Intimate Enclosed Parkland	Construction	Indirect	Minor	Temporary	Negligible
	Operation	Indirect	Negligible	Permanent	Negligible/ neutral
	Night-time	Indirect			Neutral
10. Open Grassy Heath Plateau	Construction	Direct	Moderate	Temporary	Moderate adverse
	Operation	Direct	Minor	Permanent	Minor adverse becoming neutral to slight beneficial as planting establishes
	Night-time	Direct			Negligible
11. Wooded Plateau Edge	Construction	Direct	Minor Negligible	Temporary	Minor adverse
	Operation	Indirect		Permanent	Negligible adverse/neutral
	Night-time	Indirect			Neutral

Site Landscape Character Area	Nature of Effects		Scale of Change	Duration	Significance of Landscape Effects
	Type	Direct/Indirect			
12. Wide Plateau Corridor	Construction	Direct & Indirect	Negligible	Temporary	Negligible adverse
	Operation	Indirect	Minor	Permanent	Negligible adverse becoming neutral to slight beneficial
	Night-time	Indirect	Negligible		Neutral

Significant landscape effects are shown in *italics* (ie. those deemed moderate or above).

Aldermaston Park Pasture and Woodland Fringe

- 9.2 This character area contains part of the Grade II registered Park and Gardens of Aldermaston Court. It is wooded to the north and south of the AWE site and provides a wooded backdrop and containment to the site. AWE has little influence over the wider part of the character area to the north east as it dips away from the plateau towards Padworth. There are no direct effects on the landscape of this character area.

Construction Effects: The urbanising presence of construction traffic, construction compounds and a tower crane on the adjacent character area would have a temporary, indirect, **minor adverse** landscape effect on the margins of this character area.

Operational Effects: There is some very limited intervisibility between this character zone and the relatively small scale development site. Eventually however the slightly adverse effects of the development and loss of trees would be mitigated by the proposed new tree and woodland copse planting which would be in keeping with the character of the area. There would therefore be an initial temporary indirect, **negligible adverse** effect which would become **neutral** in 10 to 15 years when the planting establishes.

Night-time Character Effect: would also be **negligible** initially becoming **neutral** in 10 to 15 years as the tree planting matures and screens much of the additional light impact from this character area.

Tadley Urban Area

- 9.3 This urban character area borders the AWE site to the south west. It is separated from the proposed HEFF development area by the existing more urban western sector of the AWE site. It does however abut the southern edge of the Western Gate where HEFF construction traffic and contractors car parking would use the areas already provided to service the redevelopment of office accommodation on the site. This has been assessed for the NOA Environmental Impact Assessment. The proposed HEFF development would not change the character impacts of the proposals (or the assessment).

Construction Effects: Indirect, permanent and **neutral**.

Operational Effects: Indirect, permanent and **neutral**.

Haughurst Hill Heath Associated Pasture and Woodland

- 9.4 This character area which frames the AWE site to the west and north west and contains significant areas of woodlands is physically separated from the proposed HEFF development site by the western more urban sector of the AWE site and by development which abuts the A340. It contains some of the original features of the Wasing Park parkland/woodland landscape. The HEFF development would have no landscape character effects on this area.

Construction Effects: Indirect, temporary and **neutral**.

Operational Effects: Indirect, permanent and **neutral**.

1. Contained Intensive Industrial Plateau

- 9.5 This character area is primarily defined by the concentration of industrial buildings and flat topography. The buildings are interspersed with a range of hard spaces which include car parking, set behind an inner security fence and roads.
- 9.6 This area has intervisibility with the contractor's access and compound and car parking which has been assessed for the NOA, Environmental Statement. The HEFF project would utilise these provisions but would not change the character of appearance of the proposals which have already been assessed.
- 9.7 The area accommodates part of the contractor's access and proposed construction compound for the HEFF development to the east. There would also be intervisibility with the proposed HEFF development area. However, the buildings in this part of the site are very large industrial scale with little or no outlook and this low quality, low sensitive area can accommodate the proposed changes without any negative effect.

Construction Effects: Temporary, **neutral** landscape effect.

Operational Effects: Permanent, **neutral** landscape effect.

2. Disturbed Plateau

- 9.8 This area comprises vacant plots, temporary parking and construction related activities for the current site redevelopment projects. The HEFF development would make use of the contractor's access and parking areas but would not change any of the proposals, landscape character or the assessment of effects considered for the NOA Environmental Statement. The HEFF built development is separated from this area by the intensive industrial plateau area so no operational landscape effects would occur.

Construction Effects: Direct temporary, **neutral** landscape effects.

Operational Effects: N/A

3. Urban Core

- 9.9 The Urban Core character area lies adjacent to the areas where the proposed HEFF development and the contractors temporary compounds would be located. These aspects of development would be some distance away and separated from the edge of the urban core by other low rise (up to 10m) development and scattered mounds and trees in grassland. The contractor's compounds would have a temporary urbanising influence which would be reinstated after use. The development would be perceived as additional industrial building introduced into the adjacent large scale grass and heathy tree scattered area. The urban core is ordinary quality and would have a low sensitivity to the proposed change, additional lighting introduced by the development would be perceptible but in the context of the already lit site. The proposed planting would in time contain the new development and mitigate any adverse effects.

Construction Effects: Temporary, indirect **minor adverse** landscape effect.

Operational Effect: Indirect **minor adverse** effect becoming **neutral** in 10-15 years with the planting mitigation.

7. Plateau Formal Open Space

- 9.10 This character area abuts the contractor's access and car parking which has already been assessed in the NOA Environmental Statement. During the HEFF development the facility would be used but there would be no further landscape effects and no change to the assessment given in the NOA Environmental Statement. The area is remote from the HEFF operational development and construction compounds.

Construction Effects: Indirect temporary **neutral** landscape effect.

Operational Effects: N/A

8. Contained Open Space

- 9.11 This character area at the western corner of the AWE site would be used for the contractor's site access from the local highways. This would already be provided for the NOA development and has been assessed in the NOA Environmental Statement. During the HEFF construction phase the facility would be used, but there would be no additional landscape effects and no change to the assessment given the NOA Environmental Statement.

- 9.12 The contractor's compounds and operational development for HEFF would be remote from this area and would therefore have no effects on its landscape character.

Construction Effects: Direct temporary **neutral** landscape effect.

