

Bioregional’s response to application 21/03177/F - Axis J9, Phase 3 Howes Lane Bicester

Application description: Full planning application for employment development (Use Classes E(g)(iii), B2 and/or B8) and associated parking and servicing, landscaping and associated works

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Bioregional have assessed a range of documents submitted with the application 21/03177/F against Policy Bicester 1 (North West Bicester Eco-Town) and Policies ESD 1-5 from the adopted Cherwell District Council Local Plan 2011-2031. A full table is provided below.

Key: Comments in a **Red box** – significant information outstanding; **Amber box** – some information outstanding, **Green box** – sufficient information provided.

| Policy Bicester 1 (North West Bicester Eco-Town) | Evidence/response | Reference | Compliance and next step |
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| Employment | | | |
| Land Area A minimum of 10 ha, comprising business premises focused at Howes Lane and Middleton Stoney Road, employment space in the local centre hubs and as part of mixed use development | The site comprises 7.2 ha of arable land adjacent to the existing built edge of Bicester and immediately north of recent employment development. | Planning report, Quod, September 2021 | This is phase 3 of the Axis J9 development and the 10 ha requirement will be met. Phase 1 is completed and operational. Phase 2 is near completion with a pre-let for full occupation before the end of 2021. It is confirmed in the Economic Statement that the site could accommodate 255-720 jobs (depending on the occupiers). The policy requirement for 1,000 jobs on B use class land applies to all three phases of the Axis J9 development. |
| Jobs Created At least 3,000 jobs (approximately 1,000 jobs on B use class land on the site) within the plan period. It is anticipated that the business park at the South East corner of the allocation will generate between | It is stated in the planning statement that the “CLP 2015 anticipates that the business park will generate between 700 and 1,000 jobs in use classes B1 (now within class E), B2 and B8 uses in the early plan period”. | Planning report, Quod, September 2021 Economic Statement, Quod, September 2021 | |

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| 700 and 1,000 jobs in use classes B1, B2 and B8 early in the Plan period | | | |
| Use classes B1, with limited B2 and B8 uses | The proposed development provides 16,901 sqm GIA flexible, speculative employment floorspace with “use classes B1 (now within class E), B2 and B8 uses”. | Planning report, Quod, September 2021 | Sufficient information has been provided. |
| A Carbon Management Plan shall be produced to support all applications for employment developments | No information provided. | N/A | No information provided. |
| New non-residential buildings will be BREEAM Very Good with the capability of achieving BREEAM Excellent. | It is confirmed in the Sustainability Statement that a BREEAM rating of Very Good will be achieved (and that it may be possible to achieve an Excellent rating). | Sustainability Statement, ESC Ltd, November 2021 | <p>We would recommend that a pre-commencement condition is set requesting that a BREEAM Design Stage assessment is provided, and a condition for post completion requests a BREEAM Post Construction certificate within 6 months of completion.</p> <p>The Sustainability Statement states that there is a document titled “ESS0274-BREEAM NC 2018 Pre-Assessment-20210827” which confirms the score for the proposed development, however this has not been provided.</p> |
| Have real time energy monitoring systems, real time public transport information and Superfast Broadband access, including next generation broadband where possible. Consideration should also be given to digital access to support assisted living and smart energy management systems | The mechanical and electrical building services shall be provided with energy metering in accordance with Building Regulation’s Approved Document Part L2A. | Sustainability Statement, ESC Ltd, November 2021 | <p>The water and electricity meters provided will be connected to a dedicated energy monitoring and performance platform, readable on an easy to-use-portal i.e. tenant IT infrastructure.</p> <p>The Sustainability Statement also states that gas meters will be connected to this portal – but will there be any gas consumption on site?</p> |

