LDĀDESIGN

# Fort Halstead

Area of Outstanding Natural Beauty (AONB) Report

May 2020

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*This document has been prepared and checked in accordance with ISO 9001:2008.*

# 1.0 Introduction

## 1.1. Project Context

Fort Halstead is a developed site within the Kent Downs Area of Outstanding Natural Beauty (AONB), comprising mainly employment uses.

The current owners of Fort Halstead, the Merseyside Pension Fund (the Client / Applicant), are submitting a hybrid planning application for mixed use redevelopment of the Site.

LDA Design Consulting Limited (LDA Design) has been appointed by the Mersey Pension Fund to consider the likely impact of the current development proposals on the landscape and visual environment; help shape the masterplan / green infrastructure strategy; and prepare a Landscape and Visual Impact Assessment (LVIA) to accompany the planning application.

This AONB Report specifically considers the relationship between the proposed development and the Kent Downs AONB. It has helped inform the judgement made within the LVIA on the effect of the proposed development on landscape character and views, and should be read in conjunction with the LVIA Report and Landscape and Visual chapter of the Environmental Statement.

The location of the Site and the extent of the Kent Downs AONB within the vicinity of the Site are shown on Figure 1, which is included at the end of this report.

## 1.2. Application Context

The proposed development is for up to 635 residential dwellings; employment / mixed use land uses (including safeguarded land for a potential school site); a centrally located village centre comprising public space and community facilities; and retention and enhancement of existing important landscape / habitats features and creation of new green infrastructure. It should be noted that the application site already has outline planning permission (Application Reference 15/00628/OUT) for a mix of employment and residential development, with up to 450 dwellings. As such the AONB Report considers the effect of the operational development on both the existing baseline environment (i.e. the current land uses) and the future baseline environment (i.e. with the permitted development built-out in accordance with the 2015 planning permission).

It should also be noted that a new hybrid planning application was submitted in September 2019, which proposed up to 750 dwellings, in line with Sevenoaks District Council's (SDC) expectations that the Site was able to deliver a greater quantum of housing to meet local demand, as identified in the draft allocation in Sevenoaks Local Plan (2015-2035). Based on ongoing consultation with SDC and other stakeholders the application has been amended. Key design change includes a reduction in the extent of residential development and subsequent reduction in overall dwelling numbers.

This AONB Report forms part of a suite of documents supporting the planning application for this development proposal.

### 1.3. Planning Context

The Site was identified as a Major Developed Site (MDS) in the Green Belt in the Sevenoaks District Council Core Strategy (Adopted 2011) and as a Major Developed Employment Site (MDES) for redevelopment in the Allocations and Development Management Plan (ADMP) (Adopted in February 2015), which contains proposals for the development of key sites and detailed development management policies.

Policy EMP3 - Redevelopment of Fort Halstead sets out the development principles for the Site, which includes a mix of employment and residential uses, and expects proposals to make a positive contribution to the achievement of the aims and objectives of the Kent Downs AONB.

As set out above, the Site already has planning permission (Application Reference 15/00628/OUT) for a mix of employment and residential development with up to 450 dwellings.

SDC have an emerging Sevenoaks Local Plan (2015-2035), which is currently the subject of a legal challenge following the Inspector's conclusions that the Plan could not be found sound in respect of Duty to Cooperate. It is noted that Fort Halstead is identified as a proposed allocation, with capacity for additional residential dwellings, over and above the 450 already allocated. For the purpose of his submission, the draft policies are afforded limited weight.

Further details are set out in Section 3.0: Planning Policy Context, and reference should be made to the Planning Statement which accompanies the planning application.

### 1.4. Site Context

The Site is located in Kent, approximately 5km to the north-west of the town centre of Sevenoaks and approximately 8km to the south-east of the town centre of Orpington. The Site falls entirely within the administrative area of Sevenoaks District Council (SDC).

The Site is in close proximity to several major transport routes, including the M25 motorway; its junction with the M26; the A21 (T) road leading south to Sevenoaks; and the London-Ashford railway line.

The Site was originally developed as a Ministry of Defence (MoD) research establishment in the 1940's and is still currently occupied by defence related industries. It is currently home to Defence Science and Technology Laboratory (DSTL), which is part of the Ministry of Defence, and QinetiQ, a private defence technology company.

The companies operate out of a range of office, laboratory and storage type buildings which are scattered throughout the Site. They are typically low-rise buildings of 1 – 3 storeys in height (up to around 12m Above Ground Level (AGL)) but with relatively large footprints. There are also a number of taller building within the Site. These comprise:

- Building N2 - approximately 22m Above Ground Level (AGL)
- Building S2 – the boiler house chimneys are approximately 23m AGL
- Building A28 – the organ pipe chimneys are approximately 13m AGL
- Buildings S4, S5 and A10 – all around 12– 15m AGL

A number of buildings within the Site have previously been demolished, leaving large areas of hard standing. The buildings are interspersed with internal roads; large areas for parking / access; smaller storage buildings and bunkers; and areas of amenity grassland and mature trees. Woodland is a key characteristic of the Site, surrounding the existing built-up area and providing enclosure.

### 1.5. Consultation with the AONB Unit

Given the location of the Site within the AONB, the Kent Downs AONB Unit has been consulted from an early stage in order to discuss the emerging design proposals.

Key dates include:

- **30 May 2012** – Meeting between Alex Harwood and John Murdoch (landscape architects appointed by the previous site owners) and Jenny Bate (Kent Downs AONB / Planning Officer) to discuss the principle of development at Fort Halstead.
- **5 September 2012** – Meeting between Stephen Roberts and Alison Tero (CBRE / project planning consultant), Nick Johannsen (Kent Downs AONB / Director) and Jenny Bate to provide an update on the emerging development proposals.
- **18 April 2013**- Meeting between Robert Tregay (LDA Design), Nick Johannsen and Jenny Bate to discuss the proposed mix of residential and employment uses.
- **18 September 2013** – Meeting (with the above participants) to present the illustrative masterplan and discuss emerging technical studies.
- **20 December 2013** – Issue by LDA Design of technical information requested by the AONB Unit, including Transport Assessment, Ecological Management Plan, and Lighting Strategy.
- **August 2014** – Issue of the EIA Scoping Report to SDC which included details of the approach to the LVIA and likely impacts.
- **September 2014** – Consultation with the AONB Unit on the scope of the LVIA. The AONB Unit received a copy of the EIA Scoping Report and aspects of the approach / methodology were discussed directly between Paul Lishman (LDA Design) and Jenny Bate. This included the identification of additional viewpoints.
- **18 September 2014** – Meeting between Lesley Westphal and Alan Dyer (SDC), Nick Johannsen and Jenny Bate, Robert Tregay and Paul Lishman, and Rebecca Maxwell (CBRE) to discuss the latest masterplan proposals.
- **November 2014** – Consultation and agreement with SDC on the extent of the LVIA Study Area and scope of the cumulative assessment.
- **4 December 2014** – Meeting between SDC, CBRE, LDA and JTP (project masterplanners) to discuss latest masterplan proposals, including draft parameter plans, draft Design and Access Statement (DAS) and illustrative masterplan.
- **27 November 2018** – Meeting between CBRE, LDA and Katie Miller (Kent Downs AONB / Planning Manager) to provide an overview of the latest development proposals, including illustrative masterplan and development parameters.

- **10 January 2019** – Meeting between Alison Tero, Phoebe Juggins (CBRE) and Katie Miller, including site walk over and attendance at the public exhibition.

### 1.6. Purpose and Structure of the Report

This AONB Report considers the impact of the proposed development on the AONB in terms of its natural beauty and identified special qualities.

The report includes the following information:

- A summary of the statutory duties of AONBs by reference to relevant legislation and guidance, and a description of the natural beauty criteria specific to the Kent Downs AONB. This uses Natural England's designation guidance as its structure and draws on information contained within AONB Management Plan and local landscape character assessments.
- A summary of relevant planning policy context, which provides an understanding of the current condition of the AONB landscape; landscape management guidance; and development control objectives.
- A description of the development proposals, with reference to the iterative mitigation by design process and illustrative masterplan.
- A summary of the relevant technical studies that inform the judgements of potential effects of the project. This includes information on built heritage; ecology and nature conservation; transport and access; noise and vibration; landscape and visual; tree surveys; and lighting.
- An appraisal of the how the statutory duties and natural beauty criteria of the Kent Downs AONB may be affected by the proposed development and what mitigation / control measures are proposed to mitigate any potentially adverse effects.

### 1.7. Methodology

In accordance with current best practice guidance (Guidelines for Landscape and Visual Impact Assessment (GLVIA), 3rd Edition, 2013), the LVIA recognises that the Site falls within a designated landscape and through desk and field study has sought to understand the basis of the designation and why the landscape is of value. This has informed the assessment of impacts on landscape character, and judgements made on impacts of the proposed development on landscape character areas (LCAs) at both the AONB-scale (as defined by the Kent Downs AONB Landscape Design Handbook) and local-scale (as defined by Sevenoaks District Landscape Character Assessment).

However, in order to fully understand the impact of the proposed development on the Kent Downs AONB in terms of its natural beauty and special qualities, this report establishes the 'degree of change' for each of the identified statutory duties / natural beauty criteria of the Kent Downs AONB that may be potentially affected by the scheme.

It is rated on the following scale, which is derived from best practice Environmental Impact Assessment (EIA)/LVIA guidance and professional experience:

| Degree of Change | Definition |
|---|---|
| High | A major change in the natural beauty and / or special qualities of the AONB |
| Moderate | A notable change in the natural beauty and / or special qualities of the AONB |
| Low | A minor change in the natural beauty and / or special qualities of the AONB |
| Negligible | A nominal change in the natural beauty and / or special qualities of the AONB, approximating the existing situation |
| No change | No change to the natural beauty and / or special qualities of the AONB |

It should be noted that the degree of change can be either beneficial or adverse.

The degree of change is measured against the current baseline environment i.e. the existing research establishment. In accordance with the LVIA approach / methodology, the degree of change is also measured against the future baseline environment, assuming the permitted development is delivered in accordance with the planning permission.

The degree of change is stated for the overall AONB (i.e. the entire Kent Downs); the 'Wider Survey Area', which falls within the Applicant's ownership and which would be subject to landscape and ecological enhancements but would not contain any new built form; and the 'Site', within which the proposed development would occur.

## 2.0 Statutory Duties of AONBs

### 2.1. Natural Beauty

An Area of Outstanding Natural Beauty (AONB) is an area of high scenic quality which has statutory protection in order to conserve and enhance natural beauty.

AONBs are designated under the provisions of the 1949 National Parks and Access to the Countryside Act, and subsequent legislation has introduced new measures to strengthen their protection.

In clarifying what natural beauty covers, Section 114(2) of the National Parks and Access to the Countryside Act 1949 states that *"references in this Act to the preservation of the natural beauty of an area shall be construed as including references to the preservation of the characteristic natural features, flora and fauna thereof."*

The Countryside and Rights of Way (CRoW) Act 2000 generally reinforce the provisions of the 1949 Act with regard to AONBs. The relevant sections of the CRoW Act are:

- Section 82 – sets out the primary purpose of designating an AONB to conserve and enhance natural beauty.
- Section 84 – states the powers that local planning authorities have to take action to achieve conservation and enhancement.
- Section 85 - requires all public bodies and relevant authorities to demonstrate they have taken account of the purposes of the AONB in their decision making.
- Section 89 – refers to the production of AONB management plans.

With regard to the Kent Downs AONB, the first management plan was published in April 2004 and the first revision management plan (2009- 2014) was published in April 2009. More recently the second revision management plan (2014 – 2019) was published in April 2014.

The Natural Environment and Rural Communities (NERC) Act 2006 updates the definition to include the cultural dimension of the landscape. It states (in Section 99 - under the heading 'Natural Beauty in the Countryside') that:

*"The fact that an area in England or Wales consists of or includes—*

*(a) land used for agriculture or woodlands,*

*(b) land used as a park, or*

*(c) any other area whose flora, fauna or physiographical features are partly the product of human intervention in the landscape,*

*does not prevent it from being treated, for the purposes of any enactment (whenever passed), as being an area of natural beauty (or of outstanding natural beauty)."*

The implication of the Natural Environment and Rural Communities Act 2006 is that natural beauty includes natural features (flora, fauna and geological and physiographical features) and features of the shaped by human cultural workings and interventions (fields, woodlands, parkland etc.).

This is confirmed in Natural England's 'Guidance for assessing landscapes for designation as National Park or Area of Outstanding Natural Beauty in England' (March 2011) which states that:

*"It is Natural England's view that fauna and flora (i.e. wildlife), geological and physiographical features and cultural heritage can contribute to the natural beauty of all landscapes and that any assessment of natural beauty must take these factors into consideration, whether in relation to a National Park or an AONB designation. For example, the presence of particular wildlife or cultural heritage features can make an appreciable contribution to an area's sense of place and thereby heighten the perception of natural beauty. There is now express statutory clarification that wildlife and cultural heritage may be taken into account in assessing natural beauty for National Park designations (s.59(1)) of NERC)".*

It goes on to state that Natural England has developed a list of factors that contribute to natural beauty, and it provides a practical framework for an evidence base which assists in making judgements about natural beauty in a rigorous and transparent way. The 'factors related to natural beauty' are set out in full below:

**Table 1: Natural Beauty Framework (Guidance for assessing landscapes for designation as National Park or Area of Outstanding Natural Beauty in England, 2011)**

| |
|---|
| **Landscape Quality**<br>This is a measure of the physical state or condition of the landscape. |
| **Scenic Quality**<br>The extent to which the landscape appeals to the senses (primarily, but not only, the visual senses). |
| **Relative Wildness**<br>The degree to which relatively wild character can be perceived in the landscape makes a particular contribution to sense of place. |
| **Relative Tranquillity**<br>The degree to which relative tranquillity can be perceived in the landscape. |
| **Natural Heritage Features**<br>The influence of natural heritage on the perception of the natural beauty of the area. Natural heritage includes flora, fauna, geological and physiographical features |
| **Cultural Heritage Features**<br>The influence of cultural heritage on the perception of natural beauty of the area and the degree to which associations with particular people, artists, writers or events in history contribute to such perception. |

## 2.2. Other Statutory Functions

In addition to conserving and enhancing natural beauty, the CRoW Act 2000 identifies secondary functions of AONB's.

Section 86 of the CRoW Act empowers the Secretary of State for Environment, Food and Rural Affairs to make Establishment Orders setting up Conservation Boards for individual AONBs following consultation with the Countryside Agency (now Natural England) and all affected local authorities.

Section 87 of the CRoW Act states that AONB Conservation Boards have a duty to *".....increase understanding and enjoyment by the public of the special qualities of the AONB"* and that Conservation Boards must also *".....seek to foster the economic and social well-being of local communities within the area of outstanding natural beauty"*.

Although the Kent Downs does not have a Conservation Board (only two Conservation Boards currently exist in England, for the Cotswolds and The Chilterns AONBs), this report also considers the likely effect of the proposed development on understanding and enjoyment of the AONB and the economic and social well-being of local communities within the AONB.

## 2.3. Natural Beauty Criteria of the Kent Downs AONB

### 2.3.1. Introduction

In order to assess the potential effects of the proposed development on the AONB it is necessary to determine the natural beauty criteria that are specific to the Kent Downs AONB.

The following documents have been used in order to describe the natural beauty criteria:

- North Downs National Character Area (National Character Area Profile 119)
- The Landscape Character Assessment of Kent (2003)
- Sevenoaks Countryside Assessment (2017)
- Kent Downs AONB Management Plan (2014)
- Kent Downs AONB Landscape Design Handbook

Reference is also made to 'tranquillity mapping' and 'intrusion mapping' prepared by CPRE to identify those areas that remain unaffected by development and therefore may be particularly sensitive to development in the future.

The natural beauty criteria are listed below, structured in accordance with the Natural England framework.

It should be noted that in their review and response to a draft version of the AONB Report associated with the original planning application (February 2014), the AONB Unit did not suggest any changes to LDA Design's review of key characteristics, with the exception of the description of dark night skies, as described under 'relative tranquillity'. This is in reference to Policy SD6 and SD7 of the 2014 Management Plan which seeks to *"....retain and improve tranquillity, including the experience of dark skies at night"*.

