BRACKNELL DATA CENTRE

Sustainability Statement

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Bracknell Data Centre
Development
Sustainability Statement
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1 INTRODUCTION

1.1 Overview of Project

1.1.1 This Sustainability Statement is intended to support a planning application for the development of lands at Cain Road, Bracknell, Berkshire RG12 1HN. It forms one of a suite of technical reports forming part of a full application for a data centre building.

1.1.2 The proposed development is located on the western edge of Bracknell, within the established Amen Corner Business Park, part of the wider Western Industrial Area. The Application Site is bounded by Cain Road to the north and Beehive Road to the west. The Application site extends to a total of 9.9 Ha and is made up of 2 distinct sections. The Main Site (7.5 Ha) and an area of land (2.4 Ha) to the south on the opposite side of Beehive Road (the 'Former Recreation Site'). The site currently comprises 2 no. existing office buildings surrounded by extensive area of car parking with intermittent amenity tree, shrub and hedgerow planting.

1.1.3 The Application Site lies within the administrative area of Bracknell Forest Council.

1.1.4 The application seeks consent for the erection of a single storey Data Centre building (containing data halls, associated electrical and AHU Plant Rooms, loading bay, maintenance and storage space, office administration areas and plant at roof level), emergency generators and emission stacks, diesel tanks and filling area, electrical switchroom, a water sprinkler pump room and storage tanks, a gate house / security building, MV substation, site access, internal access roads, drainage infrastructure and hard and soft landscaping.

1.1.5 No Use Class specifically for Data Centres exists within The Town and Country Planning (Use Classes) Order 1987. However, the proposed scheme is considered to be Class B8 – Use for storage, or as a distribution centre.

1.1.6 The primary function of the development is to support Cloud Computing services as part of the Operator's long-term commercial plan and provision of services. Both Office & Data Hall areas are considered occupied spaces.

1.2 Purpose of the Sustainability Statement

1.2.1 The purpose of the Sustainability Statement is to demonstrate that the principles of sustainability have been considered during the design of the development and how these will be further embedded throughout its lifecycle, in accordance with relevant national, regional and local planning policies and guidance.

1.3 Scope of the Sustainability Statement

1.3.1 The scope of the Sustainability Statement is based on relevant national, regional and local planning policies and strategies that address sustainability. In developing the framework for this strategy, the following policies and supplementary guidance have been reviewed:

- National Planning Policy National Planning Policy
- National Planning Policy Framework 2019 (NPPF); and
- Planning Practice Guidance 2014 (PPG).

Regional and Local Planning Policy and Guidance

1.3.2 The following adopted policies have been considered.

Bracknell Forest Core Strategy DPD - Adopted 2008

- Policy CS1: Sustainable Development Principles
- Policy CS7: Design
- Policy CS10: Sustainable Resources
- Policy CS12: Renewable Energy
- Policy CS 19: Location of Employment Development
- Policy CS 20: New Development in Employment Area's
- Policy CS23: Transport
- Policy CS24: Transport and New Development

Bracknell Forest Site Allocations Plan – Adopted 2013

- Policy CP1: Presumption in Favour of Sustainable Development
- Policy SA8 Land at Amen Corner (South), Binfield

Bracknell Forest Borough Local Plan (2002)

1.3.3 This document was adopted in January 2002. Whilst some of the policies have been replaced by the Core Strategy and the Site Allocations Plan, the following saved policies may be relevant to this proposal.

- Policy R8: Public rights of way
- Policy EN1: Protecting tree and hedgerow cover
- Policy EN2: Supplementing tree and hedgerow
- Policy EN3: Nature Conservation
- Policy EN6 : Prevention of Flooding
- Policy EN20: Design Considerations in New Development
- Policy EN22: Designing for accessibility
- Policy EN25: Noise and other pollution
- Policy M4: Highway Measures in association with new development

Binfield Neighbourhood Plan (2016)

1.3.4 The Binfield Neighbourhood Plan was brought into legal force by Bracknell forest Council on 20th April 2016. It forms part of the development plan for Bracknell Forest and is used for determining planning applications in the Binfield Parish.

- Policy ENV2: Air Quality
- Policy BF2: Protection of Heritage Assets

Supplementary Planning Document (SPD) – 2008

1.3.5 The following adopted Supplementary Planning Document have been considered.

- Design Supplementary Planning Document

- Sustainable Resource Management Supplementary Planning Document

Emerging Policy

1.3.6 Bracknell Forest Council are currently preparing a new local plan which will set the long term spatial vision and development strategy for the borough up to 2036. Once adopted it will replace the Bracknell Forest Local Plan (2002) and the Core Strategy (2008). A Draft Local Plan was consulted on between 5th October until 6th December 2019. The document has not been through examination in public so less weight can be given to any of the policies. However, it does give a clear direction to how Bracknell Forest Council wish to see the area developed in future. Consequently, it is considered that it would be useful to highlight the relevant policies contained within the document.

Draft Bracknell Forest Local Plan (2019)

Draft Bracknell Forest Local Plan Part 1 - Strategic Revised Growth Strategy:

- Policy LP 1 Sustainable development principles
- Policy LP 2 Sustainable locational principles
- Policy LP 13 Transport principles
- Policy LP 15 Green Infrastructure
- Policy LP 17 Flood risk
- Policy LP 19 Design principles

Draft Bracknell Forest Local Plan Part 2 - Non-Strategic Development Management Polices:

- Policy LP25: Designated Employment Areas
- Policy LP39: Design
- Policy LP42: Protection and enhancement of the historic environment
- Policy LP43: Biodiversity
- Policy LP44: Designated nature conservation and geological sites
- Policy LP45: Protection and enhancement of trees and hedgerows
- Policy LP46: Sustainable construction
- Policy LP47: Renewable and low carbon energy
- Policy LP48: Sustainable Drainage Systems (SuDS)
- Policy LP49: Pollution and hazards
- Policy LP50: Development of land potentially affected by contamination
- Policy LP51: Assessing transport impacts and requirements
- Policy LP52: Transport infrastructure provision
- Policy LP53: Travel Plans
- Policy LP54: Parking

1.4 Structure of the Sustainability Statement

1.4.1 At a national level, one of the underlying objectives of the NPPF (2019) is the presumption in favor of sustainable development. The NPPF defines the role of *planning* within the three dimensions of sustainability (in paragraph 8) as:

'an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating development requirements, including the provision of infrastructure;

a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services that reflect current and future needs and support communities' health, social and cultural well-being; and

an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.'

1.4.2 In addition to the policies comprising the NPPF, the PPG as launched in 2014, has been considered within this report.

1.4.3 The requirements of the sustainability policies presented within national and local policy and guidance documents will be discussed within the relevant sections of this Sustainability Statement.

1.4.4 Based on the planning policy review, this Sustainability Statement has been structured to address the following aspects of sustainability, considering all three pillars of sustainability; social, economic and environmental:

- Sustainable Economic Development;
- Strong, Vibrant and Healthy Communities;
- Transition to a Low Carbon Future;
- Conserving and Enhancing the Natural Environment;
- Promoting Sustainable Transport; and
- Prudent Use of Natural Resources and Minimising Waste.

1.4.5 These aspects are then drawn together in the concluding section, summarising the sustainable design and construction principles incorporated within the development.

2 SUSTAINABLE ECONOMIC DEVELOPMENT

2.1 Introduction

2.1.1 The first of the 'three dimensions' of sustainable development is an economic objective. This is recognised in the NPPF, identifying the 'economic role' of the planning system to *"help build a strong, responsive and competitive economy".*

2.1.2 Bracknell Forest Council highlight the need for local employment and training opportunities, an objective that the proposed development will help to meet, as detailed below. This is supported by the Bracknell Forest Core Strategy DPD (2008) - Policy CS 20: New Development in Employment Area's and the emerging Draft Bracknell Forest Local Plan (2019) - Policy LP25: Designated Employment Areas.

2.2 Short and long-term employment benefits

2.2.1 The planned investment in the construction, operation and maintenance of the proposed data centres will generate substantial economic benefits in the UK economy.

2.2.2 The Operator is planning to invest over £500 million from 2020 to 2032, including capital and operating expenditures, to build and operate new data centres. This investment includes in-country (local) spending on construction labour and materials, utilities and imports of highly specialised and proprietary equipment.

2.2.3 The construction of the Data Centre and fitout of the first phase will sustain approximately an average of 400 full-time equivalent (FTE) jobs. Subsequent fitout phases will be timed to meet business demand, each taking approximately 6 months to complete. The completion of each of the remaining fit out phases will sustain approximately an average of 120 full-time equivalent (FTE) jobs. In calculating FTE impacts, the Operator considers Direct and Indirect economic impact generated from projected capital expenditure utilising the input-output multiplier methodology. The estimated result includes those employed by the Operator directly and additional jobs generated in the related industries through the supply chain. The data is extrapolated based on historical Operator data from similar projects and data from the UK's Office for National Statistics (ONS).

2.2.4 The operation of the Data Centre will sustain approximately 40 FTE jobs during the first three years. After the first three years, the ongoing operation expenditure is estimated to sustain approximately 50 FTE jobs The direct jobs supported include construction-related jobs, such as construction general contractors, subcontractors, tradesmen, as well as operation and maintenance jobs, such as engineers, technicians, janitors, security guards and many others. Due to the sophisticated design and engineering of the data centres, the operation and maintenance jobs are high-skilled and high-tech.