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| | | | It is stated in the Travel Plan that “Real Time Information display will be provided within the larger units” for public transport information. |
| Infrastructure needs | | | |
| Green infrastructure–40% of the total gross site area will comprise green space of which at least half will be publicly accessible and consist of a network of well-managed, high quality green/open spaces which are linked to the open countryside. This should include sports pitches, parks and recreation areas, play spaces, allotments, the required burial ground (possibly a woodland cemetery) and SUDS | The planning statement confirms that the 40% target for green infrastructure will be achieved. | Planning report, Quod, September 2021 Green Infrastructure Plan, Cornish Architects, September 2021 | A green infrastructure plan confirms the area of green infrastructure has been calculated to be 42.6% (28536sqm-66962sqmx100). A condition could be set to ensure this percentage is achieved at completion. |
| Utilities Utilities and infrastructure which allow for zero carbon and water neutrality on the site and the consideration of sourcing waste heat from the Ardley Energy recovery facility. The approach shall be set out in an Energy Strategy and a Water Cycle Study. The Water Cycle Study shall cover water efficiency and demand management, water quality and how it will be protected and improved, WFD compliance, surface water management to avoid increasing flood risk and water services infrastructure improvement requirements and their delivery, having regard to the Environment Agency’s guidance on Water Cycle Studies. Zero Carbon (see PPS definition) water neutral development is sought. Development proposals will demonstrate how these requirements will be met. | It is stated in the Sustainability Statement that achieving water neutrality “would be very difficult as we are working from an existing zero water draw”. It is stated in the Sustainability Statement that the Ardley Energy from Waste facility is 4km away. The warehouse spaces in the industrial units will be shell only so a connection to the heat network will not be created. The office spaces will be heated with ASHPs. | Sustainability Statement, ESC Ltd, November 2021 | The applicant has noted that ASHPs are proposed to provide space heating for the office spaces and therefore no connection to heat networks are proposed. They also add that “the speculative workshop and storage/distribution areas have potential for a wide range of heating demand, down to and including no heating demand. This makes the feasibility of connection to a local heat network, whether private or public, very difficult to assess at this stage”. The industrial spaces are speculative and being finished as shell only. It is confirmed that “to facilitate the potential for future heat network delivery however, the buildings shall be provided with service ducts capable of supporting the routing of heating mains from the site boundary to the building”. |

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| | | | <p>No Water Cycle Study has been provided. We would recommend that it is in order to demonstrate policy compliance.</p> |
| Monitoring | | | |
| <p>Embodied impacts of construction to be monitored, managed and minimised (ET21)</p> | <p>During the construction phases, the development has the potential to give rise to include dust emissions from earthworks, construction activity and construction vehicles. A construction environmental management plan (“CEMP”) will however be in place to ensure that best practice measures are used to minimise dust at all stages of the construction works. With these mitigation measures in place, the effects from the construction are not predicted to be significant.</p> | <p>Planning report, Quod, September 2021</p> | <p>It is stated in ES Volume 1 Chapter 11 that the assessment of GHG emissions during construction included “the embodied GHG emissions from construction materials, construction equipment and construction waste materials were taken from the Lifecycle Assessment (LCA) completed in support of the BREEAM assessment (appended to the Sustainability Statement submitted with the planning application). The LCA assessment complied with British Standard EN15978 Assessment of Environmental Performance of buildings and considered all the upstream and downstream processes needed to construct the building; and GHG emissions from construction traffic were calculated based on predicted construction traffic movements provided by the project transport consultants, average travel distances based on RICS benchmarks and latest government published GHG emission factors for construction vehicles”.</p> <p>Reducing greenhouse gas emissions from the construction of phase 3 will include a focus on procurement of sustainable</p> |