Operational Effects: N/A

9. Intimate Enclosed Parkland

- 9.13 This character area is enclosed by quite dense parkland and woodland vegetation. Its topography falls steeply away from the main site plateau to the north east corner and therefore its aspect is away from the main site area. It has a good landscape quality and a moderate sensitivity to change however it is well protected from the effects of the proposed development by the existing vegetation and its topographic aspect. There is limited intervisibility from this area to the proposed development however, there would be no direct effects. The operational development would have little effect on its character and there may ultimately be beneficial effects from the mitigation planting once established. The construction effects would be temporary and barely perceptible.

Construction Effects: Indirect, temporary **negligible adverse** effect.

Operational Effects: Indirect, permanent **negligible adverse** effect becoming **neutral** as the planting matures in 10-15 years.

10. Open Grassy Heath Plateau

- 9.14 This large area of the site comprises open grassland with some heathland, scattered trees, mounds and low rise buildings. During construction one of the contractors compounds and the site development would be accommodated within the area with the second compound and access in the adjacent areas to the west. The proposed development would introduce a modern industrial scale and style buildings into this slightly less intensively developed area of the site, however it would be seen in the context of the major industrial and office development areas to the west and the larger industrial buildings situated on the eastern edge of the eastern sector of the AWE site. The new buildings would be relatively low in height and would relate to the height of the existing mounds and low rise buildings scattered through this character area. The eight lattice metal lightning towers would introduce taller elements which are less in keeping with the character area, however at 28m these would be much shorter and less intrusive in mass than the chimneys stacks (some up to 49.5m) immediately to the east and west of this area. Any lighting associated with the contractors compounds and the proposed new buildings would intensify the amount of lighting in this part of the site however, this would be perceived in the context of the wider lit site and lit perimeter fences.

- 9.15 Whilst the loss of trees to accommodate the development would add to the initial adverse landscape impact on this area, the proposed mitigation planting would in time more than replace that lost. It would provide the eastern sector with a stronger landscape context which would have longer term benefits when compared to the existing over mature birch trees which would be removed.

Construction Effects: Direct, temporary, **moderate adverse** landscape effects.

Operational Effects: Direct, permanent, initial **minor adverse** effect becoming **neutral** after 10-15 years and continuing to improve to **slight beneficial** in the longer term.

11. Wooded Plateau Edge

- 9.16 This area is contained with mounding and significant areas of vegetation. The contractor's access would pass through the area on established roads and one of the contractor's compounds would lie adjacent to the southern boundary of the area. There would be no significant change in its character as a result of the construction of the HEFF development.
- 9.17 The operational development would be separated from this area by existing development, roads and car parking. The scale and the effects of change would be insignificant in the context and character of this area. The proposed planting once established would have a beneficial effect on the setting of the site.

Construction Effects: Direct, temporary, **minor adverse** effects.

Operational Effects: permanent, **negligible adverse** becoming **neutral** landscape effect.

12. Wide Plateau Corridor

- 9.18 This area was a former runway and now comprises roads and large expanses of car parking and compounds. It divides the more urban and densely developed western sector from the relatively less densely developed eastern sector of the AWE site. During construction this area would be used for construction access and construction vehicular movements would be perceived. The contractor's compounds and development site would be located primarily to the west but a small construction compound would also exist temporarily to the east of the area. This area has a poor landscape quality and low sensitivity to change. The construction effects would not be out of character and would lead to a negligible adverse effect. The operational development would have no direct effect on the area but would be perceptible in the context of the landscape to the east. It would have an initial negligible adverse effect becoming neutral to slight beneficial in time as the proposed mitigation planting establishes and matures to reinforce the landscape framework in the adjacent area to the east.

Construction Effects: Direct, temporary, **negligible adverse** effect.

Operational Effects: Indirect, permanent **negligible adverse** becoming **neutral** in 10-15 years and then **slight beneficial** as the tree planting become mature.

Effects on Landscape Resources

- 9.19 Topsoil would be stripped, stored and reused on the development site. Around 38 mature birch trees and a couple of oak trees would be removed to make way for the development and access for construction. These would be replaced by significant areas of new tree and native shrub planting which would ultimately be beneficial to this part of the site as over mature birch stock is replaced by a mix of birch, pine and oak to provide an enhanced landscape structure in keeping with the heathy woodland character of the plateau, for the future.

- 9.20 Whilst there would be an initial slight adverse impact on the tree stock this would ultimately be more than replaced by an improved tree structure leading to a slight beneficial impact in the longer term.

Night Time Effects

- 9.21 A lighting scheme has not been prepared for the proposed construction and operational phases. A broad outline assessment of the likely effects has therefore been based on additional access, building and security fencing lighting within the application area, in order to facilitate health, safety and site security requirements.
- 9.22 The proposed new buildings are located in a lit site, which extends to the edges of the whole AWE site (as a result of the security requirements of lighting the perimeter fence). Any new lighting will therefore be viewed in the context of the existing lit site. The introduction of lighting to these areas is likely to result in the overall net increase of lighting in this sector of the AWE site. However, the use of flat glass lanterns for road areas and directional down lighting, together with limited inclination, would help minimise light spill in to the night sky.
- 9.23 The proposals would intensifying the lit areas of the site in the east. Overall, the effects of lighting will be minimised wherever possible and it is considered that the proposed lighting will have a **negligible adverse** impact on the site and local landscape.
- 9.24 Considering the mitigation measures described in section 7, lighting the site would be unlikely to result in any change to the character of the views from within the AONB.