It is acknowledged that 'dark skies' are an aspiration of the AONB Unit, and as set out later in this report, careful consideration has been given to proposed lighting and the desire to improve current lighting conditions at the Site. However, the Site is already lit at night and, due to its location near to large settlement and main transport routes, is influenced by lighting at the North Downs Business Park and quarry; street lighting along A224 Polhill and the M25; and general light glow from the Sevenoaks urban area. It is therefore concluded that the Site is not within an area of 'dark skies'.

The AONB Unit also have reviewed the original AONB Report as part of their consideration of the permitted planning application, and a copy of the original AONB Report was discussed at the meeting on the November 2018. No additional comments or review of key characteristics was made at this stage.

Minor updates to the description of 'landscape quality' and 'cultural heritage features' – as set out below – have been made to reflect increasing presence of settlement in the western extents of the AONB; and the significance of the Fort Halstead as a historic military features within the AONB.

2.3.2. **Landscape Quality**

The Kent Downs has a dramatic and diverse topography, creating a unique landscape pattern. These features comprise scarps of chalk and greensand; expansive open plateaux; hidden dry valleys; steep-sided river valleys; and dramatic white cliffs and foreshore.

Woodland is a key feature of the Kent Downs and frames the upper slopes and plateaux tops. Over half of the woodland sites are ancient. Semi-natural chalk grassland is also a key feature of the AONB.

Settlement is also a key feature of the Kent Downs, and villages are generally framed by surrounding woodland. Larger settlements are typically found in the western extents of the AONB, and includes the towns of Westerham and Wrotham.

Villages, hamlets and farms are interconnected by a network of rural roads, lanes and droveways. These are typically enclosed by high hedges and mature trees.

The AONB Management Plan notes that key landscape features in some areas have been lost or eroded through intensive land management, development or neglect. The AONB Management Plan also states that there is considerable demand for access and recreation in the Kent Downs, and that this needs to be provided in a way that does not degrade landscape quality.

2.3.3. **Scenic Quality**

The Kent Downs supports mixed farming practices where arable crop production co-exists with livestock grazing and horticulture. This creates a variety of seasonal colours and textures, and provides contrast with areas of permanent grassland.

The AONB has an overall sense of enclosure due to the wooded character, however, long-distance panoramas across the landscape are offered from the scarp, cliffs and plateaux areas. In contrast the dip slope dry valleys and river valleys provide more intimate and enclosed vistas.

Scattered villages, hamlets and farms create a distinctive sense of place. The diverse range of local materials used, which includes flint, chalk, ragstone, timber and tile, contributes to the character and texture of the countryside.

The AONB Management Plan notes that there is degradation to the scenic quality of the AONB in certain locations through inappropriate development. This also can also be detrimental to views in and out of the AONB.

2.3.4. **Relative Wildness**

Relative wildness is not described as a key characteristic in the AONB Management Plan nor in the landscape character assessment and is not considered further in this report.

2.3.5. **Relative Tranquillity**

The landform of the Kent Downs has confined the main transport links to its edges and the river valleys, and much of the AONB provides a large area of relatively tranquil and remote countryside.

Extensive woodland and the pattern of ridges and valleys further accentuates the sense of relative remoteness and isolation in certain locations.

'Dark skies' are considered to be a valued feature of the Kent Downs. The AONB Management Plan notes that dark skies are increasingly difficult to enjoy in the Kent Downs because of increasingly ubiquitous lighting columns and floodlighting, and seeks to improve the experience of dark skies at night.

The relative tranquillity reduces towards the periphery of the AONB boundary, due to the presence of large towns and transport links along its boundary, and the AONB Management Plan specifically identifies the impact of traffic and development on the appreciation of the Kent Downs.

'Tranquillity mapping' and 'intrusion mapping' prepared by CPRE also highlights the impacts of development on the relative tranquillity of the AONB. While the eastern extents of the AONB – between Maidstone / Gillingham and Dover / Folkstone – are considered to be relatively undisturbed and tranquil, the western extents of the AONB – between Maidstone and Sevenoaks – are less tranquil and already disturbed by noise and visual intrusion.

2.3.6. **Natural Heritage Features**

The Kent Downs has a rich mosaic of habitats, plant and animal communities. These include semi-natural chalk grassland; neutral grassland; ancient semi-natural woodland; chalk cliffs, foreshore and sea platform; chalk rivers and wet pasture; and networks of linear features of species-rich hedgerows, flower-rich field margins and road verges.

The Kent Downs supports populations of some of the country's rarest chalk species. Although this habitat is one of the most valued features of the Kent Downs, the AONB Management Plan highlights that it has seen substantial erosion through modern farming practices and the remaining extent of chalk grassland amounts to less than 2% of the total land area of the AONB.

The AONB Management Plan goes on to say that the sensitive management and conservation of chalk grassland is essential to the survival of the AONB's important biodiversity heritage and landscape quality.

The AONB management plan also identifies the potential deterioration of chalk grassland due to inappropriate or lack of management. The lack of grazing livestock in particular is identified as a threat to areas of semi-natural grassland, especially those sites that are small or inaccessible.

2.3.7. **Cultural Heritage Features**

The Kent Downs has a strong cultural inheritance, with a range of heritage assets scattered throughout the landscape. These features comprise Bronze Age barrows, Iron Age hill-forts, Roman villas and towns, medieval villages, and post-medieval stately homes and gardens.

Fort Halstead in particular is a key heritage feature, being one of a series of 'mobilisations centres' constructed in the 1890's as part of the London Defense Scheme.

Fields of varying shapes and sizes and ancient wood-banks and hedges, set within networks of droveways and sunken lanes also contribute to the rich historic mosaic.

The landscape of the Kent Downs has been very influential on many people, places and events of cultural importance. These include the ancient Pilgrim's Way from Winchester to Canterbury, paintings by Samuel Palmer in the Darent Valley and the writing and paintings of Winston Churchill at his home in Chartwell.

The biggest threats to the Kent Downs's historic and cultural heritage are from a general lack of awareness and understanding of the importance of these many sites and features. The AONB Management Plan states that there is a need to encourage greater opportunities for information and interpretation of the area's rich cultural heritage.

## 3.0 Planning Policy and Guidance

The planning policies and guidance document that are of most relevance to the AONB context are summarised below. Reference should also be made to the Planning Statement which accompanies the planning application and provides details of how the development proposals have been informed by specific planning policies.

### 3.1. National Policy and Guidance

#### 3.1.1. National Planning Policy Framework, 2019

The National Planning Policy Framework (NPPF) makes clear that the purpose of planning is to help achieve sustainable development (Section 2), and that design (Section 12) and effects on the natural environment (Section 15) are important components of this.

Paragraph 11 sets out that plans and decisions should apply a presumption in favour of sustainable development unless *"the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area"* or *"any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole".*

'Areas or assets of particular importance' are referred to a footnote 6 and include an Area of Outstanding Natural Beauty (AONB). The list also includes important and/or irreplaceable habitats, designated heritage assets, and other land-use designations (Green Belt, Local Green Space).

Section 11 sets out considerations in 'Making effective use of land' and notes in paragraph 122 that in achieving appropriate densities, planning policies and decisions should consider *"the desirability of maintaining an area's prevailing character and setting (including residential gardens), or of promoting regeneration and change".* Furthermore paragraph 123 states that in locations where there is a shortage of land to meet housing need *"it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site".*

Section 12 deals with 'Achieving well-designed places' and states that planning policies and decisions seeks to ensure that developments:

*a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;*

*b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;*

*c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);*

*d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;*

*e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and*

*f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience".*

Section 15 relates 'Conserving and enhancing the natural environment' and covers both ecological and landscape matters. Paragraph 170 requires that planning decisions should contribute to enhancing the local environment by:

*a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*

*b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*

*c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*

*d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

*e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

*f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

In respect of valued landscapes, paragraph 171 notes that planning policy should *"distinguish between the hierarchy of international, national and locally designated sites"* and *"allocate land with the least environmental or amenity value".*

In relation to AONB's paragraph 172 requires that:

*"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:*

*a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;*

*b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and*

*c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.*

Footnote 55 notes that *"whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined".*

Paragraph 180 requires decisions to ensure that *"new development is appropriate for its location"* including by limiting the impact of light pollution on local amenity and *"intrinsically dark landscapes".*

3.1.2. **Natural England Standing Advice on Protected Species and Ancient Woodland, 2014 (Updated 2018)**

Whilst not planning policy, Natural England's Standing Advice on Protected Species and Ancient Woodland is a material consideration for the purposes of this planning application The Standing Advice states that Ancient Woodland and veteran trees is an irreplaceable habitat. Any development proposals should identify ways to avoid negative effects on ancient woodland or veteran trees, and buffer zones (of at least 15 meters) are an established mechanism to avoid root damage. Where possible, a buffer zone should contribute to wider ecological networks / be part of the green infrastructure of the area, and should consist of semi-natural habitats such as woodland, scrub, grassland, heathland and wetland planting.

## 3.2. Local Policy and Guidance

Local planning policy is contained within the following documents:

- Sevenoaks District Council Adopted Core Strategy Development Plan (2011)
- Sevenoaks District Council Adopted Allocations and Development Management Plan (ADMP) (2015)

Emerging planning policy is also contained within the Sevenoaks District Council Proposed Submission Version of the Local Plan (2018), although the Local Plan has been found unsound by the Planning Inspectorate so currently carries very limited weight.

3.2.1. **Core Strategy Development Plan**

The Core Strategy was adopted by SDC in 2011 and provides overarching development principles for the District. The application site is identified as a Major Developed Site (MDS) within the Green Belt within this document.

Policy LO1 concerns distribution of development and notes that *"development will only take place where it is compatible with policies for protecting the Green Belt and the High Weald and Kent Downs Area of Outstanding Natural Beauty, where relevant".*

Policy LO8 relates to the countryside and rural economy and seeks to protect the *"distinctive features that contribute to the special character of the landscape".* The policy notes the distinctive character of the Kent Downs AONB will be conserved and enhanced.

Design of new development is addressed in Policy SP1 which notes "*all new development should respond to the distinctive local character of the area in which it is situated."* The policy notes

that account should be made to adopted design guidance such as local character area assessments and AONB management plans.

Policy SP10 relates to Green Infrastructure, Open Space, Sport and Recreation and states:

*"A Green Infrastructure Network will be developed of accessible multi-functional green space, primarily based on maintaining and linking existing areas of open space ... provision should include arrangements for maintenance of the open space. For the purposes of this policy, open space includes amenity open space, parks and formal gardens, natural and semi natural open space, children's play areas, outdoor sports facilities, churchyards and allotments."*

3.2.2. **Allocations and Development Management Plan (ADMP), 2015**

The ADMP was formally adopted in February 2015 and provides specific site allocations and policies.

Policy EN1 relates to design principles and seeks to encourage development of appropriate height, scale, materials while respecting the topography and character of the surrounding area and sensitively incorporating natural features such as trees and hedges.

Policy EN5 relates to landscape and states:

*"The Kent Downs and High Weald Areas of Outstanding Natural Beauty and their settings will be given the highest status of protection in relation to landscape and scenic beauty. Proposals within the AONB will be permitted where the form, scale, materials and design would conserve and enhance the character of the landscape and have regard to the relevant Management Plan and associated guidance.*

*Proposals that affect the landscape throughout the District will be permitted where they would:*

*a) conserve the character of the landscape, including areas of tranquillity, and*

*b) where feasible help secure enhancements in accordance with landscape actions in accordance with the Sevenoaks Countryside Assessment SPD."*

Policy EMP3 designates the Site as a Major Developed Employment Site (MDES 1) within the Green Belt. The accompanying text notes at 4.16 that:

*"The Green Belt status of the site constrains the scale of development that can acceptably be accommodated, while its AONB status provides a further constraint on future development. However, there is substantial development on the site at present ... and it remains an important employment site subject to Core Strategy Policy SP8 on the protection and regeneration of such sites."*

Policy EMP3 sets out overarching principles for the redevelopment of Fort Halstead and allocates the Site for up to 450 dwellings as part of a mixed-use scheme. The policy states that *"redevelopment should have no greater impact on the openness of the Green Belt and the height of buildings must take into account the need to conserve and enhance the natural beauty of the countryside in this location."* Moreover, redevelopment is expected to make a positive contribution to the achievement of the aims and objectives of the Kent Downs AONB.

Policy EN6 - Outdoor Lighting, seeks to minimise impact on the night sky, ensure any impacts on wildlife are adequately mitigated; and where proposal affect an AONB, lighting can be demonstrated to be essential for safety and security reasons.

Policy GI1 - Green Infrastructure and New Development, seeks green infrastructure to provide connectivity for biodiversity with the existing features of the green infrastructure network and to provide habitat creation and restoration.

### 3.2.3. Proposed Submission Version of the Local Plan, 2018

The Submission Version of the Sevenoaks Local Plan (2015 – 2035) is currently subject to a High Court challenge, having been found unsound by the Planning Inspector.

It is noted that Fort Halstead is identified as a proposed allocation, with capacity for an additional 300 residential dwellings, over and above the 450 already allocated. The allocation states that any additional development must be of high-quality design; protect the ancient woodland; and conserve and enhance the AONB.

Draft Policy LA1 seeks to protect and enhance the character of the landscape. It states that the AONB will be given the highest level of protection in relation to landscape and scenic beauty, and that development proposals within the AONB and their settings must be of an appropriate layout, form, scale and appearance. Potential enhancements within the AONB include:

- *"Improvement of scenic beauty e.g. the removal or improvement of currently detrimental buildings or features; or by obscuring or distracting from negative features such as pylons, substations and major roads.*
- *Restoring historic features and replacing existing materials with more appropriate and local materials*
- *Supporting the local economy e.g. using local materials, including features reliant on local materials such as wood for biomass boilers, supporting new rural business etc*
- *Restoring historic settlement patterns, historic field patterns or historic routeways*
- *Allowing new appropriate public access*
- *Restoration of native planting and natural features including trees, hedgerows, meadows and grassland.*
- *Improving tranquillity and reducing the existing impact of noise and lighting".*

Draft Policy WN1 primarily relates to wildlife and nature conservation issues, but supports the creation of new blue green infrastructure. It states that proposals for new development must retain the majority of existing features where possible (i.e. trees, hedgerows and ponds) and create new landscape and habitat features to ensure a net gain in biodiversity. Any new planting must be predominantly compromised of native species suitable to the local area. In addition, the policy states that veteran tree and ancient woodland should be incorporated into development proposals and with a suitable buffer between development and trees/woodland.

Draft Policy EN1 relates to design principles and states that proposals must exhibit high quality design and respond to local character. This includes respecting the topography of a site; sensitively incorporating natural features such as trees, hedges and ponds; and creating new blue-green infrastructure and open space.

Draft Policy EN1 also covers lighting, and seeks to limit the impact on the night sky. Where proposals affect AONBs or open countryside, lighting must be essential for safety or security reasons.

Draft Policy H5 relates to housing density and states that new developments will be expected to make the most efficient use of land and will be expected to be delivered at higher densities.

Draft Policy OS1 relates to open space, sport and leisure. It states that open spaces should be incorporated into new developments alongside onsite blue green infrastructure and connections to the existing PRoW network. It continues that all open space should include arrangements for long term maintenance and management. It also states that proposals to improve the quality of / access to the District's open spaces, PRoW network and cycling routes will be supported.

### 3.2.4. **Sevenoaks Countryside Assessment, 2017**

SDC has produced a district wide landscape character assessment, which defines and describes the different types and character areas of the landscape in the District and evaluates each area in terms of the condition of the landscape.