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| | | | materials that minimise embodied carbon emissions and contribute towards achieving the BREEAM “Very Good” rating. |
| Sustainability metrics, including those on zero carbon, transport, water and waste to be agreed and monitored for learning, good governance and dissemination (ET22). | It is confirmed in the Sustainability Statement that a BREEAM rating of Very Good will be achieved (and that it may be possible to achieve an Excellent rating). | Sustainability Statement, ESC Ltd, November 2021 | The BREEAM assessment will include demonstration of metrics set to measure carbon, transport and water consumption and waste creation during construction. |
| Design and place shaping | | | |
| High quality exemplary development and design standards including zero-carbon development, Code Level 5 for dwellings at a minimum and the use of low embodied carbon in construction materials, as well as promoting the use of locally sourced materials. | <p>Credits are sought for responsible sourcing of materials, material efficiency in design, and designing for disassembly and adaptability in the BREEAM assessment.</p> <p>1 credit is sought for lifecycle analysis of building construction materials in the BREEAM assessment. Using the figures provided on page 30 of the Sustainability Statement, the preliminary embodied carbon analysis suggests an embodied carbon target of 1397.4 kgCO₂e/m².</p> <p>No dwellings are proposed so Code for Sustainable Homes compliance is not required.</p> | Design and Access Statement, Cornish Architects, September 2021 | <p>It is stated in the Sustainability Statement that the zero carbon can be achieved via highly efficient building design and the integration of PV panels. The carbon emissions of the development are stated to be -30.6 TCO₂/year. The modelling calculations have been based on regulated and unregulated energy. The Government’s Eco-Towns PPS states that zero-carbon must be achieved and that this is defined as “over a year the net zero carbon dioxide emissions from all energy use within the buildings” are zero or below. This definition has been met. (Please note we have requested further clarification on the final percentage achieved – please see below).</p> <p>It is not confirmed if locally sourced materials will be used (target within a certain number of miles from site), if recycled materials will be used or if modular construction or other methods may be used.</p> |

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| | | | <p>We would request further information regarding the above. Modular construction in particular may be possible given the industrial nature of the proposals.</p> <p>We would suggest that a consultant is asked to review the proposals with regards to the visual impacts on the existing residential community as a result of a predominantly industrial warehouse development.</p> |
| All new buildings designed to incorporate best practice on tackling overheating, taking account of the latest UKCIP climate predictions. | It is stated in the Sustainability Statement that the building “shall be assessed under criterion 3 of the Building Regulations Part L2A compliance tool”. | Sustainability Statement, ESC Ltd, November 2021 | We would encourage a commitment through a condition is used to ensure analysis and compliance using CIBSE TM52 is provided. |
| A layout that maximises the potential for walkable neighbourhoods. | <p>It is stated in the Design and Access Statement that the “building entrances are located in a prominent position creating a safe and pedestrian friendly entrance”.</p> <p>The landscape plan shows a car-dominated landscape, with one pedestrian crossing over the central road.</p> | Design and Access Statement, Cornish Architects, September 2021 | <p>As the proposed development is for industrial/warehouse buildings we would not expect to see significant pedestrian infrastructure.</p> <p>However, further details of safe walking routes should be provided, including evidence to demonstrate segregated routes for pedestrians and cyclists. We would also request to see evidence of wayfinding and signage to nearby public transport nodes (including train station and bus stops).</p> |

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| | | | In addition, is it possible for people working on the site to walk to buy lunch locally? |
| <p>Infrastructure to support sustainable modes of transport will be required including enhancement of footpath and cycle path connectivity with the town centre, employment and rail stations. Measures to ensure the integration of the development with the remainder of the town including measures to address movement across Howes Lane and Lords Lane.</p> <p>New footpaths and cycleways should be provided that link with existing networks, the wider urban area and community facilities with a legible hierarchy of routes to encourage sustainable modes of travel.</p> | <p>No confirmation that links will be provided to existing pedestrian and cycle networks.</p> | <p>Design and Access Statement, Cornish Architects, September 2021</p> | <p>Further detailed should be provided on active travel. In summary – more focus required on integration of active travel modes. A condition could be set to confirm that sustainable modes of travel are prioritised with evidence to demonstrate connections to existing pedestrian and cycling networks.</p> |
| <p>A layout which makes provision for and prioritises non-car modes and encourages a modal shift from car use to other forms of travel.</p> <p>Maximisation of the sustainable transport connectivity in and around the site.</p> | <p>The proposals seem to prioritise car travel.</p> <p>It is stated in the Design and Access Statement “development will provide 10% of the parking spaces with Electrical Vehicle Charging with provision for up to 25%”.</p> | <p>Design and Access Statement, Cornish Architects, September 2021</p> | <p>Would request further information to confirm if a modal shift to other forms of travel will be possible.</p> <p>Would request to see confirmation that the electric car charging points are in a suitable location and are prioritised over car parking spaces, if possible.</p> <p>In addition, we would request further information to confirm if measures such as car club parking spaces have been considered?</p> |
| <p>Good accessibility to public transport services should be provided for, including the provision of a bus route through the site with buses stopping at the railway stations and at new bus stops on the site.</p> | <p>It is stated in the Design and Access Statement that “good accessibility to public transport services with bus stops located close to the site and footpaths and cycleways allow easy</p> | <p>Design and Access Statement, Cornish</p> | <p>We would request further information to confirm if measures such as a shuttle service to nearest train station have been considered, in order discourage solo commuting car journeys?</p> |