10 Visual Effects

- 10.1 The Zone of Visual Influence (ZVI) for the existing site is shown on Figure 13.10. The ZVI for the proposed HEFF development is shown on Figure 13.11. They model the topography with areas of significant screening vegetation assumed at 15m and settlements at 9m above ground level. The HEFF buildings are modelled at 11.975m with the lighting lattice towers at 28m above ground level. The zone of visual influence where both elements of the buildings and the lighting towers may be visible is illustrated by radiating dark blue lines. The areas where only the upper parts of the lightning towers may be visible above the surrounding vegetation is illustrated by pale blue radiating lines.
- 10.2 When the proposed ZVI is overlaid with the existing baseline ZVI for the existing AWE site buildings Figure 13.12 it can be seen that the HEFF development would not increase the potential area of visibility of the AWE site. The buildings would sit below the level of the vegetation that contains the site. They would generally only be visible from within the AWE site and the immediate vicinity of boundaries of the site with the exception of the very elevated distant view points beyond Kingsclere to the south west. The upper parts of the lattice metal lightning towers have a more extensive ZVI, however this is well within the ZVI for the existing taller buildings and chimney stacks that already exist on the site. The lattice towers would be a much lighter form of construction than the existing site chimney stacks. Their visibility and influence would therefore be less extensive in reality than indicated by the ZVI. They would be difficult to see much beyond the 5km radius views whereas the existing chimneys can be perceived from elevated views 10 to 15km beyond the site in daylight, in good clear weather conditions.
- 10.3 The summary of visual effects of the development during construction and for Operation Year 1 are illustrated on Figures 13.14 and 13.15 respectively. These plans are to be read in conjunction with the baseline Existing Visual Effects Figure 13.13 and the visual impact schedules at Part 6 of the Appendices.
- 10.4 The following sections summarise the potential visual effects of the proposed development upon each visual receptor group and considers the potential night-time effects of lighting the site.
- 10.5 Views of the buildings within the application area and that of the wider site, are largely contained by the nature of the topography and intervening mature vegetation from many of the settlements, recreational paths, other public rights of way and transport corridors within the study area. The assessment of the visual effects of the proposed development upon all receptors relates to those effects likely to occur during the winter months for the worst affected receptors within any identified group i.e. the worst-case scenario. The effects have been assessed for the construction phase and the first year of operation, where the effects of planting mitigation have not been considered. The effects have also been considered at year 10 of operation where appropriate, when the proposed mitigation planting would be assumed to have established a minimum height of 6m, and this assessment is included in the schedules at Part 6 of the Appendices.

Settlements – Construction Visual Effects

- 10.6 From Raghill (receptor no. 1), Old Warren (no. 2), Tadley Hill (no. 13), Broomhill (no. 20), Beenham (no. 22), Woolhampton (no. 18) and Upper Woolhampton (no. 19) the tallest elements of the existing buildings and/or chimney stacks can be seen above the tree line. It is feasible that the upper part of any tower crane used for the construction would also be visible seen in the context of the existing structures with a resultant temporary, **negligible adverse** visual effect.
- 10.7 One property (ref no. 7) The Old Kennels would have views of construction traffic using the access route with views south east from upper storey windows and east from the garden. The traffic would be seen in the context and backdrop of the existing site development and infrastructure (refer to photograph Figure 13.18, view point 13). The effect would be a temporary **minor adverse** visual effect during construction only. There are no views of the proposed HEFF buildings or construction compounds from this property.

Settlements – Operational Visual Effects

- 10.8 From Raghill, Old Warren, Tadley Hill, Woolhampton and Upper Woolhampton, Broomhill and Beenham. There may be glimpsed views of the upper parts of the lightening towers above the tree line. These would be less intrusive in the views than the existing site chimney stacks (being shorter, narrower and of an open lattice metal construction) but would be perceived as additional vertical elements on the skyline on a clear day. This would result in a permanent **negligible adverse** visual effect.

Settlements Night-Time Effects

- 10.9 The AWE site is already well lit for security. Whilst the development may introduce additional lighting in the eastern sector of the site it would be perceived in the context of an already well lit area with both perimeter fencing, site roads and buildings lit at night. Lighting associated with this development would be barely perceptible and a **negligible adverse** visual effect at worst.

Public Rights of Way and Recreational Paths

- 10.10 There are no views of the application site and views of the proposed development would generally be limited from these receptors due to the extensive layers of vegetation and/or built form and topography containing the development from wider views. There are 5 number rights of way (ref nos. 36, 38, 40, 41 and 42) with short to middle distance views of the top of the existing tall buildings and/or chimney stacks above the tree line, (refer to photographs Figure 13.17 key view points C and E). These may afford glimpsed views of any tower cranes used for construction and of the upper part of the 8 lightning towers. These would introduce additional vertical elements which would be seen in the context of the existing views of the chimney stacks resulting in **negligible adverse** visual effects during both construction and operational phases.

- 10.11 Long distance elevated views of the AWE site can be obtained from the Wayfarers Walk (ref no. 24), Cottingtons Hill and Stubbington Down (ref no. 43) to the south west of Tadley (refer to photograph Figure 13.17 key view point A). These are within the AONB. The application site and the proposed new buildings and lightning towers would be difficult to distinguish from the existing buildings from these very elevated areas. The lattice towers would be barely perceptible from this distance on a clear day and the buildings can be further camouflaged due to their low height and form if appropriate colours are chosen for the external built elevations and roofs (ie. mid to dark natural colours). At worst **negligible adverse** visual impacts may be experienced on a clear day from these views.

Public Open Space

- 10.12 The Green at Tadley Hill (receptor number 47) has short distance views to the existing tall buildings and chimneys on the AWE site although the application area is not perceptible. As a result of the proposals, the lightning towers would be visible above intervening buildings and vegetation but when considered against the backdrop at AWE as a whole, the visual effect would be **negligible**.

Night Time Effects

- 10.13 The effects of introducing lightning within the development would be imperceptible in the views from the rights of way and open space. The lights would be indistinguishable in the context of an already well lit site and the Tadley urban area on the plateau. There would therefore be **no change** in night time visual effects.

Registered Parks and Gardens

- 10.14 There are very narrow existing views south to the construction site from the end of the avenue to the south wing of Aldermaston Court (receptor reference 49 refer to photographs Figure 13.8 local view points 11 and 12). The tallest of the existing AWE site buildings and chimneys are also glimpsed above the trees and intervening woodland. No views of the proposed HEFF buildings would be experienced due to intervening vegetation. Given the very narrow and filtered nature of the view, a temporary **negligible** visual impact would be experienced during the construction phase only.

Formal Sports User Groups

- 10.15 From Tadley Rugby Club (ref no. 51) and Wessex Downs Golf (ref no. 53) course short distance views of the top of the lightning towers may be glimpsed above the intervening buildings and vegetation. These would however, be less intrusive than the existing site chimney stacks and as such only a **negligible adverse** visual impact would be experienced.

Transport Corridors – Baseline Views

- 10.16 Receptors using the local roads network would have a medium sensitivity to changes in the views and the views experienced from the roads would be dynamic (ie changing as the viewer travels by car, rides, walks or cycles). There are significant areas of planting on the road boundaries so views to the site are intermittent.
- 10.17 Views of the application area are glimpsed from short sections of Red Lane (to the east of the site, refer to photograph Figure 13.18 local view point 10) between existing vegetation, buildings and mounds.