The Site falls almost entirely within the Knockholt and Halstead Wooded Downs. Key characteristics include (of most relevance to the Site context) include:

- *"Generally gently undulating, but with some steep valley slopes.*
- *Large areas of woodland, including ancient coppice woods. Mature in-field oaks are frequent. Fields are bounded by hedgerows with mature beech trees.*
- *Suburban development including golf courses, glass houses and distribution depots.*
- *Narrow rural lanes contrast with the M25 corridor and other main roads which introduce noise and movement.*
- *Mostly enclosed due to the extensive tree cover and high hedgerows".*

The condition of the landscape is recorded as:

*"Intrusive new residential development, extensive horsiculture, urban recreation, and hedgerow loss have adversely affected the condition of this area. Nevertheless, historic field patterns, areas of woodland and rough grassland provide a sense of intactness and ecological connectivity".*

Key sensitivities / attributes (of most relevance to the Site context) include:

- *Distinctive areas of unimproved grassland and woodland, including ancient woodland, parkland trees, mature in-field and hedgerow trees. Many are locally designated for wildlife value including Pascalls Wood.*
- *Valued indicators of cultural heritage including estate woodland, historic village cores such as Halstead (which is designated as a Conservation Area) and other features including the Fort Halstead Scheduled Monument.*
- *Narrow winding lanes enclosed by high hedges and mature trees, creating a strong sense of enclosure.*

- *Sense of enclosure and setting afforded by the woodland, with occasional glimpses out over the lower valley from higher ground around Lockholt/Halstead and the North Downs Way National Trail".*

Landscape management guidelines (of most relevance to the Site context) include:

- *"Protect and enhance valued semi-natural habitats including ancient woodland, unimproved chalk grassland and scrub. Promote ongoing management of coppice woodland.*
- *Protect the valued heritage features within the landscape including the historic village cores and Fort Halstead Scheduled Monument and ensure that their setting is respected.*
- *Conserve the character of the remaining narrow rural lanes and ensure traffic improvements do not degrade their distinctive enclosed character.*
- *Retain the important views across the landscape from higher ground including the North Downs Way National Trail".*

The southern part of the Site, which includes the area of chalk grassland on the scarp slope, falls within the Chevening Scarp LCA. Key characteristics include (of most relevance to the Site context) include:

- *"Steep wooded scarp supporting a mosaic of woodland and scrub, pasture and pockets of chalk grassland.*
- *Steep enclosed lanes with no verges and high hedged banks climb up the scarp slopes.*
- *Areas of native broadleaf woodland, irregular pastures and chalk grassland.*
- *Long-distance panoramic views across the Darent Valley from the scarp.*
- *Working and redundant chalk quarries".*

The condition of the landscape is recorded as:

*"The landscape has an intact and coherent pattern of pastures, chalk grassland and frequent blocks of ancient woodland. There are relatively few visual detractors although unsympathetic farm buildings and the presence of the M25 in the valley below are detractors. The decline of the heritage shaws and hedgerows (sometimes replaced with post and wire fencing) has also had an adverse effect on the condition of the landscape".*

Key sensitivities / attributes (of most relevance to the Site context) include:

- *"The distinctive landform of the steep scarp slopes which is largely free of development.*
- *Areas of native broad-leaved woodland, particularly remnant areas of ancient woodland on steeper slopes as well as gills and copses on lower slopes that provide visual interest and valuable habitats.*
- *Remnant pockets of chalk grassland and scrub that provide valuable habitats supporting rare species.*
- *The long views and sense of tranquillity on the elevated slopes which provides an escape from more developed areas in the valley below."*

Landscape management guidelines (of most relevance to the Site context) include:

- *"Conserve the dominant features of broad-leaf woodland and pasture. Reinforce the diversity of species in the woodlands and encourage active management.*
- *Retain, manage, restore and link up areas of unimproved chalk grassland to maximise their conservation value.*
- *Maintain good access to the countryside, including the ancient trackways and consider providing additional opportunities for enjoyment of the landscape which does not conflict with nature conservation objectives.*
- *Keep scarp horizons clear to conserve the long views from elevated areas and maintain public access to these.*

3.2.5. **Supplementary Planning Document: Kent Design Guide, 2006**

The Kent Design Guide is adopted by SDC as SPD and champions good design within Kent, setting out guidance and case studies as to how this may be achieved.

In relation to the landscape, the guide states on page 48 that *".....landscape is a combination of nature and culture; it is formed by topography, trees, hedges, paths, roads, structures and materials. These elements determine the landscape character of an area. A well-designed landscape will provide:*

- *An attractive setting for a development, its users and occupiers;*
- *A positive environment of wider economic benefit;*
- *A sense of place with a clear identity;*
- *A sense of space and enclosure;*
- *Spatial benefits including integrating the visual impact of the built environment with nature;*
- *Environmental benefits including micro-climate creation, pollution attenuation and the reduction of water and energy consumption;*
- *Noise and visual screening, and*
- *Retention of cultural associations with the natural environment."*

3.2.6. **Sevenoaks District Council Green Infrastructure Topic Paper, 2013**

The Green Infrastructure Topic Paper, part of the evidence base for the LDF, sets out the existing Green Infrastructure (GI) network in the District and also identifies priorities and projects to deliver future GI enhancements. 'Landscape and Countryside' is listed as a key priority with a number of projects identified.

The Site is within the Central North Downs Biodiversity Opportunity Areas (BOA) which identifies priority areas for the restoration and creation of Biodiversity Action Plan habitats and also contains ancient woodland, recognised for its biodiversity value. Targets for the Central North Downs BOA include:

*"Restore, extend and reconnect chalk grassland. By 2015, restore at least 10ha of chalk grassland in the Darenth Valley area, and pursue opportunities for:*

- *Enhance or reinstate woodland management, and restore plantations on ancient woodland sites to native woodland; extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement.*
- *Restore natural floodplain habitats, and restore / create flower-rich neutral grassland on suitable soils. Pursue opportunities for creation of species-rich neutral grassland where this would contribute to the county-wide target of creating 50ha on new lowland meadow in blocks of at least 2ha by 2015.*
- *Achieve a quantifiable improvement in habitat quality of the River Darent, as judged by appropriate EA quality indicators.*
- *Implement conservation grazing management on grassland and wood pasture habitats.*
- *Encourage appropriate physical and intellectual access to the landscape and wildlife of the area.*"

## 3.3. AONB Policy and Guidance

### 3.3.1. Kent Downs AONB Management Plan 2014 - 2019

The Kent Downs AONB Management Plan includes a wealth of information on the characteristics and qualities of the Kent Downs AONB. Those policies that are of most relevance to the site context and proposed development are summarised in Table 2 below.

In section dealing with 'sustainable development' the AONB Management Plan highlights the importance of the scale and design of new development, however, no guidance is given on the scale (or density) of development that would be appropriated in the AONB. Indeed, reference is made to the NPPF which advocates good design and opportunities for improving the character and quality of an area.

The AONB Management Plan goes to acknowledge that growth within and around the AONB can challenge the qualities of the AONB itself, and mitigation may be required where schemes are considered to have an adverse effect. Examples of appropriate mitigation measures are set out, which include:

- Affordable housing to sustain local communities
- Woodland management
- Improved recreational access

**Table 2: AONB Management Plan Policies**

| Policy Ref | Policy |
|---|---|
| **Sustainable development** | |
| SD1 | The need to conserve and enhance the natural beauty of the Kent Downs AONB is recognised as the primary purpose of the designation and given the highest level of protection within statutory and other appropriate planning and development strategies and development control decisions. |
| SD2 | The local character, qualities and distinctiveness of the Kent Downs AONB will be conserved and enhanced in the design, scale, setting and materials of new development, redevelopment and infrastructure and will be pursued through the application of appropriate design guidance and position statements which are adopted as components of the AONB Management Plan. |
| SD3 | New development or changes to land use will be opposed where they disregard or run counter to the primary purpose of the Kent Downs AONB. |
| SD7 | To retain and improve tranquillity, including the experience of dark skies at night, careful design and the use of new technologies should be used. New developments and highways infrastructure which negatively impact on the local tranquillity of the Kent Downs AONB will be opposed unless they can be satisfactorily mitigated. |
| SD8 | Proposals which negatively impact on the distinctive landform, landscape character, special characteristics and qualities, the setting and views to and from the AONB will be opposed unless they can be satisfactorily mitigated. |
| SD9 | The particular historic and locally distinctive character of rural settlements and buildings of the Kent Downs AONB will be maintained and strengthened. The use of locally-derived materials for restoration and conversion work will be encouraged. New developments will be expected to apply appropriate design guidance and to be complementary to local character in form, setting, scale, contribution to settlement pattern and choice of materials. This will apply to all development, including road design (pursued through the adoption and implementation of the AONB Rural Streets and Lanes Design Handbook), affordable housing, development on farm holdings (pursued through the farmstead design guidance), and rights of way signage. |
| **Landform and landscape character** | |
| LLC1 | The protection, conservation and enhancement of special characteristics and qualities, natural beauty and landscape character of the Kent Downs AONB will be supported and pursued. |
| LLC6 | The improved awareness and appreciation of all the special qualities of the AONB landscape and its conservation to people who influence the future of, live, work in or visit the AONB will be pursued. |
| **Biodiversity** | |
| BD1 | The maintenance and enhancement of existing designated sites and priority habitats, their extension and connection, will be pursued through sensitive management, fragmentation reduction and restoration. Creation of new habitats and habitat corridors will be pursued, informed by landscape character, through collaboration to establish functional ecological networks and high quality green infrastructure. |

| Policy Ref | Policy |
|---|---|
| BD2 | Local, regional and national biodiversity targets and spatial priorities for habitats and species distinctive to the Kent Downs will be supported; a Kent Downs AONB response to Biodiversity 2020 targets will be pursued. |
| **Woodland and trees** | |
| WT1 | Threats to the existing extent of woodland and transitional habitats around woodland will be resisted. Extension of both habitat types will be supported where appropriate to landscape character. The loss of ancient woodland will be opposed. |
| WT2 | A strategic approach will be pursued to secure sustainable multipurpose woodland and tree management and planting that conserves and enhances the special qualities and character of the landscape and the resilience of woodlands and trees. |
| WT5 | The restoration and management of woodland open habitats and spaces, such as rides, glades, and wood pasture, for landscape, biodiversity and archaeology conservation purposes will be supported. |
| WT6 | The identification, protection, management and planned replacement and reintroduction of fine specimen and 'veteran' trees will be pursued. |
| WT7 | Activities and developments causing damage to woodlands, such as disease, illegal and harmful recreation, an expanding deer population, poorly managed use for game rearing and development associated with wood lotting, will be addressed by appropriate means. Inappropriate developments subject to planning control will be opposed, other available regulatory mechanisms supported, and positive, strategic management interventions pursued. |
| **Historic and culture heritage** | |
| HCH1 | The protection, conservation and enhancement of the historic character and features of the Kent Downs landscape will be pursued and heritage-led economic activity encouraged. |
| HCH2 | A wider understanding of the cultural, scientific and artistic importance of the Kent Downs landscape and its historic character will be supported in part to inform the interpretation and management of the AONB. |
| HCH4 | Opportunities to develop contemporary artistic, historic, cultural and scientific interpretation and celebration of the landscape and people of the Kent Downs will be pursued. |
| **Geology and natural recourses** | |
| GNR1 | Activities designed to protect, conserve and enhance the important geological exposures of the Kent Downs will be encouraged. |
| **Vibrant communities** | |
| VC1 | Community and business initiatives that improve the recognition, engagement in and conservation of the AONB and encourage community life will be pursued. |
| VC2 | Positive and sustainable links between the AONB (landscape, communities and Partnership) and nearby communities, particularly from excluded groups and from neighbouring deprived areas will be pursued. |

| Policy Ref | Policy |
|---|---|
| VC3 | Initiatives which are in line with existing policies of the Local Planning Authority that increase and improve the supply of affordable housing for (i) those with proven local needs, and (ii) workers whose activities directly contribute to the purposes of the AONB designation, will be supported where it is demonstrated that the proposals are of high quality design, limited quantity and scale and are built to the best current environmental standards. |
| VC4 | The retention and development of local services, facilities and employment opportunities in order to conserve and enhance the natural beauty of the Kent Downs AONB or reduce the need to travel by car and maintain viable rural communities will be supported. |
| VC6 | The development of sustainable visitor and tourism facilities will be pursued where they enhance people's enjoyment and understanding of the AONB without detracting from the special characteristics and qualities. |
| **Access, enjoyment and understanding** | |
| AEU1 | Coordinated information and interpretation for recreation, access, education, and health and well-being across the AONB which is accurate, well presented and appropriate to its setting, readily available in a variety of formats and fosters a greater understanding and respect for the AONB will be pursued. |
| AEU7 | Improvements to the Rights of Way Network to provide and improve countryside access, health and well-being opportunities, including way-marking, signposting and maintenance, new routes and establishment of higher rights which conforms with AONB policies and design guidance, will be supported. |

### 3.3.2. The Kent Downs AONB Landscape Design Handbook

The Kent Downs AONB Landscape Design Handbook identifies 13 individual landscape character areas within the AONB. For each character area, design guidance is provided which seeks to ensure new development makes a positive contribution to the conservation and enhancement of the AONB.

The Site is within LCA1: Darent Valley which occupies a broad sweep of land between Westerham to Farningham west to east and Sevenoaks and the edge of Greater London south to north. Key characteristics include:

- *"Steep, often wooded scarp top and greensand ridge.*
- *Strong hedgerow patterns on valley sides.*
- *River within tree-lined corridor.*
- *Riverside trees and pasture.*
- *Flint and brick and weather boarded buildings.*
- *Much of the floodplain is arable farmland*
- *Motorway."*

The overall design objectives for LCA1: Darent Valley are as follows:

- *"To maintain and improve where necessary the existing hedge network, in particular on the scarp foot and on the northern downland "prairies".*
- *To enhance the river corridor by conserving and extending the variety of tree and grassland habitats.*
- *To curb the general suburbanisation of the countryside due to inappropriate development, introduction of non-native species and use of unsympathetic materials and design.*
- *To protect and enhance unimproved chalk grassland.*
- *Conserve the historic landscape and special character of villages and settlements.*
- *To reduce the impact of major roads in the landscape."*

The design guidance mainly relate to new development as opposed to the redevelopment of existing sites. However, there are a number of generic principles that are of direct relevance to the Development, namely:

- Avoiding the loss of important views.
- Retaining key landscape features, such as hedgerows, trees and woodland.
- Integration of development into the landscape through the use of open space and planting.
- Considering the mass, height and colour of development, including use of materials.
- Considering the need for lighting and the control of light spillage.

The handbook also offers specific guidance on issues such as road improvements, woodland management and chalk grassland management:

- The handbook seeks to ensure that any road improvements respect the character of rural lanes and avoid the introduction of standard materials, lighting, signs and barriers.
- The handbook encourages the management of woodlands through natural regeneration and supplementary planting. Woodland edge habitats are also encouraged to create a gradual transition between woodland and grassland areas.
- The handbook seeks to retain area of chalk grassland and control scrub invasion through an appropriately managed grazing regime.

# 4.0 The Proposed Development

## 4.1. The Proposal

The proposed development will comprise the following elements as described in more detail in the Design and Access Statement (DAS):

- Employment / mixed use land uses, including safeguarded land for a potential Primary School and existing employments uses at QinetQ.
- Residential land uses, allowing for up to 635 residential dwellings.
- A centrally located village centre comprising public square, community facilities, and incorporating retained and enhanced Listed Buildings.
- Retention and enhancement of the Fort as an Historic Interpretation Centre and with other buildings within the Fort used as workshop space.
- Retention and enhancement of existing important landscape / habitats features and creation of new green infrastructure providing public open space, recreational routes, drainage, and biodiversity benefits.
- Some limited vegetation clearance on the southern edge of the Fort to better reveal its heritage significance and allow for long distance views south across the landscape.
- Key open spaces include:
  - Village green at the heart of the proposed development.
  - Green corridors running through the built-up area and acting as a buffer to the Ancient Woodland.
  - Community recreation area within open land to the north-west of the application site, including 'bunker park' (which incorporated some the existing, retained bunkers).
  - Ecology zone within land to the south-west of the application site.

Key changes between the 2015 planning application (450 dwellings) and the May 2020 scheme (635 dwellings) include:

- Overall increase of 185 of new homes, achieved mainly through a combination of higher densities in key locations and inclusion of the 'bunkers' site for residential uses.
- Variations in residential building height (but within existing parameters) with predominantly 2.5 storey residential development; 3 storey residential development for landmark buildings; and a maximum of 4 storey development for the employment area.
- Larger mixed-use village centre, including village square, centred around retained buildings.
- Relocation of some proposed employment uses closer to the village centre, creating new frontage to QinetiQ.
- Relocation / reduction in size of the village green, so that it is more clearly defined and closely associated with the village centre.

- Exclusion of the hotel which was found not to be viable.
- Exclusion of the energy centre / flue zone, with an energy strategy focussing on passive design measures and solar PVs.

It should be noted that in relation to residential and employment building heights, the maximum height parameter of the proposed development is the same as the 2015 planning application i.e. 16m. In addition, as stated above, the proposed development does not include an energy centre / flue, for which a maximum height parameter of 25m was permitted.

