## Climate Change and Sustainability Policy Matrix

| Policy | Requirement | Scheme Response |
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| Policy ESD1: Mitigating and Adapting to Climate Change | Mitigation measures at a strategic level will include:<br>▪ Distributing growth to the most sustainable locations | The application site forms part of an adopted development plan allocation for development. Therefore, the appropriateness of the site to accommodate development has been assessed and found to be sound. It is a sustainable location for (job creating) growth and development. |
| | ▪ Reducing the need to travel and encourage sustainable travel options to reduce dependence on the private car. | The location of the proposed development has been carefully selected by the proposed operator due to its proximity to a range of local businesses which reduces the need for these customers to travel further afield, and as a means by which to reduce car borne journeys to drive-thru facilities outside Bicester. Beyond these overarching measures which will reduce the need to travel, the proposals also in incorporate electric car vehicle charging points, customer and staff cycle parking, direct linkages to the local pedestrian and cycle network, and a commitment to funding enhancements to the adjacent pedestrian/cycle network. |
| | ▪ Designing developments to reduce carbon emissions and use resources more efficiently. | A fabric first approach has been taken to designing the building which means it will use less energy and have the ability to manage demand during its operation. The use of LED lighting, mechanical ventilation with heat recovery and electric powered heating and cooling systems (using electric rather than a gas powered system, for example, is beneficial as the grid is being de-carbonised) represent further efficiencies. |
| | ▪ Promoting the use of decentralised and renewable or low carbon energy. | Air source heat pumps are to be installed at fit out stage as a renewable energy sources and these will be complemented by 100sqm of roof mounted PV panels to maximise the renewable and low carbon energy generating credentials of the development. The PV panels will provide around 18KW of electricity generated at maximum output generating over 16000KWH of green electricity each year saving over £2,000 per annum in electrict usage costs. |
| | Adaption measures will include: | |
| | ▪ Taking into account the known physical and environmental constraints. | The main constraint on developing the site is the risk of flooding. This risk has been comprehensively mitigated through the layout, design and drainage solution proposed for the site, which also take the opportunities available to generate material benefits associated with flood risk reduction and biodiversity enhancement (an 18% net gain). |
| | ▪ Design approaches that are resilient to climate change impacts. | The risk of flooding has been comprehensively mitigated through the layout, design and drainage solution proposed for the site, which also take the opportunities available to generate material benefits associated with flood risk reduction and biodiversity enhancement (an 18% net gain). |
| | ▪ Minimising the risk of flooding and making use of sustainable drainage methods. | The risk of flooding has been comprehensively mitigated through the layout, design and drainage solution proposed for the site, which also take the opportunities available to generate material benefits associated with flood risk reduction and biodiversity enhancement (an 18% net gain). |
| | ▪ Reducing the effects of development on the microclimate. | The development is of a very limited scale and there will be no perecptible microclimate impacts arising from the scheme. |
| Policy ESD 2: Energy Hierarchy and Allowable Solutions | The Council promote the following energy hierarchy: | |
| | ▪ Reducing energy use, in particular by the use of sustainable design and construction measures | A fabric first approach has been taken to designing the building which means it will use less energy and have the ability to manage demand during its operation. The use of LED lighting, mechanical ventalation with heat recovery and electric powered heating and cooling systems (using electric rather than a gas powered system, for example, is beneficial as the grid is being de-carbonised) represent further efficiencies. |
| | ▪ Supplying energy efficiently and giving priority to decentralised energy supply | There is no scope to consider decentralised energy supplies for a scheme of this limited nature and scale. However, air source heat pumps are to be installed at fit out stage as a renewable energy sources and these will be complemented by roof mounted PV panels to maximise the renewable and low carbon energy generating credentials of the development. |