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| | access to and from the site. The development utilises the route of the strategic link road and maintains provision for the strategic bus route”. | Architects, September 2021 | |
| Contributions to improvements to the surrounding road networks, including mitigation measures for the local and strategic highway network, consistent with the requirement of the Eco-Towns PPS to reduce reliance on the private car, and to achieve a high level of accessibility to public transport services, improvements to facilities for pedestrians and cyclists and the provision and implementation of a Travel Plan to maximise connectivity with existing development. | A new access road will be created. | Design and Access Statement, Cornish Architects, September 2021 ES Volume 3 Chapter 8.2 Framework Travel Plan | It is stated in the ES that a Travel Plan will be implemented. The Framework Travel Plan is provided as ES Volume 3 Appendix 8.2. |
| Provision of a Transport Assessment. | ES Volume 1 Chapter 8 is supported by Appendix 8.1 Transport Assessment. | | A Transport Assessment for Axis J9 Phase 3 is provided in ES Volume 3 Appendix 8.1. This concludes that “16,901sqm flexible employment floorspace will not result in significant impact on the local road network”. We would recommend that further information is provided on the fact that the spaces will be used for industrial warehouse/manufacturing purposes and therefore may include significant heavy-goods vehicle movements. According to the planning report, the layout of the scheme has been designed specifically to minimise noise impacts on residential development to the east of Howes Lane. A condition could be set to ensure targeted internal and external noise levels are achieved after construction. |

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| <p>Measures to prevent vehicular traffic adversely affecting surrounding communities.</p> | <p>It is stated in the planning statement that “local highway infrastructure can accommodate the forecast traffic levels in advance of the SLR being fully open. The Transport Assessment demonstrates that the forecast development traffic associated with the proposals will be significantly lower than the traffic levels associated with the residential development that had been predicted to come forward elsewhere in the Eco-Town in advance of the SLR and previously deemed acceptable by OCC Highways and CDC”.</p> | <p>Planning report, Quod, September 2021</p> | <p>We would suggest that the ES appendices (including the Transport Assessment and Road Safety Analysis) are reviewed by a transport consultant with regards to impact on local residential areas with regards to traffic and road safety.</p> |
| <p>No development in areas of flood risk and development set back from watercourses which would provide opportunity for green buffers. Proposals should include a Flood Risk Assessment.</p> | <p>Site in Flood Risk zone 1 and is at low risk of flooding.</p> <p>The Flood Risk Assessment considers all sources of flooding. The site does not have a history of flooding and only localised flooding could occur due to blocked or inadequate drainage facilities.</p> | <p>Bailey Johnson Hayes, Flood Risk Assessment and Drainage Strategy, September 2021, Issue 2</p> | <p>No flood risk mitigation measures are deemed to be required.</p> <p>The drainage strategy has been designed for a 100 year event + 40% for climate change allowance. The drainage strategy includes: swales, permeable paving, petrol interceptors, catchpits, flow control devices and gullies and line drains.</p> |
| <p>Significant green infrastructure provision, including new footpaths and cycleways, enhancing green modal accessibility beyond the site to the town centre and Bicester Village Railway Station, and adjoining developments. Public open space to form a well connected network of green areas suitable for formal and informal recreation</p> | <p>Green infrastructure is proposed to separate vehicle and pedestrian routes and create pleasant walking routes. In addition, drainage ponds are proposed.</p> | <p>Landscape Management Plan, ReForm Landscape Architecture, no date</p> | <p>We would request further information is provided with regards to green space for recreation. Have any spaces/benches been allocated for people working in the industrial units to sit outside during lunch breaks to enjoy nature, get fresh air, walk around or places to eat?</p> |