### 4.2. Site Fabric

The proposed developed in entirely contained within areas of previously developed land. As such the following existing open spaces / landscape features will be retained and enhanced as part of the development proposals:

- The woodland surrounding the application site, some of which is classified as Ancient Woodland.
- The area of chalk grassland to the south of the application site, on the scarp slope.
- The area of grassland to the west of the application site, along Crow Drive.

A small area of non-Ancient Woodland is indicated within the 'Flood Risk Assessment and Drainage Strategy' as potentially being removed to accommodate drainage features, however, this will be subject to detailed design.

The layout of the scheme has also been designed to ensure the majority of higher value trees are incorporated into areas of green infrastructure and can be retained. Other trees – that fall within the proposed development parcels – also have the potential to be retained, subject to more detailed design proposals.

However, it is inevitable that a number of trees will be lost as a result of proposed development in order to accommodate the development proposals. It is anticipated that overall around 70% of the existing tree stock can be retained; a further 15% of existing tree stock could be retained within development parcels, subject to more detailed design; and around 15% of trees will be removed. Where possible the design of the proposed development has avoided the loss of the most valuable trees, and around 91% of Category A trees have the potential be retained. Further details of tree loss and retention can be found in Section 5.9 of this report and within the Arboricultural Impact Assessment (AIA) which accompanies the planning application.

There will be some reprofiling of the application site in order to create suitable development platform and create drainage features. Levels vary across the application site, with many of the larger buildings spanning changes in level that allow level access at one end but are partially buried at the other. A ground modelling exercise was undertaken aimed at creating suitable development platforms whilst minimising cut and fill / export of material off site; allowing for the retention of trees, particularly at the perimeter of the site; maintaining existing levels along Crow Drive which is an arterial route through the application; and ensuring a buffer to the scheduled monument and existing retained development. Overall it was concluded that retaining features are needed to facilitate raising and lowering of site levels and creating development platforms with gradients of no more than 1 in 20. These

changes are considered to be relatively minor alterations and will be entirely consistent with the existing varied topography of the Site.

There would remain some excess spoil material to be retained within the Site. It is proposed that this will be deposited within the area of open space to the north-east of the Site (north of Crow Road and the Star Hill Road gatehouse). This area is not considered to be sensitive from landscape, ecology or heritage perspective, and due to the relatively large scale of the space, can easily accommodate some minor change in levels. Subject to more detailed design, it is anticipated that the spoil could be evenly distributed across the space or designed to create features within the landscape. This later approach would be particularly suitable given the proximity to the 'bunker park' and the potential to creating viewing platform, with views northwards towards London and potentially southwards towards Sevenoaks.

### 4.3. Design Approach

An understanding of the location and context of the Site within the Kent Downs AONB has been a crucial component of the iterative design process, and the proposed development seeks to deliver a range of enhancements to the 'natural beauty' of the AONB.

While the design has had regard to the character of existing settlements within the AONB, the vision for the proposed development is not to create a 'traditional' AONB village - that mimics existing settlement patterns, building density, and architectural detail –but reflects its historic military development and instead creates a new community that:

- Provides a genuine live-work opportunity, with employment and residential uses side by side, supported by a range of shared community facilities.
- Utilises the existing layout and structure of the Site as far as possible, minimising the need for new infrastructure and engineering works.
- Retains and enhances the valuable natural and cultural assets within and around the Site, including historic structures; mature trees, Ancient Woodland and chalk grassland.
- Opens up a previously private, secured area of the Knockholt and Halstead Wooded Downs, removing sections of the security fence, enhancing existing footpaths / creating new routes; and providing interpretation of important features.
- In line with prevailing policy and guidance, ensure efficient use of land and delivers much needed market and affordable housing in the local area.

The Design and Access Statement (DAS), which accompanies the HPA, sets out overall design approach to the proposed development and describes the type of place that would be created. The DAS has adopted a 'character area' approach in order to identify different neighbourhoods of distinct identity. Each character area has definable characteristics, such as density, height, building typologies, landscape and land use, which would guide future detailed design and Reserved Matters Applications.

LDA Design, as landscape architects and protected landscape specialists, has contributed significantly to the development parameters; Illustrative Masterplan; and detailed design of the Village Centre in order to ensure the statutory requirements of the AONB designation have been fully considered. Interactions between the project masterplanners, LDA Design, ecology consultants and heritage consultants have been particularly important to shaping

the green infrastructure proposals for the Development, ensuring that existing landscape features are retained, protected and enhanced where possible.

The design principles that relate specifically to the AONB context are summarised below:

- Locating development within areas of previously developed land and ensure efficient use of land.
- Careful consideration of building height parameters to ensure that development is not generally visible above the perimeter woodland.
- Ensuring there are no major changes to the topography of the Site.
- Enhancement of retained woodland through appropriate management, including thinning and replanting.
- Protection of all Ancient Woodland, including the creation of new woodland / woodland edge habitats to provide a buffer from built development.
- Creation of new green infrastructure throughout the Site, which would provide new areas of open space, footpath and cycle link, drainage features and ecological habitats.
- Retention and enhancement of individual trees wherever possible and integration into green infrastructure.
- Planting of new individual trees / tree groups within areas of green infrastructure, and ensuring all new woodland, tree and scrub planting is of local provenance.
- Retention of all areas of open grassland to the south and west of the Site, including the more sensitive calcareous grassland along the scarp slope.
- Creation of new areas of species rich grassland within woodland buffers and areas of green infrastructure.
- Retention of all PRoW within the Site and creation of a new footpath / cycle that runs parallel to the existing PRoW SR172, improving links between the Site and Knockholt Pound.
- Retention and enhancement of key heritage features within the Site, including reuse of the historic fort as an interpretation centre.
- Creation of new green infrastructure throughout the Site, including new footpaths and cycle paths.
- Provision of way-finder signs and interpretation information throughout the Site, aiding navigation and providing interpretation of key landscape, ecology and heritage features.
- Partial removal of the perimeter security fence (a new security fence would be built for QinetiQ), improving the character and appearance of the Site.
- Removal of intrusive security lighting and all new lighting designed to minimise light spill.

Specifically in relation to lighting, a lighting strategy has been prepared for the HPA which establishes the principles for the removal of existing and installation of new lighting. All external lighting for the proposed development would be designed to meet the requirements of the ILP guidance, based on category E2 Rural (low district brightness, typical of a small

village). External lighting would be controlled to limit light spill and glow and include the specification of standard LED light sources to improve colour definition and limit upward lighting. The lighting strategy would be developed for the detailed design stage.

### 4.4. Other Mitigation Measures

The mitigation of potentially adverse environmental effects has been addressed from an early stage in the design process.

Additional mitigation measures that should be adopted, beyond those inherent within the design, include:

- Adoption of a Construction Environmental Management Plan (CEMP).
- Implementation of a Landscape and Ecological Management Plan (LEMP).

A CEMP will play an important in ensuring considerate construction activity and that the identified woodland, trees and other landscape / habitat features are protected during the construction phase.

A LEMP is important to ensure the identified landscape / habitat features are appropriately managed, in particular in ensuring the long-term health and robustness of perimeter woodland which provides an important screen. An Outline LEMP is provided as part of the planning application, building on the Framework Ecological Mitigation Strategy (prepared by Middlemarch) which sets out the approach to retention, creation and management of ecology features.

# 5.0 Technical Studies

## 5.1. Introduction

A range of technical impact assessments have been completed to understand the existing baseline conditions of the Site and its surroundings; inform the development concept for the Site; and predict the environmental effects of the proposed development. These are included in the ES (September 2019) and ES Addendum (May 2020).

A number of these assessments are of direct relevance to the consideration of the effect of the Development on the statutory purposes of the AONB. These are:

- Landscape and Visual (ES Volume 2 Chapter 7 & ES Addendum Chapter 5)
- Historic Environment (ES Volume 2 Chapter 8 & ES Addendum Chapter 6)
- Biodiversity (ES Volume 2 Chapter 9 & ES Addendum Chapter 7)
- Transport and Access (ES Volume 2 Chapter 10 & ES Addendum Chapter 8)
- Air Quality (ES Volume 2 Chapter 11 & ES Addendum Chapter 4)
- Noise and Vibration (ES Volume 2 Chapter 12 & ES Addendum Chapter 9)

Other relevant supporting studies include:

- Arboricultural Impact Assessment
- Lighting Assessment Report

Summaries of the above studies are provided below and should be read in conjunction with the corresponding ES Volume / Chapter / Appendix.

## 5.2. Landscape and Visual

The Landscape and Visual chapter, prepared by LDA Design, sets out any changes to landscape character and visual amenity resulting from the proposed development.

The Site, despite its location on the ridge of the Kent Downs escarpment, is not overly apparent within the landscape. The perimeter woodland and vegetation surrounding the Site forms an effective screen to many potential views. From the north and east, views are restricted by vegetation and flatter topography of the dip slope of the escarpment, limiting views to taller elements such as Building N2 and the boiler house chimneys (Building S2). From the south, the scarp face of the escarpment is prominent, with views of the QinetiQ perimeter security fence and buildings X40 and X54, beyond the perimeter vegetation possible although all other buildings / structures within the Site screened from view.

Inevitably, there would be changes to the character and visual resource of the Site itself as a result of the construction activities and these effects are considered to be adverse. However, given the screening properties of perimeter vegetation, impacts would be localised and construction activity would not be intrusive in the surrounding landscape. The removal of buildings currently visible above and beyond the perimeter vegetation and the partial removal of perimeter security fencing is considered beneficial. Any construction effects would be temporary in nature, and overall no significant impacts to the landscape and visual resource are therefore concluded during the construction phase.

The operational development is considered to improve the visual amenity and character of the Site. The majority of the utilitarian structures, workshops, car park and disturbed land that currently dominate the application site being will be removed and replaced by residential and employment built form, punctuated and intertwined by new areas of green infrastructure. In addition, the visual amenity of adjacent Public Rights of Way would be substantially improved by the removal of the vast majority of the existing perimeter security fencing. The application site will become publicly accessible, giving people the opportunity to experience the new areas of public realm, open space and heritage features.

Beyond the Site, based on the maximum spatial and height parameters, the proposed development would be generally contained by the perimeter vegetation. In short range views to the north, around Otford Lane, certain parts of the employment area / village centre may just break above the tree line but would not be a prominent feature in view and would be consistent with the baseline views of existing buildings and structures protruding above the perimeter woodland. To the east and west, along Pole Hill and Star Hill respectively, the proposed development is generally screened by the perimeter woodland, with the exception of minor changes to the existing access points into the application site. From the south, at the base of the scarp slope and around the M25 / A224, the proposed development will not be visible, set back from the scarp slope and sitting below the tree line. In middle to longer distance views to the east and south, from areas of higher ground around Otford and Sevenoaks, the proposed development would be generally screened by the perimeter woodland. Any visible structures that just break above the tree line would be indiscernible at this distance and there would be no perceptible change to baseline views.

Accordingly, it is concluded that beyond the Site itself the proposed development will not generally be visible from within the AONB.

It should also be noted that the assessment of effects is based on maximum building height parameters and does not consider the effects of individual building design, which would result in variations to height and roofscape and which would inevitably further reduce any visual impact.

#### 5.2.1. Summary

Overall, the proposed development is considered to improve the visual amenity and character of the Site itself and this localised area of the AONB. Beyond the Site itself the proposed development will result in no discernible change to the character and views from within the surrounding landscape / AONB and the removal of some existing structures is considered to be beneficial.

### 5.3. Built Heritage

The Built Heritage Statement, prepared by CGMS, has been prepared to identify and determine the significance of the built heritage assets within the site, including the contribution made by their settings, and assess the potential impact of the proposed development upon that significance. A Heritage Note has also been prepared to support the findings of the Built Heritage Statement and discuss the changes made to the proposed development.

The Site's built heritage significance principally derives from its role in the defence of London in the late nineteenth century and strategic armaments research and development during the twentieth century.

The Site contains the Grade II listed Penney building, Fort Halstead Scheduled Monument, two grade II*listed buildings, two grade II listed buildings and a number of non-designated heritage assets, including 29 building structures across the site that are considered to be of historic interest.

The remainder of the buildings on Site have limited to no inherent historic or architectural interest due to their standard design and construction, and the lack of available sources demonstrating their uses or associations.

The proposed development allows for the retention of 25 buildings that are considered to be of historic interest in addition to the listed buildings within the Site. These structures would be retained in four distinct groups: the Fort retained as Historical Interpretation Centre; buildings to the north of the Fort, adapted as the Village Centre; former workshop and office buildings to the east of the Fort, adapted as part of an area for employment use; and a number of bunkers to the west, forming part of the 'bunker park'.

In relation to the Fort, selective tree and shrub clearance and maintenance is proposed to better reveal the historic form of the earthworks; to enable an understanding of the spatial relationship between buildings; selectively expose sightlines from gun emplacements to illustrate the defensive role of the Fort; and bring about an overall improvement to the setting of the Fort.

The layout of the proposed development has also been carefully considered to ensure that views on the approach to the Fort (from along Crow Road) and views between the Fort and the proposed Village Centre are enhanced. This would be achieved through the retention of Crow Road as an historic route; retention / demolition of buildings around the Fort; and selective tree and shrub clearance. This will enable additional views of the Fort and reinforce its role as a focal point within the development.

#### 5.3.1. Summary

Overall it can be concluded that the existing heritage features of most value within the Site will be preserved. In particular all designated heritage assets will be retained and opportunities to enhance their settings will be taken. This will include the creation of new views to the listed buildings and Fort.

### 5.4. Archaeology

The Archaeological Desk-Based Assessment (ADBA), prepared by Waterman, has identified all archaeological receptors; including known and as yet unknown buried archaeological remains, that could be impacted by the proposed development.

The significance of potential archaeology within the Site derives from the presence of prehistoric assets indicative of activity and occupation, in addition to post-medieval to modern archaeological assets associated with the scheduled site of Fort Halstead. Of particular interest is the Site's later development as a military research facility.

Any proposed development work surrounding the scheduled monument; including tree and shrub clearance, has the potential to cause direct physical and setting impacts on the monument and archaeological remains that may survive below ground. As such any enabling and construction work could have an adverse effect on the significance of these assets and in turn the cultural and archaeological significance of the AONB (if not mitigated).

To mitigate any adverse effects on archaeological remains, a programme of archaeological mitigation to be agreed with Kent County Council's Heritage Conservation Team. This will add to the understanding of the historic uses of the Site and in turn will enrich the knowledge and understanding of how its landscape (and AONB) has transformed over time.

The potential exists to allow for findings to be displayed / interpreted within the Fort which will be retained as an Historical Interpretation Centre.

5.4.1. **Summary**

Overall it can be concluded that any adverse effects can be mitigated by a programme of archaeological investigation and that this will enrich the knowledge and understanding of the landscape.

## 5.5. Biodiversity

The Ecological Impact Assessment (EcIA), prepared by Middlemarch Environmental, sets out any changes to habitats and species resulting from the proposed development.

The EcIA draws upon surveys previously undertaken between 2006 and 2014, and a Landscape and Ecological Management Plan (LEMP) which was prepared in 2014.

Middlemarch Environmental subsequently completed a suite of updated ecological surveys and assessments in 2018 and 2019, comprising a Preliminary Ecological Appraisal (consisting of a desk study and Phase 1 Habitat Survey), a botanical survey, and surveys for badger, bats, breeding birds, wintering birds, dormouse, invertebrates and reptiles. An updated site walkover and an updated badger survey were undertaken in 2020.

The findings of the historical and current survey work for the site were used to inform a detailed assessment of the ecological baseline value of the site for the EcIA, and also informed the production of a Framework Ecological Mitigation Strategy (FEMS) which outlines how the proposed development will address biodiversity impacts in accordance with the mitigation hierarchy (Avoid; Mitigate; Compensate; Enhance). The overall aim of the FEMS is to protect key habitat features on site and to ensure that the favourable conservation status of all sensitive ecological receptors is maintained.