Transport Corridor Construction Visual Effects

- 10.18 Construction traffic may be seen from the A340 Paices Hill (ref no. 61) as it runs parallel to the development access route leading to a temporary **negligible** visual effect.
- 10.19 The construction compounds, tree removal and development construction site may be perceptible from Red Lane (ref no. 54) resulting in temporary **minor adverse** visual effects.
- 10.20 From the Reading Road (ref no. 55) the upper parts of any tower crane would be visible above the intervening buildings and vegetation resulting in a temporary **negligible adverse** visual effect.

Transport Corridors – Operational Effects

- 10.21 From Red Lane narrow views of the proposed buildings would be experienced. These would be partially screening by the intervening buildings, mounds and vegetation. Similar narrow views of the lightening towers would also be gained. By Operational Year 10 the mitigation planting proposed and the existing young planting on the perimeter of the site would have established to form screening and landscape structure to the development. The resultant visual effects would be **Minor adverse** in Year 1 reducing to **negligible** in Year 10 and continuing to develop to **neutral to slightly beneficial** as the landscape structure planting matures.
- 10.22 From the Reading Road views of the development would primarily consist of the upper parts of the lightening towers above the intervening vegetation resulting in a **negligible adverse** visual effect.

Employment Sites

- 10.23 These are considered to be low sensitivity receptors and non would experience significant visual effects. They are included in the Visual Impact Schedules in Appendix Part 6.

11 Statement of Effects

Landscape Planning Policy

National landscape designations

AONB

- 11.1 The effects of the proposed HEFF development on the quality of views from several footpaths on the southern edge of the North Wessex Downs AONB to the north of the site and from elevated view points to the south west will be of negligible significance, where the proposed development would form a small part of the existing developed wooded ridgeline. The proposed development therefore meets the requirement of Policy C2 of the draft south east plan and of Policy DP3 set out in the *'North Wessex Downs Management Plan'* (January 2004): *"Retaining the quality of views from and to the North Wessex Downs"* seeks "...to resist intrusive development within the main views from and to the AONB."

Registered Parks and Gardens

- 11.2 The development proposals are located outside of the areas identified as registered parks and gardens, as a result there will be no direct effects on either Wasing Park or Aldermaston Court. The boundary of the registered park and garden associated with Aldermaston Court immediately abuts the northern boundary to the eastern sector of the AWE site. It is separated from the HEFF application area by woodland and parkland vegetation and low rise buildings and mounds. There will be no adverse landscape impact on this site. There is a very narrow view from the southern avenue in the grounds of Aldermaston Court to the contractor's compound which may give rise to a temporary negligible adverse visual effect during the construction phase, there would however, be no long term visual effects. The proposed redevelopment would therefore accord with policy EN4 of the Berkshire Structure Plan and Policy ENV.35 of the West Berkshire Local Plan in relation to registered parks or gardens.

County Policy Context

- 11.3 This assessment has taken account of the various published National, County level and North Wessex Downs AONB landscape character assessments to inform the landscape assessment and design of mitigation for the project in accordance with Policy EN1 of the Berkshire Structure Plan and E6 of the Hampshire Structure Plan.

Local Policy Context

- 11.4 The landscape character methodology and approach has considered the local landscape character and detailed character assessments have been undertaken. The proposals seek to mitigate the landscape and visual impacts of the HEFF development. The protection of topsoil resources, proposed tree planting, native structure planting and guidance with regard to the colour of the proposed buildings would reduce the visual impact and in the longer term provide an improved and

more diverse landscape structure to this section of the site in keeping with the heathland woodland landscape character of the local area. The proposals would therefore accord with OVS.2, ENV.1 and ENV.5 of the West Berkshire District Council Local Plan in conserving and enhancing the special features and diversity of the different landscape character areas found within West Berkshire and Policy E6 of the Basingstoke and Dean Borough Local Plan.

- 11.5 The proposals have no direct or indirect landscape effects on the character of any of the local conservation areas and would therefore accord the Policy ENV.33 of the West Berkshire Local Plan and Policy E3 of the Basingstoke and Dean Local Plan.
- 11.6 The proposed development would not have an impact on the designated Area of Special Landscape Importance as there is limited intervisibility between the proposed development and the area and therefore accords with Policy ENV.3 of the West Berkshire Local Plan.

12 Summary of Residual Effects

Landscape Effects

- 12.1 The only significant (ie. moderate and above) landscape effect identified by this assessment is the temporary moderate adverse landscape effect on the eastern sector of the AWE site – ref 10 Open Grassy Heath Plateau; a result of the removal of existing trees and the impact of both the temporary contractors compound and construction development site. Once the construction phase is completed this would reduce to a **minor adverse** effect in Year 1, as the new industrial style buildings would sit within the large grassy heath plateau amongst the various other existing mounds and buildings and the contractors compound would be restored to grassland and planting. In time the proposed mitigation planting would establish and mature to provide an enhanced landscape structure and context to this sector of the AWE site. The residual effect would be **neutral** once the planting establishes in 10 years becoming **slight beneficial** in the longer term as the planting matures.
- 12.2 The remaining residual landscape effects on the local and AWE site landscape character areas would be **negligible/neutral** as indicated in Table 9.1.

Visual Effects

- 12.3 In Operational Year 1 the visual effects of the proposed development would generally be **negligible** for affected receptors with the exception of a short length of Red Lane (ref. No. 54) where a **minor adverse** effect may be perceived.
- 12.4 By Year 10 the residual visual effects of the operation of the proposed development taking into account the implementation of the proposed mitigation measures (as set out in Section 7), would be **negligible** as set out in the Visual Impact Schedules in Part 6 of the Appendices. This is primarily as a result of the existing built development and existing vegetation which contain the proposed development application area. However, the vegetation containment would be reinforced and improved by the planting mitigation proposals which would also ensure a continuity of cover in the longer term.

13 Cumulative Effects

Introduction

- 13.1 The assessment of cumulative effects considers the landscape and visual effects of HEFF with the New Office Accommodation (NOA) which was granted planning permission early in 2007.
- 13.2 It also considers HEFF in the context of the Site Development Context Plan (SDCP).