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| <p>Preservation and enhancement of habitats and species on site, particularly protected species and habitats and creation and management of new habitats to achieve an overall net gain in biodiversity including the creation of a local nature reserve and linkages with existing BAP habitats</p> | <p>Existing trees and vegetation to be protected. Existing hedgerow to Howes Lane to be maintained and improved. New meadow grass and amenity grass, amenity shrubs, trees, woodland planting and hedgerow planting proposed. The list of species are provided on the landscape plan. The planning statement confirms net biodiversity gain will be achieved.</p> | <p>Planting strategy, ReForm Landscape Architecture, September 2021</p> | <p>We would seek to see evidence of linkages with local BAP habitats.</p> <p>We would seek evidence that protected species and habitats on site are adequately protected during construction and operation of the development.</p> |
| <p>Sensitive management of open space provision to secure recreation and health benefits alongside biodiversity gains.</p> | <p>The BNG calculation is provided in the ES Volume 3 Appendix 10.2. The habitat biodiversity is calculated to have a 0.27% net biodiversity gain, which doesn't meet the target of 10% improvement. The linear habitats do achieve the target and are calculated to have a potential 14% BNG.</p> <p>In ES Volume 1 Chapter 10, it is stated that "the biodiversity net gain calculation will use the DEFRA 2.0 metric due to DEFRA 3.0 still possessing glitches which can provide inaccurate readouts. This has been agreed with CDC".</p> | <p>ES Volume 1 Chapter 10 Biodiversity, Quod, September 2021</p> <p>ES Volume 3 Appendix 10.2 BNG Calculation, Quod, September 2021</p> | <p>In line with the consultation response from the CPRE, we would recommend that the applicant reconsiders the habitat proposals in order to demonstrate that a 10% BNG can be achieved for the non-linear habitats, and would recommend that a condition is set in order to ensure this is delivered.</p> |
| <p>A Landscape and Habitats Management Plan to be provided to manage habitats on site and to ensure this is integral to wider landscape management.</p> | <p>The Landscape Management Plan sets out procedures for the first 10 years after completion. The plan includes maintenance notes to ensure the soft landscape thrives and maximises its value to local wildlife and for biodiversity net gain. Notes</p> | <p>Landscape Management Plan, ReForm Landscape Architecture, no date</p> | <p>Sufficient information has been provided.</p> |

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| | are provided for tree management, and for planting, grass and hedges management. A plan for activities each month is provided. | | |
| Cherwell District Council Local Plan 2011-2031 ESD polices | | | |
| ESD 1: Mitigating and Adapting to Climate Change | | | |
| Delivering development that seeks to reduce the need to travel and which encourages sustainable travel options including walking, cycling and public transport to reduce dependence on private cars | See above | N/A | See above |
| Designing developments to reduce carbon emissions and use resources more efficiently, including water (see Policy ESD 3 Sustainable Construction) | It is stated in the planning statement that “the development will achieve at least BREEAM ‘Very Good’ and the proposals will be operationally “zero carbon”, meaning that carbon generated by the day-to-day operation of the building delivered will be off-set by a range of technology and enhancements, including the installation of (inter alia) photovoltaic arrays on the roofs”. Credits are also sought for demonstrating efficient use of potable water on site during operation. | Planning report, Quod, September 2021 | As stated above, we would recommend that conditions are set to ensure BREEAM Very Good rating is delivered. Following the proposed energy efficiency measures, the 8no. modelled industrial units all achieve a reduction in carbon emissions of >64% (with a simple average reduction of 71% - please note this is not an area-weighted average). It is not clear what final reduction in carbon emissions is achieved once the PV panels have been added to the calculations as it is not clear how the figures in Table 24 have been calculated. We would request confirmation of the reduction in carbon emissions achieved for each unit (and site-wide) following the addition of PV. |