A summary of the key findings of the baseline survey work is provided below:

5.5.1. **Ancient Woodland**

The proposed development has been designed to avoid any loss of ancient woodland, which is considered to be the most valuable habitat feature on and adjacent to the site. The proposed development has predominantly been designed to occupy the same built footprint as the existing built environment on site, meaning that the ancient woodland areas around the edge of the existing military/defence research facility will remain intact. Mitigation and

enhancement measures for the retained Ancient Woodland were previously provided in a LEMP, and will be reiterated in the FEMS, and include:

- Enhancement and restoration of the structural diversity of all areas of woodland through appropriate management, such as canopy thinning, re-coppicing and planting of native species.
- Enhancement of the woodland by providing a more graded woodland edge planting within the 15m buffer zone that would separate the woodland from the residential area.
- Where access is to be permitted close to the Ancient Woodland, for example, on currently permitted rights of way, enhancement to the existing pathways would be undertaken; thus discouraging human disturbance away for the paths.

In addition any impacts from human and pet disturbance will be reduced / avoided through mitigation and enhancement measures set out in the previous LEMP and reiterated in the FEMS, namely the introduction of the woodland buffer zone; appropriate footpaths and signage leading any from the Ancient Woodland and the creation of alternative recreational spaces.

5.5.2. **Unimproved Calcareous Grassland**

The proposed development will have no adverse impacts on unimproved calcareous grassland, another valuable habitat resource on site. The proposed development will be within the same developed area of the existing military/defence research facility and the areas of unimproved calcareous grassland are found on the outskirts of the Site. As such, they will remain intact. Mitigation and enhancement measures for the unimproved calcareous grassland were previously provided in a LEMP, and will be reiterated in the FEMS, and include:

- Provision of a carefully designed programme of sheep grazing (where possible) and cutting regimes (a single hay cut a year), with arising's removed from the grassland area.
- Management of encroaching trees and scrub in the unimproved calcareous grassland to provide a habitat mosaic and maximise the ecological value of this area.

5.5.3. **Bats**

The suite of bat surveys completed in 2018 have confirmed that bat roosts are present in 13 buildings within the Site. Subject to any works to these buildings being undertaken in accordance with a European Protected Species (EPS) development licence from Natural England, no adverse impacts on roosting bats are anticipated. The process of obtaining the licence will require the development of a method statement describing how the favourable conservation status of the bat population on site will be maintained, including the provision of a variety of new bat roosting locations and a methodology for excluding bats for the roosts within buildings to be lost in a way that does not cause harm.

The suite of bat surveys completed in 2018 also highlighted that parts of the site are well-used by a range of bat species for foraging and commuting. A key part of the avoidance of, and mitigation for, impacts on foraging bat species will be the retention of key habitat features such as woodland edges, hedgerows and trees, coupled with the design and

implementation of an appropriate lighting strategy to ensure that dark corridors remain present on site. Avoidance and mitigation measures for bats are described in the emerging FEMS.

5.5.4. **Breeding Birds**

The 2018 survey work highlighted that the site supports a good range of breeding species, most notably species of woodland and farmland habitats. A small amount of breeding habitat will be lost to the proposed development, however the most valuable features, including the ancient woodland habitat, will be retained and enhanced. The FEMS outlines measures to ensure that the favourable conservation status of the breeding bird population is maintained, including appropriate timing of vegetation clearance to avoid disturbance to nesting birds, provision of a range of new nesting features and enhancement of existing habitats through improved management.

5.5.5. **Reptiles**

The 2018 Reptile Survey identified populations of slow worm and common lizard on Site, located within the same areas of calcareous grassland and semi-improved neutral grassland where populations of reptiles were recorded during previous surveys.

Subject to the implementation of measures outlined in the FEMS, the proposed development will have no adverse impact on reptiles. The Site's slow worm and lizard population is generally restricted to areas of species rich calcareous and semi-improved grassland, which will be retained. Where the loss of grassland habitat is predicted, best practice methods (including trapping and habitat manipulation) will be used to ensure that reptiles are protected from harm. The proposed development will increase the opportunities for reptiles by ensuring existing habitats are managed in an appropriate manner and the creation of refugia (including purpose built hibernacula and log piles).

5.5.6. **Dormouse**

The 2018 survey work identified a single dormouse within an area of bramble scrub adjoining broadleaved semi-natural woodland in the southern part of the Site. Subject to any works which have the potential to impact dormice being undertaken in accordance with an EPS licence from Natural England, no adverse impacts on populations of this species are anticipated.

The Site's dormouse population is generally restricted to areas of woodland which will be retained. The proposed development will increase the opportunities for dormice by ensuring existing habitats are managed in an appropriate manner and the enhancement of woodland structural diversity, including the creation of tree and shrub buffers along woodland edges.

5.5.7. **Badgers**

The updated 2020 Badger Survey identified a series of 12 badger setts, comprising two main setts, two annex setts, two subsidiary setts and six outlier setts. Of these setts, eight showed signs of recent use, including the two main setts. Latrines and snuffle holes were also noted. Due to the apparent presence of two main setts, it is likely that the site is used by more than one badger clan.

Building demolition works and associated groundworks have the potential to result in disturbance to some of the setts. Works with the potential to result in sett disturbance will need to be completed in accordance with a Development Licence from Natural England. Subject to works being undertaken in accordance with the licence, no breach of legislation with respect to badgers is anticipated.

Three setts, including one main sett, lie within an area which is to be fenced off, although it is understood that the setts are to be retained. To ensure that badgers can continue to move through the Site, suitable tunnels will be provided underneath the fencing.

In addition, subject to the implementation of measures outlined in the FEMS, the proposed development will have no adverse impact on badgers utilising the site for foraging and commuting. The findings of the badger survey indicate that badgers predominantly utilise the areas of woodland and grassland around the Site peripheries for foraging and commuting, and the majority of these areas will be retained.

5.5.8. **Terrestrial Invertebrates**

The 2018 Terrestrial Invertebrate Survey identified that the most valuable area for invertebrates within the Site is the large area of chalk grassland located in the southern part of the Site. This area will be retained and as such the proposed development will have no adverse impact on the Site's terrestrial invertebrate population. The proposed development will increase the opportunities for terrestrial invertebrates by ensuring existing habitats are managed in an appropriate manner and the enhancement of woodland structural diversity, including the creation of tree and shrub buffers along woodland edges.

5.5.9. **Summary**

Overall it can be concluded that the majority of existing habitat within the Site will be retained and enhanced, and that there would be an overall improvement to the ecological value of this localised area of the AONB.

## 5.6. Transport and Access

The Transport Assessment, prepared by Peter Brett Associates, sets out any changes in vehicle movements resulting from the proposed development.

The traffic modelling is based on a worst-case scenario and does not factor in any potential shift from private vehicle use to public transport. This has demonstrated that even without the proposed improvements to bus services there will be only slight increase in traffic movements along roads within the AONB and this will not be discernible in the context of existing traffic movements /flow. Details of key routes are set out below.

The traffic modelling has also demonstrated that no physical change to local road network will be required, such as widening or passing places. The only changes would be to the layout to the main Site access points at Otford Lane and Star Hill, which includes the removal of the gate house, security fence, some minor tree / scrub clearance to improve the visibility splays, and new warning signs on the northern and southern approaches to the junction at Star Hill; and a new roundabout junction at Otford Lane connecting Crow Drive, Otford Lane and Polhill at Otford Lane. These are considered to be relatively minor changes to the arrangement of these access points and the removal of the security fence at Star Hill would

represents an improvement to the appearance and character of this junction. In addition, the proposed roundabout at Otford Lane would provide a safe means of negotiating the junction and includes provisions for pedestrians and cyclists.

While there will be some minor scrub clearance at the site entrance along Star Hill in order to ensure appropriate visibility splays, the removal of the security fence; and removal of security lighting would represent an improvement to the appearance / character of this junction.

5.6.1. **Star Hill Road**

The main impact of the proposed development at Star Hill Road will be on the section of Star Hill between the site access and the A224. This section of road currently carries around 3,150 vehicles per day (2-way) with a peak hour flow of about 330 (2-way) vehicles in the AM peak. Based on this assessment it is estimated that the proposed development would increase peak flows by around 176 vehicles (2-way) during the AM and PM peak hour. The likely increase in traffic flow even at peak times is therefore about 3 vehicles per minute, which would not be a noticeable increase in traffic movements.

5.6.2. **A224 Polhill**

A224 Polhill, south of Otford Lane, runs through the AONB but this is a main road with flows approaching 13,060 vehicles per day with peak hour flows of around 1,070 vehicles. Even at peak times the proposed development will add only some 167 vehicles per hour to the road. This level of increase is within the normal daily variation in traffic flow and would not be noticeable.

5.6.3. **Sundridge Road**

Sundridge Road (between Star Hill Roundabout and A25) is expected to have an additional flow of approximately 125 vehicles per hour during both the AM and PM peak hours. Whilst this link does lie within the AONB the maximum level of increase is about 2 vehicles per minute, which would not be a noticeable increase in traffic movements. It is also important to note that this road runs parallel to the M25, and already represents a busy transport corridor with constant vehicle movement.

5.6.4. **Pilgrims Way**

Pilgrims Way (between A224 Polhill and Filston Lane) is expected to have an additional flow of up to 66 vehicles per hour during both the AM and PM peak hour. Whilst this link does lie within the AONB the maximum level of increase is about 1 vehicle every minute, which would not be a noticeable increase in traffic movements and as such would not adversely affect the tranquillity of the AONB.

5.6.5. **Transport Planning**

Strategies are proposed to manage construction traffic and encourage sustainable transport forms for future residents.

Traffic associated with the construction and demolition stages will be minimised though management measures set out within the Construction and Logistics Management Plan

which will be prepared and implemented prior to the commencement of construction . This will include an agreement not to use the Star Hill access for construction traffic. HGV's will be required to use the Otford Lane access onto A224 Polhill, with the route north towards the M25 Junction 4 identified as the main route for construction vehicles to access the strategic road network.

The transport strategy and Travel Plan for the completed / occupied development which would include a range of measures that encourage sustainable forms of transport and minimise reliance on single occupancy car journeys. This includes the provision of pedestrian and cycle routes through the internal site; on-street cycle lanes on London Road to link Otford Lane with the existing advisory cycle lanes on Old London Road which provide access towards the Knockholt Station; the provision of a community bus service; and potentially rerouting of the 3 bus service to directly serve the Fort Halstead site. The travel plan will also be based on a parking management strategy which prioritises and promotes sustainable modes and will implement a monitoring and review strategy to assess the outcomes of measures against targets. These measures will reduce the reliance on the private car and help to reduce traffic flows on the various roads within the site that fall within the AONB.

The creation of a live-work community, with a mix of residential and employment uses within the same development, also has the potential to reduce the number of vehicle movements.

5.6.6. **Summary**

Overall it can be concluded that there would be a relatively minor changes to the number of vehicle movements, no physical change to the local road network within the AONB and improvements to the character / appearance of Star Hill Site entrance.

## 5.7. Air Quality

The Air Quality chapter, prepared by Waterman, sets out the impact and likely effect to local air quality resulting from the changes in vehicle trips associated with the proposed development, as well as considering the likely impact during demolition and construction.

In order to establish the baseline air quality conditions, project specific nitrogen dioxide (NO2) diffusion tube monitoring was completed at a number of monitoring locations both within the Site and along the surrounding road network. The monitoring results show annual mean NO2 concentrations on and immediately around the Site, including within the AONB, are below the annual mean NO2 objective at all monitoring locations, and therefore existing air quality is relatively good.

With respect to the demolition and construction phase, no significant adverse impacts are expected at the majority of sensitive receptors. To minimise the release of dust and air pollution during the demolition and construction works, a number of measures would be implemented in order to reduce and minimise the likely impacts of nuisance dust, these measures would be detailed in the Outline Construction Environmental Management Plan. Furthermore all construction routes would be agreed with Kent County Council so as to avoid or limited use of traffic routes close to sensitive routes and the avoidance (or limited) use of roads during peak hours. With mitigation the likely air quality impact from construction traffic would be insignificant

Detailed computer dispersion modelling of future traffic emissions has been undertaken on the local road network and within the AONB. The results show even in the absence of mitigation, the proposed development is predicted to have a likely insignificant impact on local air quality on both existing and future sensitive receptors. Further benefits, not quantified in the modelling, are likely to occur as a Travel Plan for the proposed development would be implemented, with the aim of reducing the number of car trips associated with the Development.

5.7.1. **Summary**

Overall it can be concluded that there would be an insignificant effect to local air quality within the AONB.

## 5.8. Noise and Vibration

The Noise and Vibration Assessment, prepared by Hydrock, sets out potential changes to the noise environment resulting from the proposed development.

In order to establish the baseline noise conditions, a number of noise monitoring locations were established, all within the AONB. The Site is situated in a relatively rural location, where the ambient noise environment is largely dominated by distant road traffic noise from the M25, which is reflected in the relatively noise levels measured across the Site.

With respect to the demolition and construction phase, no significant adverse impacts are expected at the majority of sensitive receptors. At Armstrong Close, to the north of the Site, occasional significant adverse impacts may arise when certain activities (e.g. pneumatic breaking) are undertaken nearby. However, and with careful programming of work and the adoption of methods of best practice at all times, noise levels would be minimised as far as practically possible.

With respect to construction traffic noise there are no anticipated significant impacts at any potentially sensitive receptor.

With respect to fixed building services plant, appropriate noise emission limits have been specified. Providing that the limits are met, with careful attention paid to plant selection, installation and noise attenuation as appropriate, then disturbance to future occupants of the proposed development as well as surrounding sensitive receptors would be avoided.

Additional road traffic noise generated by the proposed development would largely not result in any significant increases in noise levels. The maximum predicted increase is along Star Hill and Crow Drive (reflecting Crow Drive being the main access to Fort Halstead) where, at worst an imperceptible change in the road traffic noise levels may occur.

Noise impacts associated with trace mineral explosives at QinetiQ are predicted to be negligible across the residential extent of the development.

5.8.1. **Summary**

Overall it can be concluded that there would be a relatively minor changes to the noise environment within the AONB, and these changes are localised within the Site.

### 5.9. Tree Surveys

Existing arboricultural information for the Site comprises:

- Arboricultural Appraisal (2007) produced by Pegasus Planning comprising appraisal informed by BS5837:2005 detailing species, age and condition based on 98 compartments within DSTL site (excluding perimeter woodland);
- Tree Condition Survey (2007) produced by Cannon detailing the species, amenity value and hazard risk for individual trees above 250mm diameter within the DSTL Site (excluding perimeter woodland);
- Walkover Survey (2012) produced by Ian Keen Ltd comprising appraisal informed by BS5837:2012 detailing species, description, category grade and preliminary management recommendations based on 45 compartments encompassing the whole site (including the perimeter woodland);
- Walkover Survey (2014) undertaken by LDA Design and JTP to consider the emerging masterplan proposals and identify amendments to the layout to increase tree retention (excluding perimeter woodland);
- Tree Condition Survey (2018) undertaken by Gavin Jones to provide tree health and management recommendations; and
- Arboricultural walkover survey (2018) undertaken by Middlemarch Environmental, checking Gavin Jones survey data and application of BS5837: 2012 retention categorisation values.

The Site contains native and naturalised scattered trees of all ages and species dominated by English oak, sweet chestnut, silver birch and common ash. The whole Site is included within woodland Tree Preservation Order 4 (2016). The Site is surrounded on all sides by woodland which has either been planted or existed originally as Ancient Replanted Woodland and Ancient and Semi-Woodlands to provide screening of the Fort Halstead Site. Centrally, tree cover is scattered around the complex of buildings but was generally found to be of high to moderate quality with mature canopy proportions which would have provided camouflage from aerial view during the Site's military presence. Trees had generally been managed in a sympathetic manner with minimal intervention which had resulted in a large proportion of high-quality trees with few notable defects. The trees surveyed were generally in good health and exhibited minor defects such as minor deadwood and small hanging branches.

Based on the various tree surveys there are approximately 1,625 trees within the Site. Based on analysis of tree survey and the development parameters, it is anticipated that approximately 70% of existing trees can be retained. A further 15% of existing trees have potential to be retained within development plots (in public realm, amenity and private gardens) subject to more detailed design proposals.

Importantly the design of the proposed development has ensured that the vast majority of Category A trees can be retained. Of the 795 Category A trees, approximately 644 can be retained, and a further 70 have the potential to be retained within development plots (subject to more detailed design proposals). This equates to around 90% of existing Category A tree stock.

Table 3 below provides an analysis of tree loss and retention.