NOA and HEFF

- 13.3 NOA is located in the western sector of the site and is to be constructed on previously developed lands. It will extend the Urban Core character area of the site to the west and north. Associated areas of new car parks are to be implemented in the southern part of the western sector and will replace the Plateau Hangers Character Area with a Wooded Plateau Car Park area. These developments are located in areas of existing poor or ordinary landscape quality with low to medium value and sensitively to change.
- 13.4 The proposals seeks to arrest the decline of the western edge of the site and provide a coherent infrastructure and framework for the redevelopment with a robust and sustainable landscape structure which in time would improve the landscape and the day and night time perception of this area of the site.
- 13.5 Whilst NOA would have initial adverse landscape and visual effects relating to tree loss and construction operations covering large areas of the western sector of the site, the quality of the new built development and the significant new landscape infrastructure which would be implemented would make a positive contribution. Once established and matured the overall long term landscape and visual impact is likely to be of **moderate benefit** to the local area.
- 13.6 The HEFF project would utilise and share the construction access and car parks in the western sector implemented for NOA. There would be no change to the landscape or visual impact of these temporary construction facilities assessed in the NOA Environmental Statement. The HEFF development would introduce a new industrial style development in the eastern sector of the site which is remote from the NOA development as the two are separated by the densely developed Contained Intensive Industrial Plateau character area.
- 13.7 HEFF would result in initial **minor adverse** landscape effects which would reduce to **neutral** and become **slight beneficial** in the longer term once the proposed planting and landscape structure establishes and then matures.
- 13.8 The cumulative impact of these two areas of development would not increase the overall Zone of Visual Influence of the AWE site, however the pattern of building profiles in middle to distant sky line views would alter with some **minor to negligible** adverse visual effects. Local views to the sites from residential properties and transport corridors are already quite well contained by existing

planting and buildings, however where there are views these would benefit in the longer term from the proposed landscape structure planting to be implemented.

SDCP

- 13.9 The SDCP is shown on Figure 13.19. The plan identifies a series of areas to accommodate redevelopment in the western section of the site and in the eastern section of the AWE site. The plan also illustrates the location of site wide structure planting to reinforce the existing, to enhance the sites character and to maximise the longevity of the sites tree stock.
- 13.10 This cumulative assessment therefore considers the broad principles of developing these areas in the context of the proposed new landscape structure.

Effects on landscape character

- 13.11 There will be a change on the landscape character of the western section of the site during the construction and operational phases associated with NOA (plot 16 on the SDCP) and Orion (plot 8). There will be a temporary transition and disturbance of landscape / townscape character areas occurring during the construction phase.
- 13.12 The operation of the new Orion building will extend the perception of the adjacent Contained Intensive Industrial Plateau area further to the west, replacing the northern section of the Contained Disused Plateau character. The operational stage of the proposed NOA building will also extend the Urban Core character area further to the west. The operation of the development plots proposed within the core of the site will not affect the character of the existing Contained Intensive Industrial Plateau area or the existing area of Urban Core.
- 13.13 The areas of new car park proposed on the southern boundary will replace the south-eastern part of the Plateau Hangers character area with a new character of Wooded Plateau Car Park. The car park on Griffin Road running north to south in the centre of the site, continues to form part of the Wide Plateau Corridor.
- 13.14 The proposed development areas in the eastern section of the site including the HEFF proposals would create individual and separate development pockets within the Open Grassy Heath Plateau during both the construction and operational phases. The development of plot 4, adjacent to the south-eastern edge of the Urban Core character area, will extend this character area further north into the Open Grassy Heath Plateau area, resulting in the loss of a small part of this character area. The proposed HEFF development and plots 9 and 10 would increase the perceived development density in the eastern sector of the site, however, these would be seen in the context of the larger scale developments which already exist to the east and west.

Visual effects

- 13.15 Despite the site's large scale and its position on a ridgeline plateau, the majority of the site buildings are generally well contained visually in the immediate local landscape due to the extensive areas of mixed plantation woodland and layers of

internal and roadside vegetation. There are views, however, of the large-scale buildings and stacks on the eastern edge of the site and the large-scale mass of buildings and associated stacks in the centre portion of the site above the rough wooded horizon. This combined effect makes the site readily identifiable from the wider landscape.

- 13.16 The future removal of the boiler house and associated stacks would reduce the visual extent of the site from the AONB. The ongoing removal of visually detracting features, such as the steam pipelines following the decommissioning of the boiler house would have beneficial effects on the local views of the site.
- 13.17 Assuming that the future development, as identified on the SDCP, does not encroach substantially above the treed horizon, there would be no significant impacts on the existing views of the site from the surrounding wider landscape and in particular those views from within the North Wessex Downs AONB to the north and south west. There are existing fragmented views of the site from the residential properties, road corridors and employment areas immediately bounding the site. These will diminish as the boundary structure planting establishes.
- 13.18 The cumulative effect of the future development as set out on the SDCP, which lies wholly within the site boundary, should not extend the existing degree of visibility of the site.
- 13.19 There is limited intervisibility between the Registered Park and Garden associated with Aldermaston Court and the AWE site. The tops of the tallest buildings and stacks appear intermittently above the tree line. The eastern section of the AWE site originally formed the wider parkland associated with Aldermaston Court, an area of land which has subsequently been subject to development. Very filtered views of the eastern section of the site occur through intervening woodland and parkland, over the Open Grassy Heath Plateau character area, and included views of the mature parkland trees within the context of the edges of the Central Industrial Plateau area. Views of the wider AWE site from Aldermaston Court and its grounds would be curtailed by the proposed development and would be further enclosed through the implementation of the new landscape structure planting to this north edge.

Night Time Effects

- 13.20 The AWE site is currently lit at night and is visible in the context of the lit residential areas of Tadley. The existing perimeter fence is also lit, defining the site edge in the immediate local landscape. In views from the southern edge of the North Wessex Downs AONB to the north, the site is set within the existing night-time glow related to Tadley.
- 13.21 The development proposals, as set out on the SDCP, will increase the number of lights within the site, such as lighting to the buildings, new internal security fencing and car park areas, which will be evident from those receptors immediately bounding the site. However, considering the implementation of mitigation measures to reduce night glare, such as restricting up lighting of buildings, installing hooded and directional lighting columns and implementing the landscape proposals, the effects on the night sky will be limited.

Summary

- 13.22 There would be limited impact on the landscape character areas outside of the site boundary as a result of the development proposals. There would be changes to a limited number of site landscape character areas as a result of construction and operational activities associated with the proposed developments.
- 13.23 The cumulative visual effect of the proposed developments would not extend the existing visual envelope of the site, but would change the character of the views. In the longer term, the implementation of decommissioning of the boiler house, its stacks and the steam pipeline, together with the establishment of the proposed landscape structure planting, would when combined, further reduce the visibility of the more unattractive built infrastructure elements in the local and wider landscape.