2.2.5 The Operator runs a number of training and job placement programs, including full-time, classroom-based skills development and training program that prepares individuals for careers in the cloud and connects them to potential employers. Programs are focused on unemployed or underemployed individuals and designed to educate young adults, military veterans, members of the military reserve, those leaving the Armed Forces, and service spouses on the latest software development and cloud computing technologies.

2.2.6 Where possible, the Operator will recruit local contractors and operational employees. Additionally, there are opportunities further down the construction supply chain, with use of local suppliers for materials and equipment.

3 STRONG, VIBRANT AND HEALTHY COMMUNITIES

3.1 Introduction

3.1.1 The second of the 'three dimensions' of sustainable development is a social objective. This is recognised in the NPPF, identifying the 'social role' of the planning system as to;

"to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being".

3.2 Creating a High-Quality Built Environment

3.2.1 The proposal has been carefully designed in accordance with both Operator specification whilst also ensuring a high quality development, including landscaping and new tree planting.

- Extensive masterplanning and building massing exercises have been undertaken in developing the site layout. Orientation and placement of buildings and site infrastructure have required careful consideration so as to limit the presence of structures whilst maximising the site's operational efficiency.
- For all buildings on site, a muted colour scheme is used to harmonise with the surrounding landscaping and natural environment, providing pleasant and familiar aesthetics to onlookers and resident workers. The chosen envelope cladding will provide a clean and functional look across the entire development. Office ribbon glazing will receive a feature frame and mullion extensions to form solar shading.
- At site perimeters a mixture of high and low secure fencing is employed with functional and robust aesthetics. In conjunction, perimeter landscaping is utilised to soften site edges and obscure public views into the site.

3.2.2 The proposed site also benefits from extensive landscaping, breaking up the development volumes with natural and aesthetically pleasing environments The development proposals have been designed to be placed in the centre of the site in order to protect the existing site boundaries which are well landscaped, with established belts of trees facing Cain Road and Beehive Road. These will also be underplanted / infilled where practicable. The proposal will also enhance the ecological value of the Former Recreation Site.

3.2.3 The landscape proposals have been designed as an integral part of the proposed development to provide treatment and landscape integration for the perimeter and internal part of the site, and mitigation and visual amenity from the properties and roads adjacent to the Application Site boundary. The landscape design proposes predominantly native tree and shrub planting focussed on the enhancement of the local landscape.

3.2.4 The detailed design features supports the Bracknell Forest Core Strategy DPD (2008) - Policy CS7: Design and Supplementary Planning Documents (2008) – Design and Sustainable Resource Management. The design features also support the emerging Draft Bracknell Forest Local Plan (2019) Policy LP39: Design.

3.3 Safety and Security

3.3.1 Measures to optimise the safety and security of the site have been designed into the proposed facility. Measures currently present or proposed include:

- Security lighting will be mounted along the building facade and on mounting poles at a height of 6m or 8m within the general compound area. Within the general compound they will be activated via presence and daylight detection to minimise hours of operation.
- For the rest of the site security lighting will operate dusk until dawn. CCTV will be located along the line of the security fences. Equipment will be mounted on 8m high poles with a black finish to match lighting poles.

3.3.2 2.4m and 3m high security weld mesh fencing is proposed at the Data Centre site perimeter. Weld mesh fencing has been provided to be less visually obtrusive that pallisade fencing, while still providing the level of security required by this facility. Both fence types will be finished in green to help this to blend into the landscaping and grass site perimeters.

3.3.3 The detailed design measures will support the Bracknell Forest Core Strategy DPD (2008) - Policy CS7: Design and Supplementary Planning Documents (2008) – Design and Sustainable Resource Management. The design features also support the emerging Draft Bracknell Forest Local Plan (2019) Policy LP39: Design

3.3.4 Combined with the CCTV lighting is also proposed (8m in height) around the site, providing lighting to access areas, pedestrian routes and for surveillance. The lighting design has been optimised for the site to ensure no obtrusive glare, light spillage or other light nuisance on neighbouring uses. The external perimeter lighting is required during hours of darkness (dusk til dawn). Lighting within the generator compound incorporates integral motion sensors and will only be activated as necessary.

3.3.5 In line with the BREEAM UK Data Centres 2010, the design team has and will continue to consult with and seek advice from the local police Architectural Liaison Officer (ALO) on designing out opportunities for crime in line with the principles of Secure by Design (SBD). Any recommendations made will be incorporated into the final design and the development built to conform with the principles and guidance of Secure by Design.

3.4 Accessibility to local services

3.4.1 The site is on the western edge of Bracknell, within the Amen Corner Business Park. The Application Site is bounded by Cain Road to the north-east and Beehive Road to the west. To the north of the Application Site is a residential area, with industrial buildings located to the east, west and south. To the south west is an area of open land (the subject of a mixed-use allocation).

3.4.2 In line with the BREEAM UK Data Centres 2010, the development will further develop a BREEAM compliant travel plan as part of the feasibility and design stage based on the finding of a site specific travel survey and assessment. The development will incorporate 10 cycle storage spaces and provide accessible , changing facilities and locker facilities.

3.5 Promoting healthy communities

3.5.1 The government's vision of the planning system is to develop healthy communities through effective design and integration of facilities. These aspects focus on issues including the provision of natural/appropriate lighting, adequate noise levels and design layout to enable sufficient space and a high standard of living for communities.

3.5.2 The NPPF's PPG provides advice on noise associated with new developments. The proposal has taken this guidance into consideration to ensure that potential noise impacts associated with the proposed development upon residents or the local surroundings have been appropriately considered within the design. In addition, the guidance on light pollution, air quality and health in the NPPF'S PPG have been incorporated within the design works of the proposed development to ensure that the development appropriately manages lighting, air pollution and that overall, the development promotes healthy communities.

3.5.3 The BREEAM UK Data Centres 2010 requires a noise impact assessment to be undertaken in compliance with BS4142. This will determine the existing and proposed background noise levels. The rating level of the noise source from the site/building will target to be equivalent to or less than the background noise level. The noise impact assessment must be carried out by a suitably qualified acoustic consultant.

3.5.4 An assessment of the noise from the facility has been carried out in accordance with BS 4142:2014+A1:2019 which is the nationally recognised standard for the assessment of industrial and commercial sound. A baseline acoustic survey was undertaken, and an acoustic model was built of the proposed facility for normal worst-case operations; testing of back-up generators and for the rare case of a major grid power failure with all generators running.

3.5.5 During normal operation and generator testing, predicted operational noise levels at NSRs would be below or just exceed the prevailing background sound levels; would be well below the thresholds at which critical health effects would occur according to guidance published by the World Health Organisation; and would only result in a small increase to existing baseline ambient sound levels. Furthermore, noise from the proposed development would be similar in character to other uses within the vicinity. On this basis, the noise impacts for general operation of the proposed development are anticipated to be negligible. Noise from the generators has been mitigated and reduced to a minimum by locating the generators in enhanced acoustic enclosures. These enclosures are a higher-performance specification than the Applicant typically uses (reducing the sound emissions by over 33%). Notwithstanding this, in the event of a major grid failure, if all emergency generators are required, the noise impact would be considered as significant during the night-time. However, due to the rare likelihood of the emergency scenario, National Grid reliability and the in-built redundancy and infrastructure maintenance systems, this is unlikely to occur in practice and/or for any length of time and should therefore be considered acceptable. The Applicant also has a rigorous internal process for equipment inspection and preventative maintenance with the objective of avoiding the use of the emergency generators.

3.5.6 The detailed assessment supports the Bracknell Forest Core Strategy DPD (2008) - Policy CS1: Sustainable Development Principles, Bracknell Forest Borough Local Plan (2002)- saved Policy EN25 - Noise and other pollution and the Sustainable Resource Management Supplementary Planning Documents (2008). It also supports the emerging Draft Bracknell Forest Local Plan - Policy LP49: Pollution and hazards.

3.5.7 An Air Quality Assessment has been undertaken for the development. Impacts during construction, such as dust generation and plant vehicle emissions, are predicted to be short term and only relevant during the construction phase. The results of the risk assessment of construction dust impacts undertaken using the Institute of Air Quality Management (IAQM) dust guidance, indicates that before the implementation of mitigation and controls, the risk of dust impacts will be medium. Implementation of mitigation measures described in the IAQM construction dust guidance should reduce the residual dust effects. Section 7 of the Air Quality Assessment details mitigation measures to be taken during construction.

3.5.8 Once the site is operational the main sources of emissions will be the 11 diesel-powered generators. Concentration of NO_2, PM_{10}, SO_2, CO and benzene have been predicted at selected sensitive receptors using a detailed atmospheric dispersion model and have been compared with relevant long and short term National Air Quality Strategy (AQS) objectives. The long-term

operational impacts for all pollutants are predicted to be 'negligible' and the short-term operational impacts have been screened-out as being insignificant at all receptors. This supports the adopted Bracknell Forest Core Strategy DPD (2008) - Policy CS1: Sustainable Development Principles, Bracknell Forest Borough Local Plan (2002) - saved Policy EN25 - Noise and other pollution and the Sustainable Resource Management Supplementary Planning Documents (2008). It also supports the emerging Draft Bracknell Forest Local Plan - Policy LP49: Pollution and hazards.