**Table 3: Tree Survey Analysis**

| Type | Category | | | | Approx. % tree loss / retention |
|---|---|---|---|---|---|
| | A | B | C | U | |
| Trees to be removed | 81 (10%) | 69 (15%) | 85 (31%) | 15 (14%) | 250 (15%) |
| Trees to be retained within development parcels (subject to detailed design) | 70 (9%) | 90 (20%) | 69 (26%) | 11 (10%) | 240 (15%) |
| Trees to be retained | 644 (81%) | 291 (65%) | 116 (43%) | 84 (76%) | 1,135 (70%) |
| **Total (by category)** | 795 (100%) | 450 (100%) | 270 (100%) | 110 (100%) | 1,625 (100%) |
| **Approx. % tree retention by category (inc. trees to be retained within development parcels)** | 90% | 85% | 69% | 86% | / |

5.9.1. **Summary**

Overall it can be concluded that the majority of trees within the Site can be retained and the vast majority of Category A trees can be retained.

## 5.10. Lighting

The Lighting Assessment Report, prepared by Royal Haskoning, sets out any changes to the lighting environment resulting from the proposed development.

The existing Site is well illuminated by use of low pressure sodium lighting columns, floodlights and street lighting luminaires. Sky glow is clearly visible above the Site as an orange aura. From within the wider environment, minimal lighting sources within the Site can be seen due to the perimeter woodland. The only visible lighting sources occur where gaps within the vegetation allow views into the Site. Although the wider environment is a rural area, it is well populated with scattered lighting sources and sky glow, with lighting within the towns of Otford, Dunton Green, Halstead and Sevenoaks further afield visible.

Given the outline nature of the planning application, proposed lighting plans (including isoline contours for the artificial lighting) are only available for the main road ways for the proposed development. For the internal areas within the various development, a set of lighting design principles has been established, based upon industry recognised best practice, relevant guidelines and standards, and professional experience. Based on these design principles, the impact of the lighting associated with the proposed development has been determined both as a technical exercise in the Lighting Assessment (ES Volume 3 / Appendix 2) and as a qualitative exercise in the LVIA (ES Volume 3).

Lighting impacts are generally considered to range from minor adverse to minor beneficial. This is through the use of modern luminaires, which provide lighting to the required standards whilst reducing light spill / glare. There is still likely to be some sky glow, but this will become more of a 'whiter' aura rather than 'orange' aura due to the use of LED lamp sources, the latter being considered to be more obtrusive. Furthermore, a number of existing lighting installations will be removed, particularly security lighting at the West Gate / Star Hill Road.

5.10.1. **Summary**

Overall it can be concluded that there would be a reduction in visible lighting sources in and around the Site and general improvement in ambient lighting levels within this localised area of the AONB.

# 6.0 Effect of the Development on the AONB

## 6.1. Introduction

The potential effects of the proposed development on the natural beauty criteria of the AONB are set out in the tables below.

The following information is presented in the tables:

- Summary of the natural beauty criteria identified in Section 2.0.
- Identification of the potential effects on the natural beauty criteria, resulting from the proposed development and assuming no mitigation measures are in place.
- Review of how the design of the proposed development has responded to each individual AONB natural beauty criteria, with regard to the policy context set out in Section 3.0; the description of the proposed development set out in Section 4.0; and the technical studies set out in Section 5.0.
- Identification of the control and delivery mechanism that will ensure the necessary design quality and mitigation measures are secured.
- The likely degree of change to each individual AONB natural beauty criteria at the AONB scale (i.e. across the entire designated area) and local scale (i.e. within the Site). The degree of change is also considered against the current baseline environment (i.e. the existing research establishment) and the future baseline environment (i.e. assuming the permitted development is delivered in accordance with the planning permission).

However, it should be remembered that many of the mitigation and enhancement measures are embodied in the design within the scheme, and therefore form part of the proposed development.

While is considered that the changes between the September 2019 scheme (750 dwellings) and the May 2020 scheme (635 dwellings) are beneficial, arising from the reduction in the extent of built development and associated reduction in residential density and numbers, these changes are not considered to change the overall findings of the original AONB report. In relation to the September 2019 scheme it was concluded that the proposed development would overall positively contribute to the natural beauty criteria of the AONB, enhancing natural heritage features; benefiting the understanding and enjoyment of the landscape; and improving the social and economic wellbeing of communities within the AONB through new housing; employment opportunities; and recreational facilities.

**6.2: Landscape Quality**

**Table 4: Assessment of Landscape Quality**

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
|---|---|---|---|---|
| The Kent Downs has a dramatic and diverse topography, creating a unique landscape pattern. These features comprise scarps of chalk and greensand; expansive open plateaux; hidden dry valleys; steep-sided river valleys; and dramatic white cliffs and foreshore. | Disruption to the scarp slope and changes to the topography of the Site | No development is proposed on the scarp slope, with all new built development sitting behind the existing woodland that sits along the top of the scarp. The proposed development will be within the same developed area as the existing research establishment and will sit entirely within previously developed land. There will be some minor changes to existing levels to facilitate development within the Site, however, there will not be any significant changes to the topography of the Site nor the surrounding landscape. | – The development is sympathetic to local character and context<br>– Detrimental buildings and features are removed<br>– The scarp slope is kept free from development<br>– There will be no perceptible change to landform | – Development in accordance with the Parameter Plans |
| Woodland is a key feature of the Kent Downs and frames the upper slopes and plateaux tops. Over half of the woodland sites are ancient. Semi-natural chalk grassland is also a key feature of the AONB. | General changes to landscape character resulting from loss of key features | The key landscape features within the Site – such as the Ancient Woodland and areas of chalk, semi-improved and neutral grassland - will be retained. The majority of individual trees could also be retained and incorporated into the proposed green infrastructure network.<br>The proposed development has the potential to enhance the overall character and appearance of the Site by removing many of the existing industrial type buildings and large areas of hard standing and creating a more legible site layout with high quality buildings and open spaces. | – The development creates a well-designed place<br>– Important landscape features / habitats are protected and enhanced<br>– A buffer zone to the Ancient Woodland is provided | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FEMS / LEMP |
| | Loss / damage to chalk grassland within the Site | The area of chalk grassland on the scarp slope will be retained and enhanced through an appropriate management regime. The FEMS recommends the following management techniques:<br>– Provision of a carefully designed programme of sheep grazing (where possible) and cutting regimes (a single hay cut a year), with arising's removed from the grassland area.<br>– Management of encroaching trees and scrub in the unimproved calcareous grassland to provide a habitat mosaic and maximise the ecological value of this area.<br>Other areas of semi-improved grassland and neutral grassland will be retained and enhanced, increasing the overall biodiversity value of the Site. | | |
| | Loss / damage of woodland within the Site | All existing Ancient Woodland within the Site will be retained and enhanced through an appropriate management regime. The FEMS and Outline LEMP recommend the following management techniques:<br>– Enhancement and restoration of the structural diversity of all areas of woodland through appropriate management, such as canopy thinning, re-coppicing and planting of native species.<br>– Enhancement of the woodland by providing a more graded woodland edge planting within the 15m buffer zone that will separate the woodland from the residential area.<br>– Where access is to be permitted close to the Ancient Woodland, for example, on currently permitted rights of way, enhancement to the existing pathways will be undertaken; thus discouraging human disturbance away for the paths.<br>– Provision of information boards in strategic locations, encouraging people to keep dogs on leads and stay on designated paths. | | |
| Settlement is also a key feature of the Kent Downs, and villages are generally framed by surrounding woodland. Larger settlements are typically found in the western extents of the AONB and includes the towns of Westerham and Wrotham. | A new settlement that does not compliment the pattern and character of existing settlement | Fort Halstead is situated within a network of villages and settlements, including, amongst others, Otford, Knockholt, Halstead, Knockholt Pound and Badgers Mount. It also falls in close proximity to the larger settlements of Westerham and Wrotham, which are of comparable size to the proposed development.<br>As recorded in the DAS, a study of the morphology, land uses and character of these existing settlements has been used to inform the layout and design of the proposed development, however, the vision for the proposed development is to create a distinctive new village that draws upon the Site's unique wooded setting and military history. The design / scale of the proposed development has also been informed by the need to create a sustainable live-work community and ensure efficient use of land. | – The development is sympathetic to local character and context<br>– The development creates a well-designed place | – Development in accordance with the Parameter Plans<br>– Development in accordance with the DAS design guidance |

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| | | The DAS sets out key objectives, design guidelines and precedent images / illustrations for each of the character areas within the Site, and the use of colour, materials, architectural styles etc will be determined as part of the Reserved Matters Applications. | | |
| Villages, hamlets and farms are interconnected by a network of rural roads, lanes and droveways. These are typically enclosed by high hedges and mature trees. | Changes to the character of Star Hill, a rural road, resulting from increased vehicle movements and road infrastructure improvements | There will be minor changes to the character of Star Hill resulting from increased vehicle movements, however, the transport assessment has concluded that the vast majority of traffic will use the Crow Drive access and that the increase in traffic along Star Hill will be relatively small.<br>In addition, measures are proposed – such as an improved footpath / cycle connections and bus service – to make non-car travel more attractive and encourage mode shift away from private car travel. The creation of a live-work community also has the potential to reduce the number of vehicle movements.<br>There will be no modifications to the alignment, width etc. of Star Hill – the transport assessment has concluded that the existing road is of a sufficient standard to accommodate any increases in vehicle movements.<br>The only changes will be to the layout to the main Site access points at Otford Lane and Star Hill, which includes the removal of the gate house, security fence, minor tree / scrub clearance to improve the visibility splays, and new warning signs at Star Hill; and a new roundabout junction at Otford Lane. These are considered to be relatively minor changes to the arrangement of these access points and the removal of the gate houses / security fence at Star Hill will represent an improvement to the appearance / character of this junction. | – The development preserves the character of rural lanes | – Development in accordance with the Junction Layout drawings<br>– Planning condition and planning obligation to implement the Travel Plan |
| The AONB Management Plan notes that key landscape features in some areas have been lost or eroded through intensive land management, development or neglect. The AONB Management Plan also states that there is considerable demand for access and recreation in the Kent Downs, and that this needs to be provided in a way that does not degrade landscape quality. | Loss / damage to landscape features resulting from inappropriate management | All existing Ancient Woodland and chalk grassland within the Site will be retained and enhanced. The FEMS and Outline LEMP recommend a range of management aim and objectives to ensure all existing / new landscape and biodiversity features are appropriately managed, including woodland, scrub, trees, hedgerows, grassland and attenuation features, along with the management and control of non-native invasive plant species. | – Important landscape features / habitats are protected and enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FEMS / LEMP |
| | Loss / damage to landscape features resulting from changes to access and recreation arrangement | No additional access will be provided to areas of Ancient Woodland / chalk grassland and a range of alternative open spaces will be created for amenity and recreation purposes. A buffer will be created between the residential edge and Ancient Woodland in order to discourage access. Furthermore, sensitive areas of new / existing habitat will be fenced. All existing rights of ways will be retained and incorporated as part of the development proposals, and the Site itself will be publicly accessible, thus creating new opportunities for people to enjoy and understand the AONB. The FEMS and Outline LEMP recommend a range of management techniques to control access to areas of existing woodland, including enhancement to the existing pathways (discouraging human disturbance away for the paths); and provision of information boards (encouraging people to keep dogs on leads and stay on designated paths). | – Important landscape features / habitats are protected and enhanced<br>– Access to the countryside is maintained and enhanced | |
| **Degree of Change** | ***Current Baseline Environment*** | At the AONB scale, there is considered to be a **negligible beneficial** degree of change to landscape quality overall. At the local scale, there is considered to be a **moderate beneficial** degree of change, resulting from the comprehensive redevelopment of the Site and the retention / enhancement of landscape features. | | |
| | ***Future Baseline Environment*** | The proposed development, when compared to the permitted development, will result in no perceptible change to landscape quality. While the layout, scale and appearance of development will vary, the development will remain confined to areas of previously development land; will retain key features such as the Ancient Woodland / chalk grassland; will be largely contained by the perimeter woodland; and will continue to improve enhance the overall character and appearance of the Site. | | |

**6.3: Scenic Quality**

**Table 5: Assessment of Scenic Quality**

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
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| The Kent Downs supports mixed farming practices where arable crop production co-exists with livestock grazing and horticulture. This creates a variety of seasonal colours and textures, and provides contrast with areas of permanent grassland. | Loss / damage to chalk grassland within the Site | The area of chalk grassland on the scarp slope will be retained and enhanced through an appropriate management regime. The FEMS and Outline LEMP recommend the following management techniques:<br>– Provision of a carefully designed programme of sheep grazing (where possible) and cutting regimes (a single hay cut a year), with arising's removed from the grassland area.<br>– Management of encroaching trees and scrub in the unimproved calcareous grassland to provide a habitat mosaic and maximise the ecological value of this area.<br>– The use 'spot' treatments where necessary to control the spread of noxious weed species.<br>Others areas of semi-improved grassland and neutral grassland will retained and enhanced, increasing the overall biodiversity value of the Site. | – Important landscape features / habitats are protected and enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FEMS / LEMP |
| Long-distance panoramas are offered across open countryside from the scarp, cliffs and plateaux. In contrast the dip slope dry valleys and river valleys provide more intimate and enclosed vistas. | New development is highly visible and disrupts panoramic views across the AONB | The proposed development will not adversely affect any views across the AONB. All existing Ancient Woodland within the Site – including the belt of trees along the southern Site boundary, running along the top of the scarp slope - will be retained and enhanced through an appropriate management regime. The woodland forms an effective screen during both summer and winters months, generally screening the existing built development from view.<br>The proposed development will comprise a mix of residential and employment uses, ranging from 2 – 4 storeys high, and as demonstrated by the visualisations contained within ES Volume 2 / LVIA Figure13, the proposed development is generally well screened by the retained woodland. Any taller elements that may just break the tree-line will be indiscernible and there will be no perceptible change to baseline views. Existing taller buildings such as Building N2 and the boiler house chimneys of Building S2 will be removed and this is considered to be beneficial.<br>While the Site is largely contained by surrounding woodland, there are opportunities for outward views from the west edge of the Site (which is currently open) and from the southern edge of the Site (in and around the Fort). There will be no disruption to these existing views as part of the proposed development, and making the Site publicly accessible will allow people to experience these particular views and vistas. | – The development is sympathetic to local character and context<br>– Detrimental buildings and features are removed<br>– The scarp slope is kept free from development<br>– Important views across the landscape are retained<br>– Access to the countryside is enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FEMS / LEMP |
| Scattered villages, hamlets and farms create a distinctive sense of place. The diverse range of local materials used, which includes flint, chalk, ragstone, timber and tile, contributes to the character and texture of the countryside. | New development does not reflect the character of local villages and fails to create a 'distinctive' new settlement. | The Site is situated within a network of villages and settlements, including, amongst others, Otford, Knockholt, Halstead, Knockholt Pound and Badgers Mount. It also falls in close proximity to the larger settlements of Westerham and Wrotham, which are of comparable size to the proposed development.<br>As recorded in the DAS, a study of the morphology, land uses and character of this existing settlements has been used to inform the layout and design of the proposed development, however, the vision for the proposed development is to create a distinctive new village that draws upon the Sites unique wooded setting and military history. The design / scale of the proposed development has also been informed by the need to create a sustainable live-work community and ensure efficient use of land.<br>The DAS sets out key objectives, design guidelines and precedent images / illustrations for each of the character areas within the Site, and the use of colour, materials, architectural styles etc will be determined as part of the Reserved Matters Applications.<br>It should also be noted that the proposed development will not generally be visible from any of the surrounding villages within the AONB and will therefore not adversely affect their setting or character. | – The development is sympathetic to local character and context<br>– The development creates a well-designed place | – Development in accordance with the Parameter Plans<br>– Development in accordance with the DAS design guidance |
| The AONB management plan notes that there is degradation to the scenic quality of the AONB in certain locations through inappropriate development. This also can also be detrimental to views in and out of the AONB | New development is highly visible and disrupts views | The proposed development will not adversely affect views across the AONB. All existing Ancient Woodland within the Site – including the belt of trees along the southern Site boundary, running along the top of the scarp slope – forms an effective screen and will be retained / enhanced through an appropriate management regime.<br>The AONB landscape can be appreciated from a range of vantage points, and the LVIA has considered the effect of views from key publicly accessible locations within the AONB such as Knole Park, the North Downs Way and the Darent Valley Path, where people are most likely to stop | – The development creates a well-designed place<br>– Important views across the landscape are retained<br>– Access to the countryside is maintained and enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FEMS / LEMP |