Glossary

Assessment A collective term for description, classification and analysis of landscape and townscape.

Capacity The degree to which a particular landscape, townscape or seascape character type or area is able to accommodate change without detrimental effects on its character. Capacity is likely to vary according to the type and nature of change being proposed.

Character The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, townscape or seascape and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place of different areas.

Character Type A landscape, townscape or seascape type will have broadly similar patterns of geology, landform, soils, vegetation, land use, settlements and field pattern discernible in maps and field survey records.

Classification A process of sorting the landscape, townscape or seascape into different types using selected criteria but without attaching relative values to the different kinds of landscape, townscape or seascape.

Combined Effects The overall effect on character areas which contain more than one element of a development or the overall effect on visual receptors with a view of more than one element of a development.

Condition (or Quality) is based on judgements about the physical state of the landscape, townscape or seascape and about its intactness, from visual, functional, and ecological perspectives. It also reflects the state of repair of individual features and elements which make up the character in any one place.

Cumulative Effects The summation of effects that result from changes caused by a development in conjunction with other past, present or reasonably foreseeable development.

Element A component part of the landscape, townscape or seascape (for example, roads, hedges, woods).

Enhancement Landscape, townscape or seascape improvements through restoration, reconstruction or creation.

Environment Our physical surroundings including air, water and land.

Environmental Impact Assessment The evaluation of the effects on the environment of particular development proposals.

Feature A prominent eye-catching element, for example, wooded hilltop or church spire.

Heritage Historic or cultural associations.

Land use The primary use of the land, including both rural and urban activities.

Landform/Topography Combinations of slope and elevation that produce the shape and form of the land.

Landscape Evaluation The process of attaching value (non-monetary) to a particular landscape, townscape or seascape usually by the application of previously agreed criteria, including consultation and third party documents, for a particular purpose (for example, designation or in the context of the assessment).

Landscape/Townscape Effects Change in the elements, characteristics, character and qualities of the landscape, townscape or seascape as a result of development. These effects can be positive or negative.

Magnitude A combination of the scale, extent and duration of an effect.

Methodology The specific approach and techniques used for a given study.

Mitigation Measures, including any process, activity or design to avoid, reduce, remedy or compensate for adverse landscape, townscape or seascape and visual effects of a development project.

Perception The psychology of seeing and possibly attaching value and/or meaning to landscape, townscape or seascape.

Receptor Physical landscape, townscape or seascape resource, special interest or viewer group that will experience an effect.

Sustainability The principle that the environment should be protected in such a condition and to such a degree that ensures new development meets the needs of the present without compromising the ability of future generations to meet their own needs.

Value The relative value or importance attached to a landscape, townscape or seascape (often as a basis for designation or recognition) which expresses national or local consensus, because of its quality, special qualities including perceptual aspects such as scenic beauty, tranquillity or wildness, cultural association or other conservation issues.

Visual Amenity The value of a particular area or view in terms of what is seen.

Visual Effect Change in the view/appearance of the landscape or townscape as a result of development. This can be positive (i.e. beneficial or an improvement) or negative (i.e. adverse or a detraction).

Visualisation Computer simulation, photomontage or other technique to illustrate the appearance of a development.

Zone of Visual Influence The theoretical area from which part or all of the project site or proposal is potentially visible and may have an influence or effect on visual amenity.

References

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- The Landscape Institute and the Institute of Environmental Management & Assessment (2002): *Guidelines for Landscape and Visual Impact Assessment (Second Edition)*.
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- Atkins (Final Draft Report - December 2005): *AWE Aldermaston, Burghfield and Blacknest – Historic Characterisation and Management Strategy*
- West Berkshire Council (2006): *Draft Historic Landscape Characterisation: Aldermaston Parish*
- The North Wessex Downs Council of Partners (January 2004): *North Wessex Downs Management Plan*
- Berkshire Joint Strategic Planning Unit: *Berkshire Structure Plan 2001-2016* (Adopted 2005)
- Hampshire County Council: *Hampshire Structure Plan Review 1996 – 2011* (Adopted 2000)
- West Berkshire District Council: *West Berkshire Local Plan* (Adopted 14 June 2002)
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- English Heritage: *The Register of Parks and Gardens*
- The Countryside Agency (1999): *Countryside Character- Volume 7 - South-East and London*
- Berkshire County Council (November 2003): *Berkshire Landscape Character Assessment*
- Hampshire County Council (June 1993): *The Hampshire Landscape – A Strategy for the Future*
- Newbury (West Berkshire) District Council (1993): *Landscape Character Assessment*
- Basingstoke and Deane District Council (2001): *Landscape Character Assessment* (2001)
- Countryside Agency (April 2002): *North Wessex Downs Landscape*
- Atkins Nuclear (September 2005): *Environmental Site Setting Exercise Volume 1*
- RPS (June 2005): *Vegetation Appraisal*
- Institute of Lighting Engineers 'Lighting in the Countryside – Towards Good Practice' (1996)
- RPS (October 2006): *Landscape Strategy*



NOTE 1: National Nature Reserve, Site of Special Scientific Interest, Local Nature Reserve, Common Land, Open Country and Ancient Woodland boundaries obtained from the relevant agencies via www.magic.gov.uk.

NOTE 2: Other, local, designation boundaries obtained from the Basingstoke and Deane Borough Adopted Local Plan (adopted 2006) and from the West Berkshire District Local Plan (adopted June 2002).