3.5.9 A lighting strategy has been prepared in support of the application which ensures appropriate levels of lighting (lumens) around the site and access routes so the development is fit for purpose and can operate 24 hours. The lighting design has been optimised to reduce glare, spillage or other light nuisance to adjacent sites and/or public roads. Concerning the external lighting strategy for the site, the use of high efficiency, low energy LED lighting in combination with presence and daylight sensors ensuring energy use and light pollution will be minimised as far as possible in compliance with the Bracknell Forest Core Strategy DPD (2008) - Policy CS1: Sustainable Development Principles and Policy CS10: Sustainable Resources. The lighting strategy also supports Bracknell Forest Borough Local Plan (2002) - saved Policy EN25 - Noise and other pollution, the Sustainable Resource Management Supplementary Planning Documents (2008) and the emerging Draft Bracknell Forest Local Plan - Policy LP49: Pollution and hazards, and Policy LP47: Renewable and low carbon energy.

3.5.10 In line with the BREEAM UK Data Centres 2010, external lighting design will be compliant with Table 1 (and its accompanying notes) of the ILE Guidance notes for the reduction of obtrusive light 2005. All external lighting (except for safety and security lighting) will automatically switched off between 2300 hrs and 0700 hrs. This can be achieved by providing presence detectors, combined presence detectors, daylight sensors, photocells and/or time switch set to the appropriate hours for all external lighting. Safety and security lighting provided that will be used between 2300hrs and 0700hrs and will comply with the lower levels of lighting recommended during these hours in Table 1 of the ILE's Guidance notes.

3.5.11 In line with the BREEAM UK Data Centres 2010, the development will target a Considerate Constructors Scheme (CCS) score of between 32 and 35.5. During the construction phase, the contractor will implement best practice policies in respect of air (dust), water (ground and surface) pollution arising from the site and operate an Environmental Management system such as ISO 14001.

3.5.12 A review of ground contamination and ground gas assessments previously produced in relation to the Application Site has been undertaken by RPS.

3.5.13 The Phase 1 Environmental Assessment, CBRE (2018) indicates that the site has a history of agricultural land use, and the eastern area of the site was used as a clay pit and subsequently infilled (c.1988) when the local brick works ceased to operate. The site later became a Hewlett Packard facility from c.1989. It is understood that the clay pit was infilled as part of the Beehive Landfill (industrial and commercial waste) which extends off-site to the south and east. The report concludes that the site is situated in an area of low sensitivity with respect to groundwater and surface water resources. The risk assessment identified the potential for active source – pathway – receptor pollutant linkages relating to potential ground contamination and ground gas and recommended a Phase 2 Site Investigation.

3.5.14 The Phase 2 Geo-Environmental Assessment, CBRE (2018) concluded that based on the measured contaminant concentrations, site soils and groundwater concentrations do not present a significant risk to human health under a commercial development scenario. Asbestos was not recorded in soil samples analysed; however asbestos cement was recorded in one location during the investigation in the area of the historical clay pit. It concluded that considering the number of samples analysed during investigation, this was not considered to be indicative of a problem requiring site wide mitigation measures. Several contaminants were identified in exceedance of assessment criteria protective of controlled waters (groundwater and surface water), however, it

was concluded that the risk to controlled waters was not indicated to be significant. Six rounds of ground gas monitoring in 2018 which concluded that the site would fall into 'low' risk and basic gas protection measures would be required within any proposed buildings on site. The overall conclusion stated that the site was of low risk with respect to ground contamination issues and recommended that no remediation was considered necessary, with the exception of the inclusion of basic gas protection measures into new structures.

3.5.15 A Supplementary Gas Risk Assessment and Specification of Gas Protection Measures was undertaken by Ramboll, 2020 following the risk assessment undertaken by the CBRE. The assessment undertook further four rounds of gas monitoring and reported that data was similar to that provided by CBRE. The Ramboll report goes on to specify gas protection requirements in accordance with BS8485. As well as setting out ground gas protection requirements the report also sets out mitigation measures relating to material management, a capping system for landscaped areas, protection of water supply pipes, a watching brief during groundworks and a strategy for reacting to unexpected contamination.

3.5.16 RPS has produced a report (ref 20305B-RPS-XX-XX-RP-P-9734) identifying outstanding work requirements in relation to ground contamination and ground gas that will likely be required prior to occupation of the completed development. This would be presented in a verification report containing the following information:

- Surface Cover System
- Ground Gas Protection Measures
- Water Supply Pipe Protection
- Discovery Strategy

3.5.17 The site investigation and strategy detailed supports the Bracknell Forest Borough Local Plan (2002) - saved Policy EN25 - Noise and other pollution, the Sustainable Resource Management Supplementary Planning Documents (2008) and the emerging Draft Bracknell Forest Local Plan - Policy LP49: Pollution and hazards and Policy LP50: Development of land potentially affected by contamination.

3.6 Pre-Application Engagement

3.6.1 A community engagement specialist, Tristan Fitzgerald Associates, has been commissioned by the applicant to carry out engagement activities as the application is progressed to determination. In early March 2021 an information note will be sent to leading members of Bracknell Forest Borough Council, Bracknell Forest Borough Council local ward members for Binfield and Warfield and to Binfield Parish Council to bring the development proposals to their attention and offer a way of finding out more detail regarding the proposals, outside of the formal application process. Virtual meetings are also planned with borough councillors and members of Binfield Parish Council.

3.6.2 A request for an Environmental Impact Assessment (EIA) Screening Opinion was submitted to the Bracknell Forest Council on 11th December 2020.

3.6.3 A formal Screening Opinion was received on the 13th January 2021, which confirmed that the Local Planning Authority is of the opinion that the submission of an Environmental Statement in connection with this development at this time is not required (Reference 20/00044/SCR).

3.6.4 Alongside the EIA Screening Request on the 11th December 2020, the Applicant carried out formal pre-application consultation with the Local Planning Authority, including the submission of

proposed project details and an introductory virtual meeting on a 22nd January 2021 to discuss the overall principle of development and planning approach.

3.6.5 Following this meeting, a formal pre-application response was received on 11th February 2021.

4 TRANSITION TO A LOW CARBON FUTURE

4.1 Introduction

4.1.1 Climate change is widely regarded as the most pressing challenge for sustainable development. The UK Sustainable Development Strategy, 'Securing the Future' recognises climate change and energy as a priority area for UK's sustainable development. The Government has created a legally binding framework for reducing CO_2 emissions through to 2050 via provisions made within 'the Climate Change Act' (2008). This establishes a specific duty on the Secretary of State to ensure that greenhouse gas emissions are reduced by 100% by that date. On 12 June 2019, the UK Government revised their target committing to at least a 100% reduction of greenhouse gas emissions (compared to 1990 levels) in the UK by 2050.

4.1.2 However, not only is it important to consider how a proposed development can mitigate climate change, by reducing greenhouse gas emissions, it is also fundamental to ensure that the development is resilient to potential future changes in climatic conditions.

4.2 Mitigating Climate Change

4.2.1 The NPPF requires local authorities "to support renewable and low carbon energy and associated infrastructure".

4.2.2 Guidance on Climate Change published in the NPPF's PPGs aims to ensure that suitable mitigation and adaptation measures to address potential impacts of climate change are considered within new developments. The proposal has taken into consideration this guidance to ensure that the project has been suitably designed to take account of climate change. Additionally, guidance on Renewable and Low Carbon Energy has also been considered within the proposed development's design.

4.2.3 The adopted Bracknell Forest Core Strategy Development Plan, Policy CS12 – Renewable Energy, Policy CS10 – Sustainable Resources and the Sustainable Resource Management Supplementary Planning Document places an emphasis on CO_2 reduction, on site renewables and sustainable design, construction and resources. This is further supported by the emerging Draft Bracknell Forest Local Plan (2019), Policy LP 1 Sustainable development principles, Policy LP46: Sustainable construction and Policy LP47: Renewable and low carbon energy.

4.2.4 In order to demonstrate compliance with this national guidance and local policy, an Energy Report (ref: 20305B-CUN-XX-XX-RP-E-9736) has been prepared as part of this planning application. Overall conclusions of this assessment are detailed below.

4.2.5 The proposed energy strategy approach is based on a recognised structure of reduction in carbon dioxide emissions through the energy hierarchy as below.

- Reducing the building energy consumption (Be Lean) by optimising the design and construction of the building to ensure less energy is required.
- Supplying the energy required in an efficient manner (Be Clean).
- Supplying the energy from Low Zero Carbon and Renewable Energy Sources (Be Green).

4.2.6 The energy strategy has assessed multiple possible applications and design measures in compliance with the energy hierarchy. Consideration has been given to passive and active design measures (Be Lean). When considering reductions in carbon dioxide (CO_2) emissions it is important to minimise the heat losses through the building fabric. U-values for all building fabric elements and openings have been specified to meet or exceed the levels required by Building

Regulations. In addition, heat losses from infiltration have been minimised and a low air permeability target has been set.

4.2.7 In addition, high efficiency evaporative cooling serves the building's data halls and the mechanical building services installation will be specified to achieve high annual energy efficiency in operation. All systems have efficiencies and controls which will meet or exceed the requirements of Part L of Building Regulations (2013). The inclusion of these will support these will support the reduction in the CO_2 emissions associated with the operation of the proposed development.

4.2.8 Connection to a decentralised energy network and the use of Combined Heat and Power (CHP) is a recognised method of generating energy more efficiently (Be Clean). Where an existing decentralised energy network is not present, an assessment of the feasibility of establishing a decentralised energy system for the proposed development should be undertaken; including an assessment of the feasibility of a CHP communal heating system. As there is minimal demand for heat within the data centre, finding a use for the generated heat will not be feasible. As such, CHP is not proposed for the project. Additionally, as the electricity grid continues to decarbonise, with renewable energy coming online, incorporation of CHP will not result in reduction in terms of carbon emissions. The feasibility of connecting to an existing or proposed district network has been investigated for the site. The development is not located adjacent to major heat users, nor is there any known district heat networks within the vicinity of the development. Accordingly, connection to any district heat network is not considered applicable.