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
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| | | and appreciate the view. It has been concluded that there will be no perceptible change to views from these specific locations.<br>While the Site is largely contained by surrounding woodland, there are also opportunities for outward views from the west edge of the Site (which is currently open) and from the southern edge of the Site (in and around the Fort). There will be no disruption to these existing views as part of the proposed development and making the Site publicly accessible will allow people to experience these particular views and vistas.<br>The Site itself falls within the AONB, and there will be changes to views from within the Site, effecting existing workers at QinetiQ employment area, neighbouring residents, and recreational users of the network of footpath around the perimeter of the Site. The proposed development is considered to represent a positive change to views within the Site, removing many of the existing industrial type buildings and large areas of hard standing, and creating a more legible site layout with high quality buildings and open space. Specifically the removal of the perimeter security fencing (baring that retained for the QinetiQ area) will result in a improvement to the recreation and visual amenity of footpaths surrounding the Site, and allowing for a more natural visual recreational experience. | | |
| **Degree of Change** | ***Current Baseline Environment*** | At the AONB scale, there is considered to be a **negligible beneficial** degree of change to landscape quality overall. At the local scale, there is considered to be a **low beneficial** degree of change, resulting from improvements to the appearance of the Site itself and from the removal of existing buildings that are visible above the surrounding woodland, both of which will contribute to the enhancement of views in and out of the AONB. | | |
| | ***Future Baseline Environment*** | The proposed development, when compared to the permitted development, will result in no perceptible change to scenic quality.<br>While the layout, scale and appearance of development will vary, the development will remain confined to areas of previously development land; will retain key features such as the Ancient Woodland / chalk grassland; will be largely contained by the perimeter woodland; and will continue to improve enhance the overall character and appearance of the Site.<br>The revised height parameters may result in some additional residential / employment uses being visible above the tree-line, however, this is balanced by the removal of the energy centre flue / chimney from the proposed development. | | |

**6.4: Relative Tranquillity**

**Table 6: Assessment of Relative Tranquillity**

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
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| The landform of the Kent Downs has confined the main transport links to its edges and the river valleys, and much of the AONB provides a large area of tranquil and remote countryside. | Increased areas of built development within the AONB and reduced sense of tranquillity / remoteness | The proposed development will be within the same developed area as the existing research establishment. As such, there will be no overall increase in the area of built development within the AONB. The Site is already situated within a network of villages and settlements and is in close proximity to several major transport routes, including the M25 motorway; its junction with the M26; the A21 (T) road leading south to Sevenoaks; and the London-Ashford railway line. It is therefore concluded that the local area is not particularly tranquil or remote. | – The development is sympathetic to local character and context<br>– Important landscape features / habitats are protected and enhanced<br>– The development creates new green infrastructure and open space<br>– The development preserves the character of rural lanes | – Development in accordance with the Parameter Plans<br>– Development in accordance with the Junction Layout drawings |
| | Loss / damage to areas of non-developed land within the Site | The proposed development will be within the same developed area as the existing research establishment. As such, it will not result in the loss of any areas of Ancient Woodland, grassland or other areas of non-development within the Site. Existing areas of open space, primary to the south and west of the Site will be retained and enhanced as areas for recreation and ecology. | | |
| | Changes / introduction of new transport links to provide access to the Site | The proposed development will utilise the existing access points to the Site (from Otford Lane and Star Hill) and make use of the existing internal road network within the Site where possible. There will be no main new transport infrastructure links created.<br>There will be no substantial modifications to the alignment, width etc. of the existing road infrastructure surrounding the Site – the transport assessment has concluded that the existing road is of a sufficient standard to accommodate any increases in vehicle movements.<br>The only changes will be to the layout to the main Site access points at Otford Lane and Star Hill, which includes the removal of the gate house, security fence, minor tree / scrub clearance to improve the visibility splays, and new warning signs at Star Hill; and a new roundabout junction at Otford Lane. These are considered to be relatively minor changes to the arrangement of these access | | |

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
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| | | points and the removal of the gate houses / security fence at Star Hill will represent an improvement to the appearance / character of this junction. | | |
| Extensive woodland and the pattern of ridges and valleys further accentuates the sense of remoteness and isolation in certain locations. | Loss / damage of woodland within the Site | All existing Ancient Woodland within the Site will be retained and enhanced through an appropriate management regime. The FEMS and Outline LEMP recommend the following management techniques:<br>– Enhancement and restoration of the structural diversity of all areas of woodland through appropriate management, such as canopy thinning, re-coppicing and planting of native species.<br>– Enhancement of the woodland by providing a more graded woodland edge planting within the 15m buffer zone that will separate the woodland from the residential area.<br>– Where access is to be permitted close to the Ancient Woodland, for example, on currently permitted rights of way, enhancement to the existing pathways will be undertaken; thus discouraging human disturbance away for the paths.<br>– Provision of information boards in strategic locations, encouraging people to keep dogs on leads and stay on designated paths. | – Important landscape features / habitats are protected and enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FMES / LEMP |
| 'Dark night skies' are considered to be a valued feature of the Kent Downs. The AONB Management Plan notes that dark skies are increasingly difficult to enjoy in the Kent Downs because of the increasingly ubiquitous lighting columns and floodlighting, and seeks to improve the experience of dark skies at night. | An increase in lighting levels across the Site | The proposed development will not significantly adversely affect the levels of light pollution within the AONB. As set out in the Lighting Assessment impacts are generally considered to range from minor adverse to minor beneficial. This will be through the use of modern luminaires, which provide lighting to the required standards whilst reducing light spill / glare. A number of existing lighting installations will also be removed, particularly security lighting at the West Gate / Star Hill Road. Furthermore, the Site is already lit at night and, due to its location near to large settlement and main transport routes, is influenced by lighting at the North Downs Business Park and quarry; street lighting along A224 Polhill and the M25; and general light glow from the Sevenoaks urban area. It is therefore concluded that the Site is not within an area of 'dark night skies'. | – Th development reduces the impact of lighting | – Condition to prepare for LPA approval and thereafter comply with a Lighting Strategy |
| The relative tranquillity reduces towards the periphery of the AONB boundary, due to the presence of large towns and transport links along its boundary, and the AONB Management Plan specifically identifies the impact of traffic and development on the appreciation of the Kent Downs. | Changes to local roads resulting from increased traffic movements and access improvements | The transport assessment has demonstrated that there will only be a slight increase in traffic movements along roads within the AONB. The main impact of the proposed development will be on the section of Star Hill between the site access and the A224 Polhill, however, the likely increases in traffic flows will not represent a noticeable increase in traffic movements.<br>In addition, measures are proposed – such as an improved footpath / cycle connections and bus service – to make non-car travel more attractive and encourage mode shift away from private car travel. The creation of a live-work community will also has the potential to reduce the number of vehicle movements.<br>There will be no modifications to the alignment, width etc. of the local road network – the transport assessment has concluded that the existing roads are of a sufficient standard to accommodate any increases in vehicle movements.<br>The only changes will be to the layout to the main Site access points at Otford Lane and Star Hill, which includes the removal of the gate house, security fence, minor tree / scrub clearance to improve the visibility splays, and new warning signs at Star Hill; and a new roundabout junction at Otford Lane. These are considered to be relatively minor changes to the arrangement of these access points and the removal of the gate houses / security fence at Star Hill will represent an improvement to the appearance / character of this junction. | – The development preserves the character of rural lanes | – Development in accordance with the Parameter Plans<br>– Development in accordance with the Junction Layout drawings<br>– Planning condition and planning obligation to implement the Travel Plan |
| 'Tranquillity mapping' and 'intrusion mapping' prepared by CPRE also highlights the impacts of development on the relative tranquillity of the AONB. While the eastern extents of the AONB – between Maidstone / Gillingham and Dover / Folkstone – are considered to be relatively undisturbed and tranquil, the western extents of the AONB – between Maidstone and | Increase in noise levels within the Site and visual intrusion within the local landscape | The proposed development will not adversely affect views across the AONB. All existing Ancient Woodland within the Site – including the belt of trees along the southern Site boundary, running along the top of the scarp slope – forms an effective screen and will be retained / enhanced through an appropriate management regime. Any taller elements that may just break the tree-line will be indiscernible and there will be no perceptible change to baseline views.<br>In relation to the noise environment, additional road traffic noise generated by the proposed development would largely not result in any significant increases in noise levels. The maximum predicted increase is along Star Hill and Crow Drive (reflecting Crow Drive being the main access to Fort Halstead) where, at worst an imperceptible change in the road traffic noise levels may occur. | – Important landscape features / habitats are protected and enhanced<br>– The development will not result in additional noise impacts | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FEMS / LEMP |

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
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| Sevenoaks – are less tranquil and already disturbed by noise and visual intrusion. | | | | |
| **Degree of Change** | ***Current Baseline Environment*** | At the AONB scale, there is considered to be a **negligible beneficial** to tranquillity overall. At the local scale, there is considered to be a **low beneficial** degree of change, resulting from a reduction in lighting and removal of visible structures. | | |
| | ***Future Baseline Environment*** | The proposed development, when compared to the permitted development, will result in no perceptible change to relative tranquillity.<br>The revised height parameters may result in some additional residential / employment uses being visible above the tree-line, however, this is balanced by the removal of the energy centre flue / chimney from the scheme.<br>There will also be additional traffic on the local road network resulting from the increase in housing numbers, however, this will remain a relatively minor changes to the number of vehicle movements and there will be no physical change to the local road network within the AONB. | | |

**6.5: Natural Heritage Features**

**Table 7: Assessment of Natural Heritage Features**

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
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| The Kent Downs has a rich mosaic of habitats, plant and animal communities. These include semi-natural chalk grassland; neutral grassland; ancient semi-natural woodland; chalk cliffs, foreshore and sea platform; chalk rivers and wet pasture; and networks of linear features of species-rich hedgerows, flower-rich field margins and road verges. | Loss / damage to biodiversity within the Site | The proposed development will be within the same developed area as the existing research establishment. As such it will not result in the loss of any areas of woodland, areas of chalk, semi-improved and neutral grassland, or other important habitats within the Site.<br>Some habitat removal within the Site will be required to facilitate the proposed development. This will lead to the loss of trees within the Site; the loss of trees and scrub at the Star Hill Site entrance; and the loss of some amenity grassland and ornamental planting between existing buildings. However, a range of habitat enhancements are proposed to mitigate any loss caused by the Development. These include:<br>– Protection of Ancient Woodland, and creation of new woodland / woodland edge habitats.<br>– Enhancement of the woodland through appropriate management.<br>– Fencing and / or provision of landscape planting around the most sensitive areas of habitats.<br>– Provision of clearly defined pathways away from habitats of value for biodiversity.<br>– New individual trees / tree group planting within areas of open space.<br>– Enhancement of calcareous grassland and semi-improved grassland through appropriate management.<br>– Enhancement of Site habitats by the provision of new ponds and surface water attenuation features.<br>A range of mitigation measures are also proposed to ensure the protection of species on the Site. These include:<br>– Implementation of an appropriate lighting strategy using low levels / directional lighting and 'dark areas' near woodland habitats.<br>– Defined boundaries to the residential units located immediately adjacent to the most sensitive habitats.<br>– Provision of 'wild areas' in the vicinity of residential properties to provide alternative hunting areas for cats.<br>The FEMS and Outline LEMP recommend a range of management aim and objectives to ensure all existing / new landscape and biodiversity features are appropriately managed, including woodland, scrub, trees, hedgerows, grassland and attenuation features, along with the management and control of non-native invasive plant species. | – Important landscape features / habitats are protected and enhanced<br>– New habitats are created, ensuring a net gain in biodiversity | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the FEMS / LEMP |
| The AONB supports populations of some of the country's rarest chalk species. Although this habitat is one of the most valued features of the Kent | Loss / damage to chalk grassland within the Site | The area of chalk grassland on the scarp slope will be retained and enhanced through an appropriate management regime. The FEMS and Outline LEMP recommend the following management techniques: | – Important landscape features / habitats are protected and enhanced | – Development in accordance with the Parameter Plans |

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| Downs, the remaining extent of chalk grassland amounts to less than 2% of the total land area of the AONB | | – Provision of a carefully designed programme of sheep grazing (where possible) and cutting regimes (a single hay cut a year), with arising's removed from the grassland area.<br>– Management of encroaching trees and scrub in the unimproved calcareous grassland to provide a habitat mosaic and maximise the ecological value of this area.<br>– The use 'spot' treatments where necessary to control the spread of noxious weed species.<br>Others areas of semi-improved grassland and neutral grassland will retained and enhanced, increasing the overall biodiversity value of the Site. | – New habitats are created, ensuring a net gain in biodiversity | – Condition and planning obligation to implement the FEMS / LEMP |
| The AONB Management Plan states that the sensitive management and conservation of these features is essential to the survival of the AONB's important biodiversity heritage and landscape quality.<br>The AONB management plan also identifies the potential deterioration of these features due to inappropriate or lack of management. The lack of grazing livestock in particular is identified as a threat to areas of semi-natural grassland, especially those sites that are small or inaccessible. | Loss / damage to sensitive features due to inappropriate management | The FEMS and Outline LEMP recommend a range of management aim and objectives to ensure all existing / new landscape and biodiversity features are appropriately managed, including woodland, scrub, trees, hedgerows, grassland and attenuation features, along with the management and control of non-native invasive plant species. In relation to the chalk grassland, the FEMS / Outline LEMP recommend a programme of sheep grazing (where possible) and cutting regimes (a single hay cut a year), with arising's removed from the grassland habitat, along with management of encroaching trees and scrub within the chalk grassland area to provide a habitat mosaic and further enhance the ecological value of this area. | – Important landscape features / habitats are protected and enhanced | – Condition and planning obligation to implement the FEMS / LEMP |
| **Degree of Change** | ***Current Baseline Environment*** | At the AONB scale, there is considered to be a **negligible beneficial** degree of change to natural heritage features overall. At the local scale, there is considered to be a **moderate beneficial** degree of change, resulting from the retention and enhancement of landscape features. | | |
| | ***Future Baseline Environment*** | The proposed development, when compared to the permitted development, will result in no perceptible change to natural heritage features.<br>The development will remain confined to areas of previously development land; will retain key features such as the Ancient Woodland / chalk grassland; and create new habitat features; and will ensure the long-term management of the landscape. | | |

**6.6: Cultural Heritage Features**

**Table 8: Assessment of Cultural Heritage Features**

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
|---|---|---|---|---|
| The Kent Downs has a strong cultural inheritance, with a range of heritage assets scattered throughout the landscape. These features comprise Bronze Age barrows, Iron Age hill-forts, Roman villas and towns, medieval villages, and post-medieval stately homes and gardens. | Loss / damage to designated heritage assets within the Site | The proposed development allows for the retention of 39 buildings that are considered of be of historic interest. These structures will be retained in four distinct groups: the Fort retained and developed as an Historical Interpretation Centre; buildings to the north of the Fort, adapted as the village centre; former workshop and office buildings to the east of the Fort, adapted as part of an area for employment use; and, three bunkers to the west, forming part of the 'bunker park'.<br>These historic features will become an integrated part of the new settlement and their setting will be enhanced by the surrounding public realm and built environment.<br>The planning application will be accompanied by a Built Heritage Management Plan (BHMP) which will be set out how heritage features will be safeguard during the construction and operation of the proposed development.<br>In addition, interpretation will be provided for key heritage features, ensuring that visitors can fully appreciate and understand the Site's historic significance. | – Important historic features are protected and enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the BHMP |
| Fort Halstead in particular is a key heritage feature, being one of a series of 'mobilisations centres' constructed in the 1890's as part of the London Defense Scheme. | Loss / damage to the Fort | In relation to the Fort, selective tree and shrub clearance and maintenance is proposed to better reveal the historic form of the earthworks; to enable an understanding of the spatial relationship between buildings; selectively expose sightlines from gun emplacements to illustrate the defensive role of the Fort; ensure that views on the approach to the Fort (from along Crow Road) and views between the Fort and the proposed Village Centre are enhanced; and bring about an overall improvement to the setting of the Fort. | – Important historic features are protected and enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the BHMP |