Key

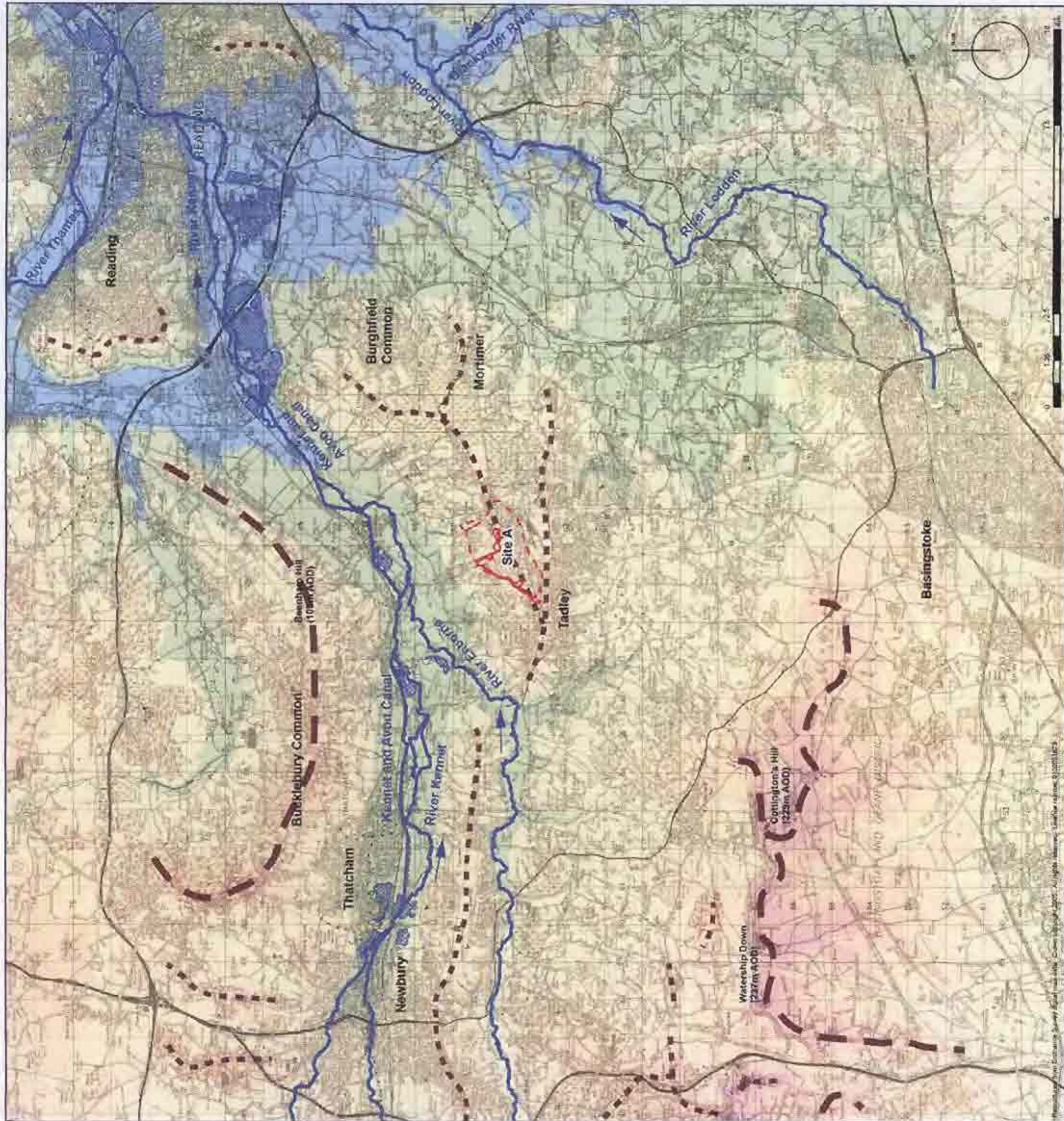
- HEFF application boundary
- Site A Boundary
- Administrative Boundaries
- National Nature Reserve
- Site of Special Scientific Interest
- Local Nature Reserve
- North Wessex Downs Area of Outstanding Natural Beauty
- Registered Park or Garden
- Scheduled Ancient Monument
- Conservation Area
- Area of Special Landscape Importance
- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland
- Registered Common Land
- Open Country (CRoW Act 2000)

Scale - See Scalebar

Environmental Designations

Figure 13.1

Drawing No.



Key

- HEFF application boundary
- Site A Boundary
- Major Watercourses
- Major Waterbodies
- Major Ridgelines
- Minor Ridgelines

Height (AOD) in metres

- Less than 50
- 50 to 74
- 75 to 99
- 100 to 124
- 125 to 149
- 150 to 174
- 175 to 199
- 200 to 224
- 225 to 249
- 250 or greater

Scale - 1:100,000@A3

Topography and Drainage

Figure 13.2

Drawing No:



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NOTE 1: Significant woodland blocks and landuses have been mapped via a desk-based survey only.

NOTE 2: Other non-agricultural land includes industrial, commercial, mineral and other land uses.

Key

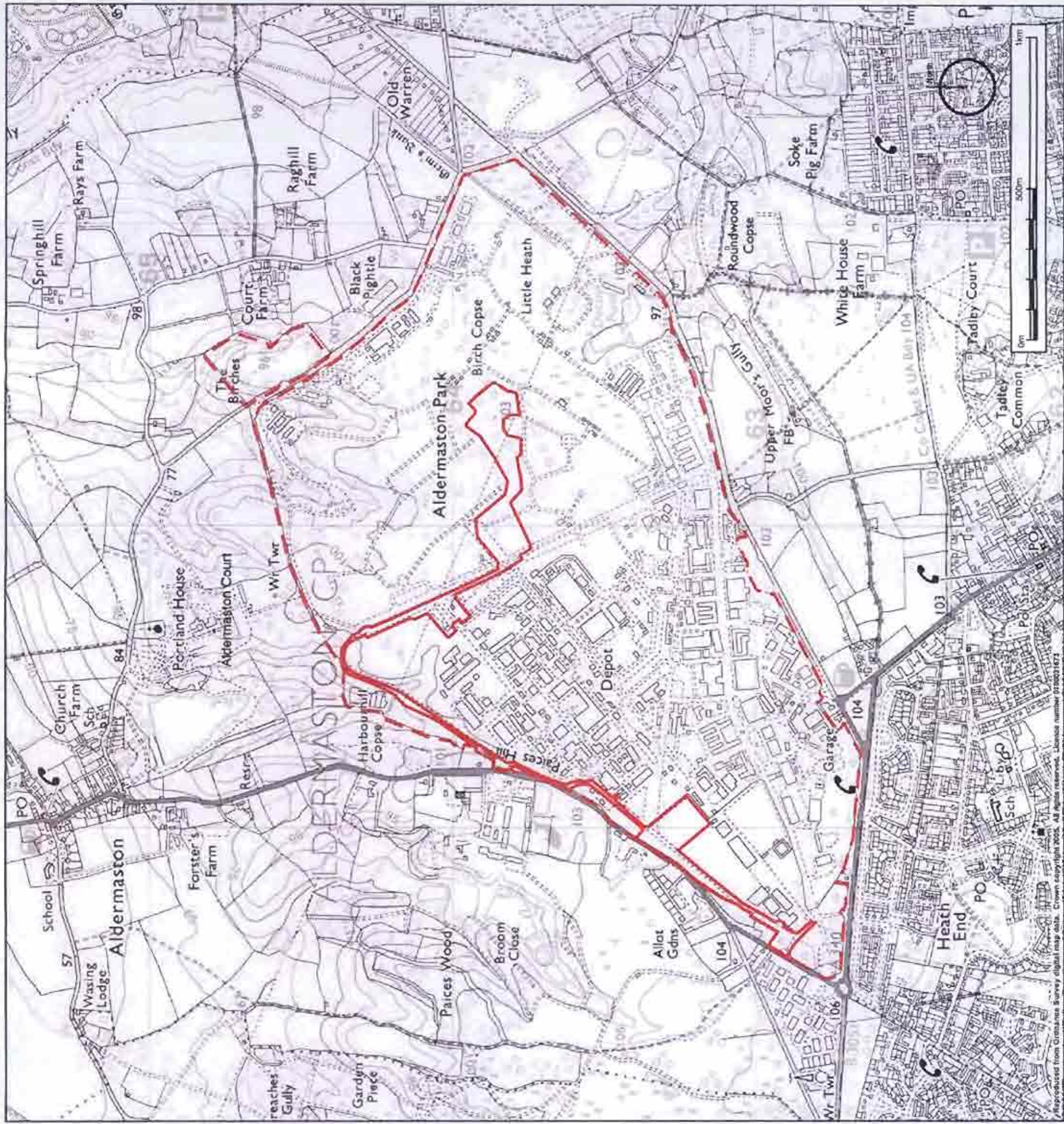
- HEFF application boundary
- Site A Boundary
- Main Settlements
- Significant Woodland
- Significant Woodland within Historic/Heritage Landscape
- Wooded Heathland
- Agricultural Land
- Recreation / Open Space
- Historic / Heritage
- River Kennet and Associated Waterbodies
- Other Non-Agricultural Land