4.2.9 In supplying energy from Low Zero Carbon and Renewable Energy Sources (Be Green), the energy strategy considered a number of different factors (further detail within the Energy Statement), including local authority requirements, land use, potential noise impacts and available space within the development, it was concluded that the best energy strategy for the different building types is the following:

- VRF (air source heat pump) heating
- 200m^2 of solar photovoltaic

4.2.10 The development demonstrates a 83% reduction in CO_2 emissions compared with a 2013 Building Regulations compliant building and a 24% contribution form on site renewables for the total energy demand of the offices. The development is also targeting an EPC A rating: the highest available and 15 credits under the BREEAM ENE-01 – Reduction in CO2 emissions issue. This supports Bracknell Forest Core Strategy Development Plan, Policy CS12 – Renewable Energy, Policy CS10 – Sustainable Resources and the Sustainable Resource Management SPD. In relation to the emerging Draft Bracknell Forest Local Plan (2019), Policy LP 1 Sustainable development principles, Policy LP46: Sustainable construction and Policy LP47: Renewable and low carbon energy are addressed.

4.2.11 The Operator has a strong focus on sustainability and has programs in place to reduce its carbon footprint, with a commitment to achieve net zero carbon by 2040. To work towards the achieving this ambitious goal, the Operator focuses on energy efficiency and reducing power consumption across its operations. The Operator's facilities are already far more efficient than traditional enterprise or on-premises servers. The Operator has commissioned studies to estimate the efficiency of its infrastructure in comparison to traditional computing and found it to be more than three times as efficient, due to efficient servers and higher utilisation rates.

4.2.12 The Operator's efforts on energy efficiency are never complete and it continuously seeks out additional opportunities to reduce energy usage from every aspect of its business. The operator custom builds its own hardware, which is designed to run workloads with high level of resource utilisation to increase efficiency.

4.2.13 Beyond efficiency, the Operator is working to decarbonise the electricity that powers its facilities. The Operator purchases renewable energy by enabling new wind and solar projects, across Europe. To date, the Operator has announced renewable energy projects in eight European

countries, including the United Kingdom. The UK projects will generate enough new clean energy to power the equivalent of over 165,000 average UK homes annually. The Operator is on a path to meet its global energy consumption with 100 percent renewable energy by 2025.

4.2.14 The Operator is also committed to water conservation at its data centres. The Operator prioritises the use of outside air cooling, which means that water is rarely used to cool servers. Utilising this highly efficient cooling solution, the proposed data centre will use the equivalent annual water usage of just eight average UK households – less than 1000m^3.

4.3 Carbon emissions generated during construction

4.3.1 During construction, best working practices will be followed as set out below for the proposed development. This will ensure that where possible, construction activities with the potential to generate carbon emissions will be appropriately managed and undertaken to minimise the production of carbon dioxide emissions and ensure the efficient use of fuel set out through the following ways:

- Where possible, pre-fabricated elements should be delivered to the site ready for assembly, which will reduce vehicle movements as part of the construction process.
- Construction materials should be sourced locally where possible, to minimise the impact of transportation.
- Adhere to the Construction Traffic Management Plan (CTMP) to manage the sustainable delivery of good and materials.
- Vehicles used in road deliveries of materials, equipment and waste arisings on- and off-site should be loaded to full capacity to minimise the number of journeys associated with the transport of these items.
- In line with the BREEAM Man 02 – Construction Site Impacts issue, the development will monitor, report and set targets for energy arising from transport to and from site.
- All machinery and plant should be procured to adhere with emissions standards prevailing at the time and should be maintained in good repair to remain fuel efficient.
- When not in use, vehicles and plant machinery involved in site operations should be switched off to further reduce fuel consumption.
- To the extent possible, a cut and fill balance should be sought across the site, reducing or avoiding the need for importing and exporting soil.
- Where possible, local waste management facilities should be used to dispose of all waste arisings, to reduce distant travelled and associated emissions.
- The volume of waste generated should be minimised, and resource efficiency maximised, by applying the principles of the waste hierarchy throughout the construction period. Segregated waste storage should be employed to maximise recycling potential for materials.
- Equipment and machinery requiring electricity should only be switched on when required for use. Procedures should be implemented to ensure that staff adhere to good energy management practices, e.g. through turning off lights, computers and heating/air conditioning units when leaving buildings.
- In line with the BREEAM Man 02 – Construction Site Impacts issue, the development will monitor, report and set targets for energy arising from site activities.
- In line with the BREEAM Man 02 – Construction Site Impacts issue, the development will monitor, report and set targets for water consumption arising from site activity.

4.3.2 A Code of Construction Practice (CoCP) has been submitted in support of the planning application (ref 20305B-RPS-XX-XX-RP-P-9738) which sets out the standards and procedures to which the contractor must follow in order to manage the potential environmental impacts of the construction works.

4.3.3 Consideration will also be given at the detailed design stage to specifying construction materials with low embodied energy (i.e. low levels of energy used during their manufacture), and to methods of minimising energy use during construction. Further detail relating to energy use associated with the proposed developments is set out in section 7 (Prudent use of natural resources and minimising waste) of this report.

4.3.4 Opportunities shall be considered as part of the detailed landscape strategy to mitigate and adapt to climate change impacts.

4.4 Carbon emissions generated during Operation

4.4.1 The section on sustainable transport (section 6) in this Sustainability Statement describes the opportunities for the use of more sustainable modes of transport by future occupants. This process will further reduce the potential for greenhouse gas emissions resulting from the proposed developments.

4.4.2 The offices incorporate glazing to reduce office lighting loads. The glazing is designed to restrict overheating by incorporating non-standard (high) g-values, deep reveals and mullion extension caps to form solar shading.

4.4.3 Within the offices, it is anticipated there will be numerous additions to the basic systems and controls to reduce their energy requirement, including the provision of high efficiency, low energy LED luminaires which are zoned within the space and with the fitment of daylight sensors and PIR detectors and/or occupancy controlled Lighting will also be designed and specified in accordance with the CIBSE Code for Lighting 2006 and CIBSE Lighting Guide 7 (section 3.3, 4.6,4.7, 4.8 and 4.9) as a minimum.

4.4.4 The external lighting will make use of high efficiency, low energy LED luminaires mounted on 6m or 8m high poles. They will be designed in keeping with the site's modern aesthetic and finished in black (RAL 9017). External lighting will be specified in accordance with CIBSE Lighting Guide 6 as a minimum.

4.5 Maximising Resilience to Climate Change

4.5.1 In addition to assessing the potential impact that the proposed development could have on climate change, consideration needs to be given to the potential effect that climate change could have during its lifetime, and how resilient the development is to predicted changes such as increased flooding, and more extremes in temperature and wind speeds.

4.5.2 The risk of flooding is increased in areas of development with extensive hard surfaced areas where adequate storm water drainage is absent. Milder, wetter winters and unusual, unpredictable rainfall patterns will require a more adaptable drainage strategy to accommodate any new or increased risks of flooding within the lifetime of the development.

4.5.3 The NPPF strengthens the consideration of flood risk and its management requiring local authorities to establish a proactive strategy to mitigate and adapt to changing climatic conditions. The framework also aims to avoid inappropriate development in areas at risk of flooding by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere.

4.5.4 The Environment Agency Flood Map for Planning, which is available online, indicates that the Application Site in its entirety is located within Flood Zone 1, where the annual probability of

flooding from fluvial or tidal sources is classified as less than 1 in 1,000. Environment Agency surface water flood risk mapping indicates the site is predominantly has a 'very low' surface water flood risk. Surface water flood risk extents are predicted in the north, south and west of the site. In the north of the site, there is a linear extent of 'low' surface water flood risk, with discrete areas of 'medium' and 'high' flood risk located within it. There is a linear extent of predominantly 'medium' surface water flood risk across the southern perimeter, and an area of 'high' risk in the central southern area. In the west of the site, there is a linear area of predominantly 'medium' surface water flood risk rising to a small area of 'high' flood risk in the south of the predicted extent. Environment Agency surface water flood modelling predicts that during a 1 in 100 year rainfall event the site is generally not expected to experience surface water flooding. Overall, the site is assessed as having generally a very low susceptibility to surface water flooding.

4.5.5 Environment Agency flood risk from reservoirs mapping indicates that the site is not located in an area at flood risk from reservoir flooding. The potential for groundwater flooding is considered to be low. The Environment Agency online groundwater Source Protection Zone (SPZ) mapping indicates that the site is not located within a groundwater SPZ.

4.5.6 The Environment Agency indicates that no flooding has occurred on site due to infrastructure failure. The Bracknell Forest SFRA does not present recorded instances of historical flooding at the site or within its vicinity.

4.5.7 In accordance with the Flood Risk Vulnerability Classification in Table 2 of PPG ID7, a data centre facility is classified as a 'Highly Vulnerable' development in flood risk terms; representing a telecommunications use required to be operational during flooding. The Application Site is located within an area identified predominantly as Flood Zone 1 considering the effects of climate change for the lifetime of the development. Table 3 of PPG ID7 indicates that 'highly vulnerable' developments within Flood Zone 1 are generally appropriate. This supports Bracknell Forest Borough Local Plan (2002) - saved Policy EN6 : Prevention of Flooding, the Sustainable Resource Management Supplementary Planning Documents (2008) and the emerging Draft Bracknell Forest Local Plan - Policy LP 17 Flood risk. The Flood Risk Assessment also supports the targeted BREEAM credits detailed within Pol 05 – Flood Risk.