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
|---|---|---|---|---|
| Fields of varying shapes and sizes and ancient wood-banks and hedges, set within networks of droveways and sunken lanes also contribute to the rich historic mosaic. | Loss / damage to ancient woodland within the Site | There are no existing ancient field boundaries or routeways within the Site, and the proposed development will not require modifications to local road network. All existing Ancient Woodland within the Site will be retained and enhanced through an appropriate management regime, and as illustrated in the DAS, new hedgerows will be created in key locations to help define open spaces and enhance character. | – Important historic features are protected and enhanced<br>– Important landscape features / habitats are protected and enhanced<br>– The development preserves the character of rural lanes | – Development in accordance with the Parameter Plans<br>– Development in accordance with the DAS design guidance<br>– Condition and planning obligation to implement the FEMS / LEMP |
| The landscape of the Kent Downs has been very influential on many people, places and events of cultural importance. These include the ancient Pilgrim's Way from Winchester to Canterbury, paintings by Samuel Palmer in the Darent Valley and the writing and paintings of Winston Churchill at home in Chartwell.<br><br>The biggest threats to the Kent Downs historic and cultural heritage are from a general lack of awareness and understanding of the importance of these many sites and features. The AONB management plan states that there is a need to encourage greater opportunities for information and interpretation. | Lack of interpretation of the Sites military history and location with the AONB. | The proposed development acknowledges the need for greater understanding and appreciation of heritage features within the Site. A Historical Interpretation Centre is proposed within the Fort, preserving a concentration of historic buildings, whilst creating a permanent facility that allows for the interpretation, access and upkeep of retained heritage assets.<br>The proposed development also seeks to enhance access and interpretation of the Site, and a range of mitigation measures are proposed. These include:<br>– Retention and enhancement of all Public Rights of Way on the Site.<br>– Partial upgrade of Footpath SR172 between the Site and Knockholt Pound to a cycle path.<br>– Partial removal of the security fence.<br>– Creation of new multifunctional green infrastructure, which will provide areas of open space and linkages from the Site to the surrounding footpath network.<br>– Provision of way-finder signs and interpretation signs throughout the Site, aiding navigation and providing interpretation of key landscape, ecology and heritage features.<br>With particular reference to the interpretation signs, it is anticipated that signage will be provided at the Historical Interpretation Centre; the village centre / Grade II Listed Penny Building; bunker park; wildlife area; and chalk grassland area, subject to more detailed design proposals.<br>There will be no change to the historic Pilgrim's Way which runs along the Site's southern boundary and runs along Lime Pit Lane / Star Hill Road (in part). | – Important historic features are protected and enhanced<br>– Access to the countryside is enhanced | – Development in accordance with the Parameter Plans<br>– Conditions and planning obligations to implement the FEMS / LEMP, BHMP and Travel Plan |
| **Degree of Change** | ***Current Baseline Environment*** | At the AONB scale, there is considered to be a **negligible beneficial** degree of change to cultural heritage features overall. At the local scale, there is considered to be a **high beneficial** degree of change, resulting from conservation and enhancement of heritage assets within the Site and provision of a Historical Interpretation Centre | | |
| | ***Future Baseline Environment*** | The proposed development, when compared to the permitted development, will result in no perceptible change to cultural heritage features.<br>The development will remain confined to areas of previously development land; will retain and enhance key features such as the Fort and Listed building; will provide access and interpretation to the historic environment; and will ensure the long-term management of heritage assets. | | |

**6.7: Understanding and Enjoyment**

**Table 9: Assessment of Understanding and Enjoyment**

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
|---|---|---|---|---|
| / | No public access to the Site | The proposed development of the Site from a high security research establishment to a new village will allow members of the public to access an area of the AONB that was previously private. The proposed development incorporates a range of measures to enhance the understanding and enjoyment of people living, working and visiting the Site. This includes creation of a village centre incorporating community space and convenience shop; public open space, including village green, informal open spaces and a network of green links; retention of the woodland and the vast majority of existing mature trees; and retention of key heritage features, including the creation of Historical Interpretation Centre within the Fort.<br>Furthermore, all existing Public Rights of Way around the Site will be retained and enhanced. This includes partial upgrade of Footpath SR172 between the Site and Knockholt Pound to a cycle path; partial removal of the security fence; new connections to the green links within the Site; and inspection to make sure that all footpaths are accessible and in a good state of repair. | – Important historic features are protected and enhanced<br>– Important landscape features / habitats are protected and enhanced<br>– The development creates new green infrastructure and open space<br>– Access to the countryside is enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the LEMP & BHMP |
| / | Lack of interpretation of the Site's heritage and landscape context | The proposed development acknowledges the need for greater understanding and appreciation of heritage features within the Site. A Historical Interpretation Centre is proposed within the Fort, preserving a concentration of historic buildings, whilst creating a permanent facility that allows for the interpretation, access and upkeep of retained heritage assets.<br>Provision of way-finder signs and interpretation signs will be provided throughout the Site, aiding navigation and providing interpretation of key landscape, ecology and heritage features. With particular reference to the interpretation signs, it is anticipated that signage will be provided at the Historical Interpretation Centre; the village centre / Grade II Listed Penny Building; bunker park; wildlife area; and chalk grassland area. | – Important historic features are protected and enhanced<br>– Access to the countryside is enhanced | – Development in accordance with the Parameter Plans<br>– Condition and planning obligation to implement the LEMP & BHMP |
| **Degree of Change** | ***Current Baseline Environment*** | At the AONB scale, there is considered to be a **negligible beneficial** degree of change to understanding and enjoyment overall. At the local scale, there is considered to be a **high beneficial** degree of change, resulting from enhanced access and interpretation | | |
| | ***Future Baseline Environment*** | The proposed development, when compared to the permitted development, will result in no perceptible change to understanding and enjoyment.<br>The development will continue to ensure there is public access to the Site; will retain and enhance Public Rights of Way; will create new open space and green infrastructure; and will provide access and interpretation to the historic environment. | | |

**6.8: Social and Economic Wellbeing**

**Table 10: Assessment of Social and Economic Wellbeing**

| Natural Beauty Criteria | Potential Effects | Design Response | Compliance with Policy and Guidance | Control Mechanisms |
|---|---|---|---|---|
| / | Employment / residential mix that is not appropriate | The proposed development will seek to foster the economic and social well-being of local communities within the AONB. The proposed mix of development has been carefully considered to ensure the right balance of homes / jobs for the local area and create a new live-work community. Specifically the proposals allow for the retention of QinetiQ, who are an important local employer and, subject to obtaining the planning permission sought, wish to remain on and invest in the Site following the withdrawal of DSTL. The development will also generate new job opportunities, and be attractive to a range of new businesses, replacing jobs lost through the relocation of DSTL from site. In addition, the proposed development will deliver a range of community facilities that can be used by the surrounding network of villages. | / | Development in accordance with the Parameter Plans |
| / | No provision of social infrastructure to serve existing / future local community | The proposed development will be of a sufficient size to establish local services. Proposals include creation of a village centre incorporating community space and convenience shop; and new primary school. The proposed development will also be of sufficient size to provide a range of recreational facilities that will encourage social interaction and promote healthy lifestyles. This includes a village green, informal open spaces, and a network of green links. The proposed development will provide enhanced access to the public transport network and facilities through the provision of a community bus service, which could provide connections to local schools, stations and Sevenoaks town centre. | / | Development in accordance with the Parameter Plans<br>Planning condition and planning obligation to implement the Travel Plan and the FEMS / LEMP. |
| **Degree of Change** | ***Current Baseline Environment*** | At the AONB scale, there is considered to be a **low beneficial** degree of change to social and economic wellbeing overall. At the local scale, there is considered to be a **moderate beneficial** degree of change, resulting from new housing, employment and social infrastructure provision. | | |
| | ***Future Baseline Environment*** | The proposed development, when compared to the permitted development, will enhance the social and economic well-being of the local area.<br>The development will provide additional market and affordable housing, supported by a range of community facilities. The design and layout of the development also creates an enhanced Village Centre, drawing together the mix of residential and employment uses and creating a more vibrant place. At the local scale, there is considered to be a **high beneficial** degree of change. | | |

## 7.0 Summary and Conclusions

Overall it is considered that the proposed development would positively contribute to the natural beauty criteria of the AONB.

The proposed development would enhance natural heritage features, ensuring the sensitive management of the woodland, mature trees and areas of chalk, semi-improved and neutral grassland. The proposed development would also benefit the understanding and enjoyment of the landscape, and the social and economic wellbeing of communities within the AONB. A range of new housing, employment and recreational facilities would be created, including providing public access and interpretation of the Site.

The development proposals are also considered to be compliant with the themes of the prevailing planning policy framework, ensuring a high standard of design and efficient use of land; protecting and enhancing the character of the AONB; and making a positive contribution to landscape, biodiversity, heritage and recreational assets.

For the vast majority of the natural beauty criteria, there is considered to be no perceptible change between the effects of permitted development and the effects of the proposed development. While the layout, scale and appearance of development will vary, the development will remain confined to areas of previously development land; will retain key features such as the Ancient Woodland / chalk grassland; will be largely contained by the perimeter woodland; and will continue to improve enhance the overall character and appearance of the Site. The only exception to this is when considering the Social and Economic Wellbeing of the AONB; the proposed development – through the delivery of additional housing and creation of a more integrated live-work community – could deliver some additional benefits over and above the permitted scheme.

A summary of the assessment findings is set out in Table 11 below.

**Table 11: Assessment of Summary**

| Criteria | Assessment Summary | Nature of Change |
|---|---|---|
| **Landscape Quality** | • Delivery of a well-designed settlement that reflects the existing structure of the Site and creates high quality buildings and open spaces.<br>• No disruption to the scarp slope and only minor changes to the topography of the Site<br>• No discernible change to local landscape character and improvement to the character and appearance of the Site<br>• Retention and enhancement of chalk grassland and woodland within the Site<br>• Minor increase in vehicle movements along local road / minor junction improvements but no physical changes to the local road network. | Beneficial |

| Criteria | Assessment Summary | Nature of Change |
|---|---|---|
| | • Appropriate management of landscape features within the Site<br>• No loss / damage to landscape features resulting from changes to access and recreation arrangements | |
| **Scenic Quality** | • Creation of a 'distinctive' new place and enhanced outward views within the Site<br>• Making the Site publicly accessible will allow people to experience new views and vista within the AONB<br>• Improving views towards the Site by removing existing tall buildings that are visible above the surrounding woodland<br>• The visually prominent chalk grassland to the south of the Site would be retained and enhanced | Beneficial |
| **Relative Tranquillity** | • No loss / damage to areas of non-developed land within the Site<br>• No introduction of new transport link infrastructure (roads) to provide access to the Site<br>• Improved bus service, including community bus serving the Site, both for residents and employees<br>• Retention and enhancement of woodland within the Site<br>• Control of lighting across the Site<br>• No physical changes to the local road network and only minor changes to the Sites access points.<br>• No increase in noise levels within the Site and no visual intrusion within the local landscape | Beneficial |
| **Natural Heritage Features** | • Retention and enhancement of biodiversity within the Site<br>• Retention and enhancement of chalk grassland within the Site<br>• Appropriate management of landscape features within the Site | Beneficial |

| Criteria | Assessment Summary | Nature of Change |
|---|---|---|
| **Cultural Heritage Features** | • Retention and enhancement of designated heritage assets within the Site<br>• Retention and enhancement of Ancient Woodland within the Site<br>• Interpretation of the Sites military history and location with the AONB | Beneficial |
| **Understanding and Enjoyment** | • Creation of public access to a currently private site<br>• Interpretation of the Site's heritage and landscape context | Beneficial |
| **Social and Economic Wellbeing** | • Employment / residential mix that reflects local need<br>• Provision of social infrastructure to serve existing / future local community<br>• Improved walking, cycling and bus services, supporting the new and existing local community | Beneficial |

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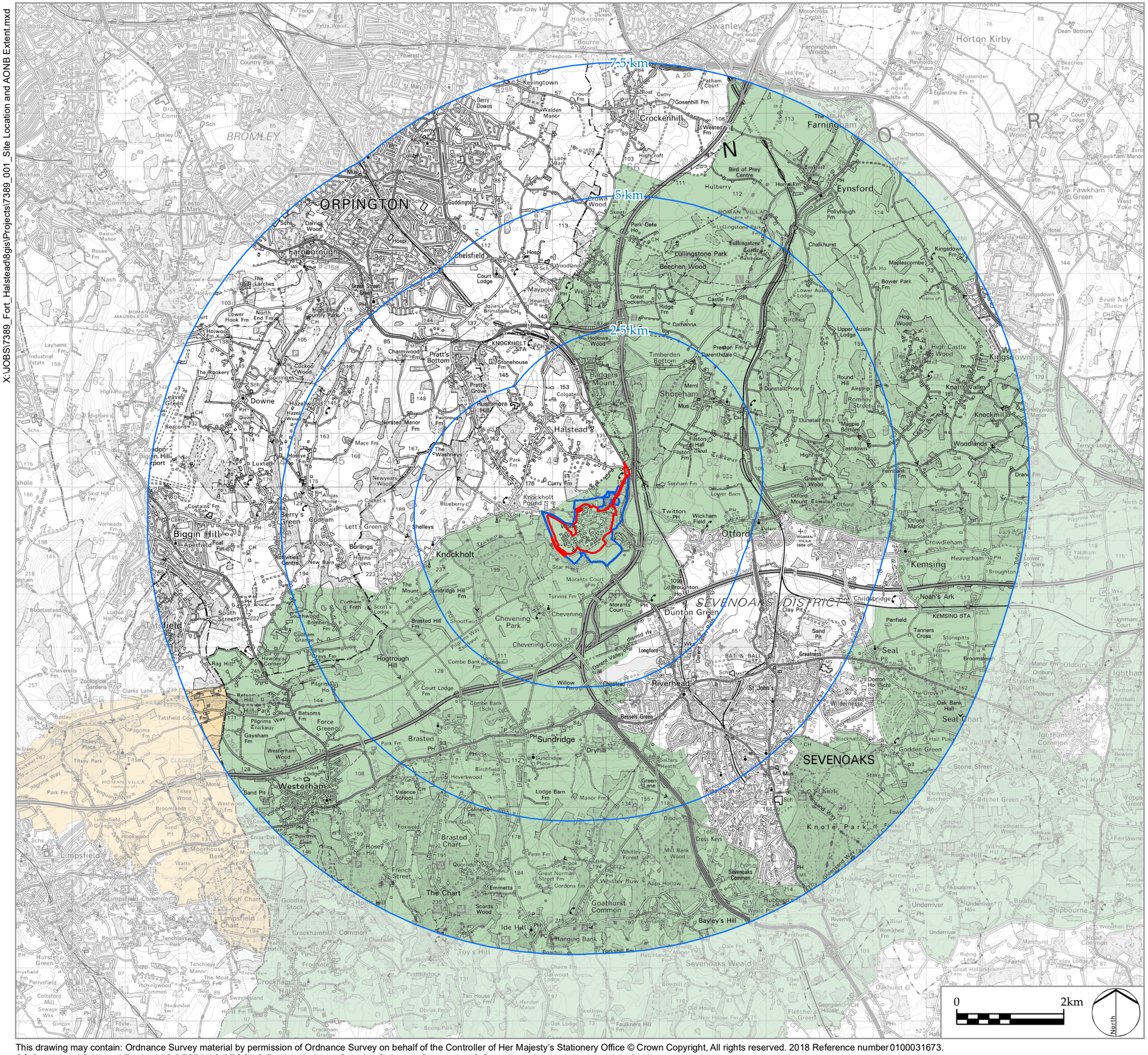


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LEGEND

- Application Site
- Wider Survey Area (Land within the Applicants Ownership)
- 2.5 km, 5 km and 7.5 km Radii around the Application Site
- Kent Downs Area of Outstanding Natural Beauty
- Surrey Hills Area of Outstanding Natural Beauty

LDĀDESIGN

PROJECT TITLE

FORT HALSTEAD

DRAWING TITLE

Figure 1: Site Location and AONB Extents

| | | | |
|---|---|---|---|
| ISSUED BY | Oxford | T: 01865 887 050 | |
| DATE | May 2020 | DRAWN | DL |
| SCALE @A3 | 1:70,000 | CHECKED | BC |
| STATUS | Final | APPROVED | PL |

**DWG. NO. 7389_001**

No dimensions are to be scaled from this drawing.
All dimensions are to be checked on site.
Area measurements for indicative purposes only.



Sources: Ordnance Survey, Natural England