Scale - See Scalebar

Landcover

Figure 13.3

Drawing No:



Key:

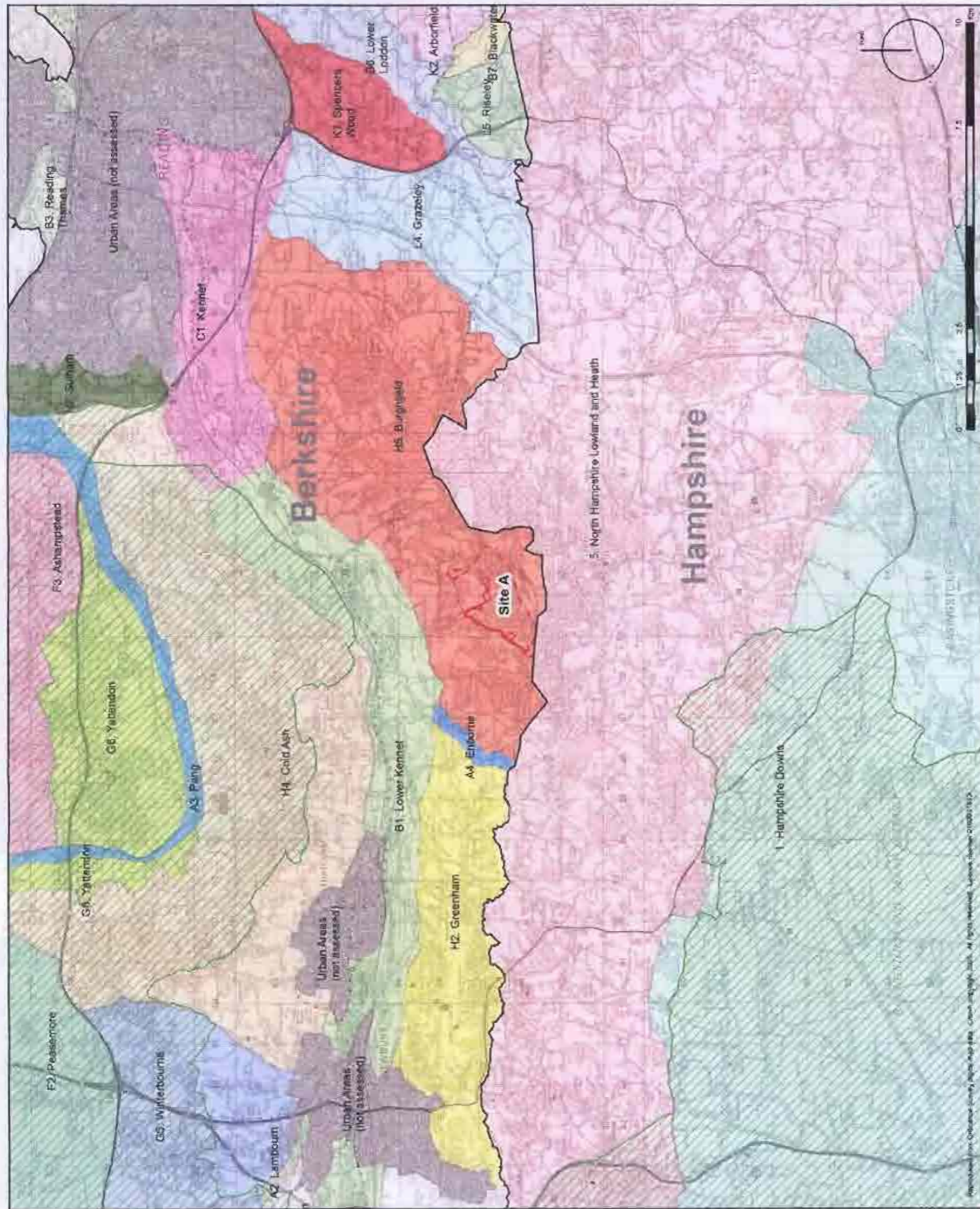
- HEFF Application Boundary
- Site A Boundary

Scale - See Scalebar

Existing Site

Figure 13.4

Drawing No:



NOTE 1: Berkshire County Council was abolished in 1998 by a series of Unitary Authorities. The Landscape Character Assessment carried out in 2003 was undertaken on behalf of the Berkshire Joint Strategic Planning Unit (BJSPU), which carries out strategic planning functions on behalf of the Unitary Authorities

County Landscape Character Areas

Figure 13.5

Drawing No.