4.5.8 The sustainable management of surface water is an essential element of reducing future flood risk to the site and its surroundings. The Application Site is currently used for two large commercial office buildings with existing drainage infrastructure which largely conveys runoff to an attenuation pond south of the site within the 'Former Recreation Site'. The setting of the site is predominantly commercial and is associated with high levels of surface water runoff. As such the area is characterised by managed water conveyance and drainage. The existing drainage network conveys surface water runoff to an attenuation pond south of the buildings at a rate of 644 litres per second (l/s).

4.5.9 Surface water arising from a developed site should as far as is practicable be managed in a sustainable manner. It should also provide betterment to the existing surface water flows arising from the site prior to the proposed development while reducing the risk of flooding at the site and elsewhere, taking climate change into account.

4.5.10 A drainage strategy has been prepared as set out in the Drainage Design Philosophy (ref 20305B-RPS-XX-XX-RP-C-9605) for the proposed development to support this FRA and forms part of the planning application. It sets out the proposed approach for managing surface water from the proposed development.

4.5.11 The NPPF (Ministry of Housing, Communities and Local Government, 2019) associated PPG ID7 (Ministry of Housing, Communities and Local Government, 2014), CIRIA C753 SUDS Manual (2015) and Local Authority policy promotes sustainable water management through the use of SuDS. A hierarchy of techniques is identified:

1. Prevention – the use of good site design and housekeeping measures on individual sites to prevent runoff and pollution (e.g. minimise areas of hard standing).
2. Source Control – control of runoff at or very near its source (such as the use of rainwater harvesting).
3. Site Control – management of water from several sub-catchments (including routing water from roofs and car parks to one/several large soakaways for the whole site).
4. Regional Control – management of runoff from several sites, typically in a detention pond or wetland.

4.5.12 The implementation of SuDS as opposed to conventional drainage systems provides several benefits by:

- Reducing peak flows to watercourses or sewers and potentially reducing the risk of flooding downstream;
- Reducing the volumes and frequency of water flowing directly to watercourses or sewers from developed sites; improving water quality over conventional surface water sewers by removing pollutants from diffuse pollutant sources;
- Reducing potable water demand through rainwater harvesting;
- Improving amenity through the provision of public open spaces and wildlife habitat; and
- Replicating natural drainage patterns, including the recharge of groundwater so that base flows are maintained.

4.5.13 Constraints placed on the design of surface water drainage serving the proposed development are surface water runoff is proposed to use the existing infrastructure and will be limited by its existing discharge rate.

4.5.14 Surface water runoff from the proposed development will be collected as follows:

- The existing surface water drainage network conveying runoff to an attenuation pond to the south of the site, in the ‘Former Recreation Site’. The discharge of surface water runoff into the existing Thames Water surface water sewer under Cain Road has been reduced by 100%; and
- Sufficient attenuation capacity is proposed to be provided to achieve the existing discharge rate of 644 l/s, for all rainfall events up to a 1 in 100 year plus 40% climate change allowance.

4.5.15 The attenuation pond will assist with the removal of sedimentation from runoff, with benefits in improving water quality and reducing the total maintenance required.

4.5.16 This strategy is presented in the Drainage Design Philosophy (20305B-RPS-00-XX-RP-D-9605) of the planning application in addition to indicative invert levels and depths. The location and levels of the proposed measures will be confirmed during the detailed design stage.

4.5.17 The new surface water drainage system will be designed to satisfy the following design criteria:

- Surface water run-off derived from the most onerous 1 in 2 year return period storm will flow unimpeded through the drainage network where practically possible. (Localised surcharging directly upstream of the attenuation ponds / detention basin and flow control is expected to occur).
- Surface water run-off derived from the most onerous 1 in 30 year return period storm will be accommodated within the drainage system.
- Surface water run-off derived from the most onerous 1 in 100 + 40% year return period storm will be accommodated within the drainage system. No above ground flooding or surcharging of the network to within 1m of the FFL.

4.5.18 The detailed drainage strategy supports the Bracknell Forest Borough Local Plan (2002)- saved Policy EN6 : Prevention of Flooding, the Sustainable Resource Management Supplementary Planning Documents (2008) and emerging Draft Bracknell Forest Local Plan - Policy LP 17 Flood risk and Policy LP48: Sustainable Drainage Systems (SuDS). The strategy also supports the targeted potential BREEAM credits detailed within Policy 05 – Flood Risk and Policy 06 – Minimising Watercourse Pollution.

5 CONSERVING AND ENHANCING THE NATURAL AND HISTORIC ENVIRONMENT

5.1 Conserving and enhancing the natural environment

5.1.1 Biodiversity encompasses all living things and plays an important function within urban areas, providing pleasant areas of amenity, whilst maintaining the ecological function of natural systems. The objectives in the NPPF and the government's Biodiversity 2020 strategy reflect the government's commitment to halt the overall decline in biodiversity and recognise the wider benefit of ecosystem services.

5.1.2 Guidance on conserving and enhancing the Natural environment (and landscape) as well as the Historic environment, as published in the NPPF's PPGs is reflective of the approach undertaken for the proposed developments to ensure that where possible, the natural and historic environment is conserved and enhanced throughout its lifetime. Local and regional policy also highlights the importance of assessing, preserving and enhancing biodiversity.

5.1.3 An Ecological Appraisal (ref 20305B-RPS-XX-XX-RP-P-9725) has been submitted in support of the application. Baseline information on the Application Site has been obtained from a desk study, Phase 1 Habitat Survey, and a preliminary protected species assessment carried out in accordance with CIEEM guidance on Preliminary Ecological Appraisal (PEA). The PEA comprised:

- a desk-based review of designated sites and records of protected species and other species that could present a constraint;
- mapping and assessment of the habitats present on the Application Site;
- assessment of the potential to support protected species or other species that could present a constraint, and make appropriate recommendations for further survey work if necessary.

5.1.4 Records within a 2 km radius of the site were obtained from Thames Valley Environmental Records Centre (TVERC) in January 2020, a review of existing statutory sites of nature conservation interest and their locations detailed that there are no statutory designated sites within or in the immediate vicinity of the application site or recreation parcel. The closest site (Wykery Copse SSSI) is located approximately 300m to the south of the Application Site. Although the site falls within the potential impact risk zone of this SSSI there is no connectivity to the development and negligible potential for adverse impacts. Thames Basin Heaths Special Protection Area (SPA) lies approximately 3.1km south. The construction and operation of the proposed data centre development will not result in any increase in recreational activities at the intentionally designated site. the development will not result in any potential adverse effects on statutory designated sites either during construction or once the data centre is operational.

5.1.5 The closest non-statutory designated site is Rigg's Copse LWS a block of ancient woodland located approximately 10m to the west of the Recreation Ground and 210m from the main site. The Recreation Ground creating a strong habitat buffer between the designated site and the development with negligible potential for any adverse effects.

5.1.6 The preliminary ecological appraisal consisted of two components: a Phase 1 Habitat survey and a scoping survey for protected species and other species of conservation concern which could present a constraint to development. The Phase 1 Habitat surveys were undertaken in August 2020 (main site) and November 2020 (Former Recreation Ground).The Phase 1 Habitat followed standard methodology comprising a site walkover of the survey area and recording the habitat types and boundary features present. At the same time a protected species scoping survey was carried out whereby the site was assessed for its suitability to support protected species, in particular great crested newts *Triturus cristatus*, reptiles, birds, badgers *Meles meles*, bats, and other species of conservation importance.

5.1.7 The planted amenity shrubs, ornamental hedgerows and the amenity trees within the car park have low to negligible ecological value and their loss at the outset of construction is not of ecological significance. The highest value feature within the main site is the tree belt on the western boundary of the site which will be retained and subject to permanent enhancement. The loss of small strips of unmanaged former amenity grassland which sub-divide the car park is considered negligible in significance. It is purposed large area of the existing hardstanding will become wildlflower turf. The proposed increase in landscaping will deliver beneficial outcomes for wildlife and a biodiversity net gain. The habitats in the Former Recreation Ground lie outside of the areas that could be directly affected by development activities. All the habitats are subject to protection and retention. Targeted enhancement of woodland and grassland to increase their species diversity and provide additional features to increase resident populations of fauna. Together then main site and Former Recreation Ground will deliver a 78% net gain in biodiversity habitat units. The habitats will be subject to management for biodiversity through the implementation of the Landscape Management Plan, which forms part of the planning application (ref 20305B-RPS-00-XX-RP-P-9723).

5.1.8 There will be no loss of bat roosts or impacts on roosting bats. The activity transect surveys have found showed low levels of bat activity in the main site with slightly higher levels of activity associated with the Former Recreation Ground. The proposed landscaping will create higher value boundary vegetation and increase the abundance of invertebrates with new native tree and shrub planting, alongside established trees and wildflower grassland. Although the data centre has to be subject to high levels of lighting, the specification of the lighting design creates a sharp cut off in lux levels outside the perimeter fence ensuing the additional lux levels around the majority of the boundary tree belt are less of 1 lux. This sensitive design will retain the value of the boundaries as wildlife corridors and potential flight lines for bats. Further information on lighting is provided in the Site External Lighting Report (ref 20305B-CON-XX-XX-RP-E-9735).