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| | | | <p>We would also request BRUKL certificates are provided as evidence for the calculations.</p> <p>A condition could be set to ensure that evidence is provided to demonstrate targeted reduction in carbon emissions is achieved at completion of the units.</p> <p>A condition to ensure efficient water consumption is suggested below.</p> |
| Demonstration of design approaches that are resilient to climate change impacts including the use of passive solar design for heating and cooling | It is stated in the planning statement that “care has also been taken in the general design and layout of the scheme to maximise natural lighting of units, whilst avoiding unacceptable fluctuations in heating and cooling”. | <p>Planning report, Quod, September 2021</p> <p>ES Volume 1 Chapter 11 Climate Change and Greenhouse Gases</p> | <p>Good fabric u-values are targeted however an air permeability of 10 m³/hour/m² is targeted due to the spaces being industrial units.</p> <p>It has not been confirmed that the cooling hierarchy has been followed to minimise cooling demand to the office spaces. A condition could be set for this.</p> |
| Minimising the risk of flooding and making use of sustainable drainage methods | See above | N/A | See above |
| Reducing the effects of development on the microclimate (through the provision of green infrastructure including open space and water, planting, and green roofs) | See above | N/A | See above |
| ESD 2: Energy Hierarchy and Allowable Solutions | | | |
| Reducing energy use, in particular by the use of sustainable design and construction measures. | Credits sought in the BREEAM certification will demonstrate the following measures: Minimising both energy demands and energy loss; maximising resource efficiency; incorporating the use of recycled and | Sustainability Statement, ESC Ltd, November 2021 | The Energy Hierarchy has been followed in the Sustainability Statement to demonstrate suitable energy efficiency measures and renewable technologies have been proposed as part of the design of the development. BREEAM certification |

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| | energy efficient materials; re-using materials from demolition where possible. | | is sought which will demonstrate sustainability during construction. |
| Supplying energy efficiently and giving priority to decentralised energy supply. | Connection to an energy network is not deemed appropriate. | Sustainability Statement, ESC Ltd, November 2021 | Energy efficiency measures have been applied and ASHPs are proposed for the office spaces in the industrial units only. |
| Making use of renewable energy. | ASHPs and PV panels are proposed. | Sustainability Statement, ESC Ltd, November 2021 | Renewable energy technologies are proposed – see below. |
| Making use of allowable solutions. | No information provided. | Sustainability Statement, ESC Ltd, November 2021 | We would recommend that the applicant is asked to provide information confirming allowable solutions proposed in order to demonstrate policy compliance. |
| ESD 3: Sustainable Construction | | | |
| All new development will be expected to incorporate sustainable design and construction technology to achieve zero carbon development through a combination of fabric energy efficiency, carbon compliance and allowable solutions in line with Government policy. | Proposed measures for sustainable design and energy efficiency include: <ul style="list-style-type: none"> – Building envelope u-values between 0.25 and 0.35 W/m²K – Glazing u-value 2.2 W/m²K – this is high – Air permeability 10 m³/m²/hour – this is high – VRF air source heat pumps for space heating and cooling (CoP 2.5 and EER 2.6) – Warehouse/industrial space to be artificially lit and unheated – Extract ventilation and electric heating to the toilets | Sustainability Statement, ESC Ltd, November 2021 | The proposed energy efficiency measures are suitable however we would request further information regarding the glazing u-value as this is high. |