5.1.9 The enhancement and appropriate management of the Former Recreation Ground will also promote an increase in activity by bats using the site as a foraging resource. The Former Recreation Ground will remain an unlit east west corridor connected to Riggs Copse and will continue to function as a bat flight line. The installation of new long lasting bat boxes in the tree belt around the main site and on larger trees on the boundary of the Former Recreation Ground will significantly increase roosting opportunities within the site. The development proposal and landscaping should have a beneficial effect on bats at least in the context of the site.

5.1.10 Appropriate mitigation for badger protection will be undertaken during the construction phase of the development to ensure that risk of entrapment of this species is safeguarded against. The boundaries and the Former Recreation Ground will remain as corridors along which badgers can safely move through the landscape. There are no anticipated adverse effects on this species.

5.1.11 The amenity planting, elements of scrub and hedgerows within the main parcel, and the semi-improved grassland, scrub and woodland in the recreation parcel, offer opportunities for hedgehog and other species of small mammal. The provision of native shrub planting will ensure that opportunities for this species remain in the main site once developed; with the Former Recreation Ground remaining an area of high value for this species enhanced through the introduction of two new hedgehog homes.

5.1.12 The temporary loss of amenity planting as part of the biodiversity enhancement of the perimeter of the main site will result in a small loss of available nesting habitat; however, this would have a negligible significance in relation to the local populations. The long-term benefits of the new native planting in the main site including fruit bearing species will offer new nesting and foraging opportunities. The maturation of the shrubs and woodland in the Former Recreation Ground continue to develop value for nesting and foraging birds alongside the nesting opportunities around the pond. Post development the installation bird nest boxes will directly increase the nesting opportunities for cavity nesting species in the short and medium term.

5.1.13 Great Crested Newts are absent from the Former Recreation Ground pond and the development will not impact on the known reptile populations (or potential common amphibian populations) present in the Recreation Ground. The habitats around the perimeter of the main site which will be subject to landscaping works have low value for reptiles and no adverse effects are anticipated from the felling of ornamental species and replanting with natives.

5.1.14 The enhancement and management of habitats within the Former Recreation Ground along with the provision of hibernacula and log piles would increase the numbers of reptiles that the site can support. Consequently, the long-term effect of the development proposals on reptiles and amphibians will be beneficial at least in the context of the site.

5.1.15 The existing habitats in the main site have very low value for invertebrates and the construction of the site will have a negligible effect on invertebrate populations as a result of habitat loss. The Former Recreation Ground has higher value and will support a wider assemblage of species. With minimal deadwood habitat in the Former Recreation Ground woodland it currently has negligible value for stag beetle. The replacement of ornamental shrubs with native species in the main site and targeted enhancements in the Former Recreation Ground will increase opportunities for invertebrates and should result in higher diversity and abundance will multiply knock on benefits for biodiversity through increased prey availability and larger populations of pollinating insects.

5.1.16 The recommendations and mitigation set out within this report will safeguard the features of ecological value and should result in beneficial effects following the establishment of new and enhanced habitats.

5.1.17 To ensure that the construction works on site do not damage retained habitat good practice guidelines are included within a Code of Construction Practice (CoCP) and must be put in place and followed to ensure habitats are adversely affected by the development.

5.1.18 Good practice guidelines will include:

- Protective fencing installed along the boundary of the woodland during construction to protect any trees, where they fall outside of construction areas.
- The sensitive siting of construction compounds, access roads, laydown areas and associated lighting away from the area of woodland.
- A plan produced to ensure that air or water-borne pollution generated during construction does not impact on the woodland.
- Screening barriers will be erected around the edge of the woodlands to protect them from dust pollution during the clearance and construction stages of the development.
- Retained habitats will not be subject to artificial lighting during construction and will not be affected.

5.1.19 Mitigation measures will be implemented through the CoCP have been provided for nesting birds to ensure that nesting birds they are not disturbed during any vegetation clearance onsite.

5.1.20 In addition to good practice measures adopted through the construction phase, the Ecological Appraisal has identified several areas of opportunity for enhancement. These opportunities will help support the council's policies concerning protection and enhancement. This includes Bracknell Forest Borough Local Plan (2002) - saved Policy EN1: Protecting tree and hedgerow cover, Policy EN2: Supplementing tree and hedgerow and Policy EN3: Nature Conservation and the Sustainable Resource Management Supplementary Planning Documents (2008). Good practice measures will also support emerging Draft Bracknell Forest Local Plan - Policy LP43: Biodiversity, Policy LP44: Designated nature conservation and geological sites and Policy LP45: Protection and enhancement of trees and hedgerows. The ecology assessment and strategy also supports the BREEAM Land Use and Ecology credits detailed within the BREEAM Pre Assessment.

5.2 Conserving and enhancing the landscape

5.2.1 The proposed landscaping strategy has given consideration to relevant local policies including the Bracknell Forest Core Strategy DPD (2008) - Policy CS1: Sustainable Development Principles, Policy CS7: Design, Bracknell Forest Borough Local Plan (2002) - saved Policy EN2: Supplementing tree and hedgerow and the Sustainable Resource Management Supplementary Planning Documents (2008). The emerging Draft Bracknell Forest Local Plan has also been considered, including Policy LP 1 Sustainable development principles and Policy LP45: Protection and enhancement of trees and hedgerows

5.2.2 The data centre would complement the adjoining land uses and would be of a similar scale to existing large-scale buildings set within a landscape structure. The proposed development would therefore be consistent with the local commercial / industrial character of the urban area.

5.2.3 The landscape proposals have been designed as an integral part of the proposed development to provide treatment and landscape integration for the perimeter and internal part of the site, and mitigation and visual amenity from the properties, PRoW and roads adjacent to the site boundary. The proposed landscape design comprises predominantly native tree and shrub planting, and wildflower grassland focussed on the enhancement of the local landscape. The Landscape Strategy focused on the following key objectives:

- To provide a high-quality landscape setting for the buildings that enhance the site and compliment the site's wider context;
- to strengthen the site's containment particularly at its north-eastern, and south-western and southern edge adjacent to Cain Road and Beehive Road, by extending areas of woodland blocks, interspersed with areas of individual trees and meadow grass areas in order to increase the potential biodiversity value;
- to extend native species trees and other landscape features into the site along access routes; and
- maintain biodiversity and conservation interest to land south of Beehive Road.

5.2.4 The landscape proposals include the following features:

- retained and proposed tree and shrub planting (to be underplanted / infilled where practicable);
- avenue and parkland trees to be planted in informal groups of three or more and within more formal avenues, particularly at the two Cain Road entrances. Avenues and tree groups to consist of mixed species;
- native shrub planting as underplanting to tree belts at perimeter of site;
- wildflower turf cut frequently to maintain height of 75 mm to allow security requirements;
- meadow grassland, maintained to 300 mm or mown annually in autumn to maintain floristic diversity.
- woodland interplanting, proposed native hedgerows and restored grassland to land off Beehive Road.

5.2.5 The Application Site layout will enable the retention of areas of existing tree and shrub planting adjacent to Beehive Road and part of the northern section of Cain Road, which would be protected as necessary during construction and augmented using native species to extend and reinforce the native vegetation boundary treatment.

5.2.6 The landscape proposals seek to improve the character of the site and the surrounding landscape by establishing vegetation using native species appropriate to the local area, which will provide screening and connectivity to the surrounding area and as an enhancement to the existing site conditions. The building would be enclosed by woodland belts and contained within a parkland setting. Despite the proposed development requiring the removal of 166 existing trees, the landscape proposal includes 338 standard trees to be planted at a range of 300 mm to 600 mm high

5.2.7 The landscape proposals include former recreation land off Beehive Road by retaining, establishing and maintaining native tree and shrub planting, grassland and fauna habitat creation in conjunction with ecologist for biodiversity enhancement.

5.2.8 All trees and shrubs are to be sourced responsibly, in the first instance, from UK Nurseries / suppliers, where they have been propagated and/or grown on for a minimum of five years in the UK (two years for shrubs).

5.3 Conserving and enhancing the historic environment

5.3.1 A Heritage Statement (ref 20305B-RPS-XX-XX-RP-T-9728) has been prepared based on a desk based assessment and site visit. Data was gathered with regards to known heritage assets (designated and undesignated) from a number of sources, including the Berkshire Historic Environment Record (HER) maintained by Berkshire Archaeology, and the National Heritage List for England (maintained by Historic England). It was not possible to visit the Berkshire Record Office (Reading) due to COVID-19 restrictions. A site visit was undertaken in February 2021 in order to check for the presence of heritage assets within the proposal site that have not been previously recorded and to examine the settings of heritage assets considered within this Heritage Statement.

5.3.2 The Heritage Statement has been prepared in line with appropriate guidance and in accordance with paragraph 189 of the NPPF. At the local level of particular note are Binfield Neighbourhood Plan (2016) - Policy BF2: Protection of Heritage Assets and emerging Draft Bracknell Forest Local Plan - Policy LP42: Protection and enhancement of the historic environment.

5.3.3 It is considered that the nature and scale of the proposed development is generally unlikely to affect the significance of heritage assets at a distance of more than 0.5 km - this 0.5 km buffer zone around the proposal site is referred to in this document as the ‘defined study area’.

5.3.4 In relation to designated heritage assets, there are two listed buildings within the defined study area; both are listed at Grade II. Peacock Farmhouse is located approximately 185 m to the south of the proposal site and barn and adjacent to the farmhouse is a barn and a group of outbuildings.

5.3.5 In relation to non-designated heritage assets, there is considerable evidence of prehistoric activity has been identified within the defined study area.

5.3.6 Overall, it is considered that the construction of the proposed development would not result in any harm to the significance of the designated heritage assets at Peacock Farm as a result of the change within their settings. The operation of the proposed development would not result in any harm to the significance of the designated heritage assets at Peacock Farm. This is due to the limited visibility of the proposed data centre building in views from and across these assets and also the existing (recent) built development adjacent to the designated heritage assets.

5.3.7 The Heritage Statement concludes that no designated heritage assets, no scheduled monuments or registered historic parks and gardens will be physically impacted by any part of the proposed development, nor will harm be caused to the significance of any heritage asset as a result of change within the setting of the asset.

5.3.8 The potential for the proposed development to impact on buried archaeological remains is considered to be very low, and the planning authority has advised that no further archaeological investigation would be necessary.

6 PROMOTING SUSTAINABLE TRANSPORT

6.1 Transport Context

6.1.1 In order to integrate sustainable travel within the proposed developments, the NPPF encourages local authorities and development proposals to consider "*patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places."*

6.1.2 Guidance on Travel Plans, Transport Assessments and Statements published in the NPPF's PPG provides advice on the content of these documents to ensure that transport and traffic generations associated with new developments are appropriately managed.

6.1.3 The adopted Bracknell Forest Core Strategy DPD (2008) - Policy CS23: Transport and Policy CS24: 'Transport and New Development' supports sustainable travel patterns. This is further supported by the emerging Draft Bracknell Forest Local Plan - Policy LP51: Assessing transport impacts and requirements, Policy LP53: Travel Plans and the BREEAM Trave Plan (Tra 05) requirements

6.2 Sustainable Transport Options

Walking

6.2.1 Walking is widely regarded as the most sustainable form of transport and is considered appropriate for journeys up to 3.2km Institution of Highways and Transportation (IHT, now the CIHT) 'Guidelines for providing Journeys on Foot (2000)' and the Design Manual for Roads and Bridges document TA91/05 Provision for Non-Motorised users. The site is well connected by high quality pedestrian routes and facilities. The number of services, amenities, and public transport interchanges that can be reached within a reasonable walking distance ensure that walking is a viable mode to and from the site and can readily form part of a multi-modal trip.

6.2.2 The site will connect to the local pedestrian network through Cain Road which provides footways on both sides, these are combined footway / cycleways which have a width of between 1.8m and 2m. The combined footways / cycleways on Cain Road benefit from street lighting along the entirety of its length.

6.2.3 The combined footway / cycleways connect to the Western Industrial Area and to nearby residential areas to the north. The combined footway / cycleways connect to the bus stops along Cain Road, directly on the northern boundary of the Application Site. Through Beehive Road, pedestrians can also connect to the wider pedestrian network of Bracknell through the residential areas to the south.

6.2.4 Whilst Cain Road provides immediate access from the Application Site to the local pedestrian network, to the east and west Cain Road connects to Western Road and John Nike Way / Beehive Road respectively. These roads also have pedestrian footways allowing access to the wider pedestrian network.

6.2.5 Beehive Road provides pedestrian access to the south via a footway on its northern side, directly from Cain Road. Beehive Road extends along the south western boundary of the Application Site and this section of Beehive Road, whilst without any footways, is designated as a quiet road by BFC. At the southern end of Beehive Road is a pedestrian footbridge over the Waterloo to Reading railway line and Berkshire Way (A329). This route provides pedestrian access to Jennet's Park residential area and the Southern Industrial Area.

6.2.6 There are no formal crossing facilities along Cain Road, however at most junctions there are informal crossing points with tactile paving and dropped kerbing, facilitating pedestrian access into the local area. This includes the Cain Road / John Nike Way roundabout and the Cain Road / Western Road roundabout, to the west and east of the Application Site respectively.

6.2.7 No public rights of way (PRoW) cross the Application Site; however, there are existing footpaths, FP15 and FP14 to the west of the Application Site which provide greater access throughout Amen Corner.

6.2.8 The Application Site has access to the residential areas to the north and south of the site within Bracknell. There are good levels of pedestrian infrastructure and crossing facilities within Bracknell, providing a safe, convenient and reliable route for pedestrians to access the site. The footways are in good condition, lit and well maintained.

6.2.9 Given the existing pedestrian infrastructure, it is considered that the Application Site is accessible to pedestrians, and there are good opportunities for pedestrians to walk between the site, public transport services and the local facilities within Bracknell. It is also considered that the surrounding pedestrian infrastructure caters for disabled users by being of suitable widths and providing appropriate dropped kerb crossings in suitable locations.

Cycling

6.2.10 Cycling is considered to be one of the most suitable forms of transport to replace short car journeys up to 3 miles (4.8km) (source: LTN 2/08, Cycle Infrastructure Design).Nevertheless, as with walking distances, other guidance documents state contrasting cycling distances. The Design Manual for Roads and Bridges document TA91/05 Provision for Non-Motorised users for example states acceptable cycling up to 5 miles (8km). Therefore, 4.8km is concluded to be a reasonable cycling distance with 8km as a reasonable maximum for most individuals.

6.2.11 Cain Road provides access to the local cycle network and connects the Application Site to the local area of Bracknell. There is currently a footway / cycleway along both sides of Cain Road. To access the wider cycle network individuals are required to cycle on the carriageway. Nevertheless, to the east and south of the Application Site there are a network of purpose built, traffic free cycle routes that provide a comprehensive local cycle network within Bracknell.

6.2.12 The combined footways / cycleways along Cain Road connect the application site to the Town Centre, Bracknell Bus Station, Bracknell Rail Station and other facilities and amenities within Bracknell. There is cycle parking provided at key destinations in the area, which includes Bracknell Rail Station, Bracknell Bus Station, throughout the town centre and at local retail facilities. As previously stated, there is a footbridge connecting to Beehive Road, which is designated as a quiet cycle road by BFC. The footbridge benefits from cycle ramps allowing easy access to southern Bracknell.

6.2.13 Furthermore, a new National Cycle Route, National Cycle Route 422 (NCR422), between Newbury and Windsor, is being developed by Reading Borough Council, Wokingham Borough Council, West Berkshire Council, Bracknell Forest Council and the Royal Borough of Windsor and Maidenhead. This route will run along the London Road, approximately 590m to the north of the Application Site.

6.2.14 The entirety of Bracknell is within cycling distance of the Application Site (8km) and the topography of the local area suggests that this would not be a limiting factor in people choosing to cycle. Thus, the site is considered accessible to cycles in the local area.

6.2.15 A cycle shelter, to house 10 bicycles will be located adjacent to the car park. The shelter is 5m in length and 2.75m wide. Cycle parking will be secure and sheltered, lockers and a dedicated changing area will also be provided. Adequate changing facilities, lockers and a clothes' drying area will also be provided within the development.

Public Transport

6.2.16 The nearest bus stops to the site are located on Cain Road approximately 60m to the north of the Application Site. These stops provide access to the X4 Lion service into Reading and Bracknell and operates throughout the day. The bus stops provide real time timetable information and a raised kerb for easy boarding and alighting. The bus stop on the southern side of Cain Road also provides a shelter and seating area. The X4 Lion service provides a direct link to Bracknell Bus Station, where additional bus services are provided. This includes bus services to Hanworth, Heathrow Airport, Camberley and suburban areas of Bracknell. Furthermore, Bracknell Rail Station is located directly adjacent to the Bus Station.

6.2.17 Bracknell Railway Station is located approximately 3.3km cycling distance to the east of the Application Site, equating to a 13-minute cycle. This is an acceptable cycling distance for multi-modal interchange, as stated in Department for Transport - LTN 1/04 - Policy, Planning and Design for Walking and Cycling, 3.10.3, which specifies that there are limits to the distances generally considered acceptable for utility walking and cycling. The mean average length for walking journeys is approximately 1 km (0.6 miles) and for cycling, it is 4km (2.4 miles), although journeys of up to three times these distances are not uncommon for regular commuters. There is extensive cycle parking available at Bracknell Railway Station, with 50 cycle parking spaces available outside the main station entrance. Bracknell is located on the Waterloo to Reading line with services to London Waterloo, Wokingham, Winnersh, Staines, Ascot, Clapham, Martins Heron, Virginia Water and Reading with frequent services throughout the day.

Encouraging the use of sustainable transport services

6.2.18 A Travel Plan (ref 20305B-RPS-XX-XX-RP-D-9730) has been produced in accordance with the Bracknell Forest Core Strategy DPD (2008) - Policy CS23: Transport and Policy CS24: ‘Transport and New Development’ and the emerging Draft Bracknell Forest Local Plan - Policy LP53: Travel Plans. The Travel Plan has also been developed to be in line with BREEAM Data Centres 2010 requirements.

6.2.19 The primary aims of the Travel Plan are to influence the travel behaviour of employees and to minimise the number of vehicular trips generated by the development. It is considered that employees travel behaviour can be influenced through the implementation of travel planning measures which actively encourage sustainable travel modes.

6.2.20 Potential measures to be implemented at the site;

- Travel Information and Awareness - Information on the travel options available to employees will be displayed on travel notice boards located in prominent locations within the data centre building.
- Encouraging employees to walk and cycle by providing adequate male and female showers, changing facilities, lockers and a clothes’ drying area.
- Encouraging employees and visitors to cycle by providing safe and secure cycle storage facilities.
- Providing Public Transport information.
- Employees and visitors will also be encouraged to sign up the Liftshare scheme.
- Personalised Travel Planning which offer information for door-to-door travel and provide a personalised travel planning tool for people, outlining the various modal options on offer for individual journeys.