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| | <ul style="list-style-type: none"> - Local small storage electric water heaters for domestic hot water - LED lighting to all areas <p>Sustainable construction measures will be assessed as part of the BREEAM assessment.</p> | | |
| Cherwell District is in an area of water stress and as such the Council will seek a higher level of water efficiency than required in the Building Regulations, with developments achieving a limit of 110 litres/person/day. | <p>While the target of 110 litres/person/day applies to residential developments it is still important to demonstrate that commercial developments are also water efficient.</p> <p>The sanitaryware specification (including manufacturers and flow rates/volumes) are provided in the Sustainability Statement. The figures suggested are suitable.</p> | Sustainability Statement, ESC Ltd, November 2021 | We would recommend a condition is set to ensure the targeted flow rates/volumes are achieved in the completed buildings. |
| All new non-residential development will be expected to meet at least BREEAM 'Very Good' with immediate effect, subject to review over the plan period to ensure the target remains relevant. The demonstration of the achievement of this standard should be set out in the Energy Statement. | See above | See above | See above |
| <p>All development proposals will be encouraged to reflect high quality design and high environmental standards, demonstrating sustainable construction methods including but not limited to:</p> <ul style="list-style-type: none"> - Minimising both energy demands and energy loss - Maximising passive solar lighting and natural ventilation - Maximising resource efficiency - Incorporating the use of recycled and energy efficient materials | High quality design and environmental methods have been demonstrated. | Sustainability Statement, ESC Ltd, November 2021 | <p>Sufficient information has been provided as follows:</p> <ul style="list-style-type: none"> • Minimising energy demands and energy loss – good building fabric u-values, and efficient ASHPs are proposed for offices • Maximising passive solar and natural ventilation – not appropriate for industrial buildings |

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| <ul style="list-style-type: none"> - Incorporating the use of locally sourced building materials - Reducing waste and pollution and making adequate provision for the recycling of waste - Making use of sustainable drainage methods - Reducing the impact on the external environment and maximising opportunities for cooling and shading (by the provision of open space and water, planting, and green roofs, for example); and - Making use of the embodied energy within buildings wherever possible and re-using materials where proposals involve demolition or redevelopment. | | | <ul style="list-style-type: none"> • Locally-sourced, sustainable materials – see above • Reducing waste during construction and providing waste facilities for operation – this will be assessed as part of the BREEAM assessment • Green roofs and cooling – see above • Sustainable drainage – see above • Embodied construction methods – see above |
| ESD 4: Decentralised Energy Systems | | | |
| Does the feasibility assessment indicate that decentralised energy systems are deliverable as part of the development? Yes/No | It is stated in the Sustainability Statement that connection to the Ardley Heat Network is not deemed appropriate due to the project only requiring heat pumps for the office space. | Sustainability Statement, ESC Ltd, November 2021 | The warehouse areas are being delivered as speculative shell only spaces so no connection to the heat network is provided. |
| If yes, do decentralised energy systems form part of the proposed development? (As required by Policy ESD 4) Yes/No | No – see above. | N/A | No – see above. |
| ESD 5: Renewable Energy | | | |
| Does the feasibility assessment indicate that onsite renewable energy systems are deliverable as part of the development? Yes/No | No feasibility assessment of renewable energy technologies has been provided. | Sustainability Statement, ESC Ltd, November 2021 | We would request to see confirmation of the renewable energy technologies considered (this could include solar thermal and ground source heat pumps). |
| If yes, does onsite renewable energy form part of the proposed development? (As required by Policy ESD 5) Yes/No | Renewable energy technologies have been suggested for the buildings. | Sustainability Statement, ESC Ltd, November 2021 | 2,940 m ² of PV panels are proposed. The proposed PV panels are 18% efficient and will be installed at a 6 degree inclination angle. |

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| | | | <p>ASHPs will provide space heating and cooling to the office spaces.</p> <p>A condition could be set to ensure that these measures are delivered in the buildings and demonstrated prior to occupation.</p> |
| <p>Planning applications involving renewable energy development will be encouraged provided that there is no unacceptable adverse impact, including cumulative impact, on the following issues, which are considered to be of particular local significance in Cherwell: Landscape and biodiversity including designations, protected habitats and species, and Conservation Target Areas Visual impacts on local landscapes The historic environment including designated and non designated assets and their settings The Green Belt, particularly visual impacts on openness Aviation activities Highways and access issues, and Residential amenity.</p> | <p>The PV panels will be installed on the roofs. It is not clear where the air source heat pumps will be installed.</p> | <p>Sustainability Statement, ESC Ltd, November 2021</p> | <p>A condition could be set to request evidence to demonstrate the heat pumps will not have an unacceptable adverse impact on biodiversity, residential amenity or have a visual impact.</p> |