6.2.21 In addition to the Travel Plan, a Delivery & Servicing Plan (D&SP) and Construction Traffic Management Plan have been prepared to ensure that both the operational and construction phases have appropriate measures to mitigate.

7 PRUDENT USE OF NATURAL RESOURCES AND MINIMISING WASTE

7.1 Use of Natural Resources

7.1.1 The construction phase of a development from extraction and production to the transportation of materials to site involves a significant amount of energy, which can lead to adverse effects on the environment. Sustainability objectives aim to minimise energy required in the production and transportation of materials.

7.1.2 The below section describes the proposed use of resources, specifically materials and water for the proposed development, setting out how they will be efficiently used during the construction and operational phase of the project. The use of energy is addressed in the earlier section (4) on climate change.

7.2 Materials

7.2.1 A responsible approach will be taken in managing all resources in the construction phase. Specification of construction materials will follow best practice in specifying material that is responsibly sourced with low environmental impact and maximising efficient use of resources. Where relevant, all timber products will be responsibly sourced from reputable suppliers as per the UK Governments Timber procurement policy.

7.2.2 In relation to material use, the proposed building envelope is of fundamentally simple construction providing large clear spans for data equipment aisles and partitioned spaces within the office area. The more significant volumes of building materials will be steel within the frame, concrete floor slabs and yards, macadam access roads and steel faced cladding.

7.2.3 Steel is a highly recycled and recyclable material. The frame of the buildings will be prefabricated and assembled with bolted connections which facilitate future dismantling and recycling. Lean design principles are employed to limit material quantities in construction. The major building elements will target achieving BRE Green Guide ratings of A or A+.

7.2.4 The floorslab and yard areas which experience high vehicular loads are to be constructed in concrete. Whilst Portland cements require significant energy in manufacture due to quantities required, this is balanced with its durability, longevity and potential future recyclability.

7.2.5 Careful specification of materials is not just restricted to the main elements but will also filter through to office materials; recycled / recyclable finishes such as plaster boards with DSG cores, recycled yarn carpets and low toxicity wall finishes. Materials specified and used within construction will be in line with the targeted BREEAM materials credits detailed in the BREEAM Predictive Assessment.

7.2.6 In line with the BREEAM UK Data Centres 2010, the development will procure all major building elements to a BRE Green Guide ratings of A or A+ which includes External walls, windows, roof, upper floor slabs, internal walls, floor finishes/coverings, this includes all applicable thermal insulation where appropriate. At least 80% of all external hard landscaping and boundary protection (by area) will also aim to achieve an A or A+ as defined in the Green Guide to Specification as detailed within the BREEAM Pre Assessment, targeted with potential credit (Mat 02).

7.2.7 As detailed within the BREEAM Pre Assessment under targeted with potential credit (Mat 05) where feasible, further consideration will be given to at least 80% of applicable materials for the major building elements will be sourced from manufactures capable of providing the necessary supporting responsibility certification in line with BREEAM Data Centres 2010 requirements.

7.2.8 To reduce the need to replace materials, the development will be designed for robustness in line with the BREEAM requirements. For example, internal and external areas of the building where vehicular, trolley and pedestrian movement occur will be suitably protected to prevent damage.

7.2.9 Incorporating these elements will support the Bracknell Forest Core Strategy DPD (2008) - Policy CS10: Sustainable Resources, the Sustainable Resource Management Supplementary Planning Documents (2008) and Draft Bracknell Forest Local Plan - Policy LP46: Sustainable construction.

7.3 Water Use

7.3.1 Guidance on water supply, wastewater and water quality as published in the NPPF's PPG, providing advice on how planning can ensure water quality and the delivery of adequate water and wastewater infrastructure.

7.3.2 A developments construction phase has the potential to use a large amount of water. Whilst much of the water is essential for building activities, and cannot be reduced, water will be monitored to ensure that it was not wasted unnecessarily. The contractor will include proposals for monitoring water use during construction and include procedures for ensuring that leakages are minimised across the construction site.

7.3.3 The Design and Access Statement (ref 20305B-RPS-XX-XX-RP-A-9580) details various measures that will be incorporated to reduce water consumption and demand including the specification of water efficient appliances such as push/percussion taps and low volume W/C's and urinals will assist. These specifications will be in line with the BREEAM Data Centres 2010 requirements. These include WCs with an effective flush volume of ≤4.5 litres which have an automatic sanitary supply shut off controlled by a passive infrared sensor (PIR) or sensor placed near the entry door. All taps except kitchen taps, cleaners' sinks and external taps have a maximum flow rate less than 6 litres/min for water pressure of 0.3MPa OR are of, or a combination of, timed automatic shut-off, electronic sensor taps, low flow screw-down/lever taps and spray taps. All showers, where specified, have a measured flow rate that does not exceed 9 litres per minute for a water pressure of 0.3MP and all urinals are either fitted with individual presence detectors that operate the flushing control after each use OR are ultra-low flush or waterless.

7.3.4 The development will incorporate mains water meter which has a pulsed output to enable connection to BMS monitoring system, a leak detection system capable of detecting major leaks on the water supply between and within the building and the site boundary.

7.3.5 The development will have no dedicated, mains-supplied irrigation systems. Watering shall only be carried out to maintain the health and continued vigour of the trees and shrubs until fully established. Water usage shall be controlled and monitored at all times to avoid waste. Once fully established, planting will rely on precipitation and manual watering by the building occupier.

7.3.6 Incorporating these elements will support the Bracknell Forest Core Strategy DPD (2008) - Policy CS1: Sustainable Development Principles, Policy CS10: Sustainable Resources and the Sustainable Resource Management Supplementary Planning Documents (2008). The water use strategy will also support the emerging Draft Bracknell Forest Local Plan - Policy LP 1 Sustainable development principles and Policy LP46: Sustainable construction.

7.4 Minimising Waste

7.4.1 The proposed development can provide for the careful and sustainable disposal of waste during and post construction. Modern methods of design and construction using pre-fabricated units will help to keep waste arisings to a minimum. Post construction, the buildings will be provided with a

dedicated area within the building for the provision of refuse and re-cycling facilities, tailored to operational requirements.

7.4.2 In line with the BREEAM Data Centres 2010 requirements, a compliant Site Waste Management Plan (SWMP)/ Resource Management Plan (RMP) will be developed and implemented covering the waste arising from the project with the aim of minimising waste. The amount of waste generated will be limited to a maximum of 6.5 tonnes/100m2 OR 12.9 m^3/100m^2 per GIFA. At least 75% by tonnage OR 65% by volume of the non-hazardous construction waste generated is diverted from landfill. Waste materials will be sorted into separate key waste groups either onsite or offsite through a licensed contractor for recovery.

7.4.3 The SWMP/RMP will additionally outline the procedures to follow for the appropriate removal and disposal of any hazardous waste. Where possible on site, the recycling and re-use of the existing building and construction materials will be considered in order to minimise construction and demolition waste associated with the proposed development, for example crushed hardstanding for use as high grade recycled aggregate. This will also support the achievement of the BREEAM 'Recycled Aggregates' credits.

7.4.4 Dedicated areas for refuse will be provided adjacent to office areas and collected periodically. In order to be in line with BREEAM requirements, the recyclable waste storage will be a dedicated storage space, clearly labelled which is accessible from the building and has good access for collection to cater for recyclable materials generated by the building during occupation. The size of the space allocated will be adequate to store the likely volume of recyclable materials generated by the building's occupants/operation. This will be based on the building floor area.

7.4.5 The detailed strategy supports the Bracknell Forest Core Strategy DPD (2008) - Policy CS1: Sustainable Development Principles, Policy CS10: Sustainable Resources and the Sustainable Resource Management Supplementary Planning Documents (2008). It further supports the emerging Draft Bracknell Forest Local Plan - Policy LP 1 Sustainable development principles and Policy LP46: Sustainable construction.

8 CONCLUSION

8.1.1 This sustainability statement has evaluated the proposed development against principles of sustainability and the relevant national and local planning policies. Consideration has been given to the three objectives of sustainable development, economic, social and environmental, demonstrating how the proposals contribute to the delivery of sustainable development.

8.1.2 A Biodiversity Net Gain Assessment has been undertaken which confirms that the landscaping proposals, relating to retained and proposed habitats will deliver a 78% net gain in biodiversity habitat units.

8.1.3 The development will incorporate the low zero carbon technologies VRF (air source heat pump) heating and 200m^2 of solar photovoltaic which will contribute 24% of the total energy demand of the offices. It has been calculated that the development will achieve a 83% reduction in CO_2 emissions compared with a 2013 Building Regulations compliant building, a significant reduction and supports the mitigation of climate change. To maximise resilience to climate change, the development has designed in sustainable drainage measures.

8.1.4 A responsible approach to managing all resources e.g. energy, water and materials during both the construction and operation phase has been considered and will be taken forward for the development. Resource Management will be supported by associated Waste Management Plans for both construction and operation.

8.1.5 The proposed development has a potential to contribute to the future economic viability of Bracknell and the surrounding areas in the short-term during construction, and through long term through expenditure by staff in the local area, contributing to the local economy. The design incorporates appropriate features to promote sustainable transport opportunities with associated environmental benefits.

8.1.6 It can be concluded that, together, the proposed site location and the proposed design will enable a sustainable development to be constructed.