| | ▪ Making use of renewable energy | Air source heat pumps are to be installed at fit out stage as a renewable energy sources and these will be complemented by roof mounted PV panels to maximise the renewable, mechanical ventalation with heat recovery and low carbon energy generating credentials of the development. The PV panels will provide around 18KW of electricity generated at maximum output generating over 16000KWH of green electricity each year saving over £2,000 per annum in electrict usage costs. |
| | ▪ Making use of allowable solutions. | Air source heat pumps are to be installed at fit out stage as a renewable energy sources and these will be complemented by roof mounted PV panels to maximise the renewable and low carbon energy generating credentials of the development. The PV panels will provide around 18KW of electricity generated at maximum output generating over 16000KWH of green electricity each year saving over £2,000 per annum in electrict usage costs. |

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| Policy ESD 3: Sustainable Construction | All new non-residential development will be expected to meet at least BREEAM 'Very Good'. | The applicants have explored the opportunities around BREEAM, but in common with other similar developments across the local area (and nationwide) it is simply not feasible to secure the required number of credits. There are many reasons for this, not least the fact that the applicants can only control construction to building shell and not fit out (responsibility of the occupier) where many of the credits lie (e.g. daylighting, energy performance, etc.), and the limited scale of the building and developable area which reduces the scope to incorporate measures to boost credits. Of course, BREEAM is only one measure against which the sustainability of the proposed development can be assessed. It is clearly demonstrated that the proposals go above and beyond the policy requirements for a scheme of this nature and scale in relation to climate change mitigation, and the sustainability objectives of local and national policy. |
| | All development proposals will be encouraged to reflect high quality design and high environmental standards, demonstrating sustainable construction methods including but not limited to: | |
| | ▪ Minimising both energy demands and energy loss | A fabric first approach has been taken to designing the building which means it will use less energy and have the ability to manage demand during its operation. The use of LED lighting and electric powered heating and cooling systems (using electric rather than a gas powered system, for example, is beneficial as the grid is being de-carbonised) represent further efficiencies. |
| | ▪ Maximising passive solar lighting and natural ventilation | The unit benefits from large areas of glazing which reduce the requirement for artificial lighting. |
| | ▪ Maximising resource efficiency | A fabric first approach has been taken to designing the building which means it will use less energy and have the ability to manage demand during its operation. The use of LED lighting and electric powered heating and cooling systems (using electric rather than a gas powered system, for example, is beneficial as the grid is being de-carbonised) represent further efficiencies. |
| | ▪ Incorporating the use of recycled and energy efficient materials | The use of energy efficient materials is intrinsic to the fabric first approach adopted to building design and construction. |
| | ▪ Incorporating the use of locally sourced building materials | Reasonable endeavours will be used to use materials from local sources where possible. |
| | ▪ Reducing waste and pollution and making adequate provision for the recycling of waste | In 2019 Greggs removed 350 tonnes of single use plastics from their operations, they will use 25% less packaging in 2025 that they did in 2019, and they already redistribute nearly 20% of unsold food to charities and community groups. |
| | ▪ Making use of sustainable drainage methods | The risk of flooding has been comprehensively mitigated through the layout, design and drainage solution proposed for the site, which also take the opportunities available to generate material benefits associated with flood risk reduction and biodiversity enhancement (an 18% net gain). The sustainable drainage solution includes both a pond and swale, prior to discharge into the nearby watercourse. |
| | ▪ Reducing the impact on the external environment and maximising opportunities for cooling and shading; and | The building is of a small scale and will not have a material impact in terms of overshadowing soft landscaped areas. The immediate environment will be enhanced in association with the proposed drainage solution, alongside more active management of the space. |
| | ▪ Making use of the embodied energy within buildings wherever possible and re-using materials where proposals involve demolition or redevelopment. | N/A |
| Policy ESD 4: Decentralised Energy Systems | The use of decentralised energy systems, providing either heating (District Heating (DH)) or heating and power (Combined Heat and Power (CHP)) will be encouraged in all new developments. | It is not feasible to connect to a DH/CHP system in this case. In any event the incorporation of PV panels and air source heat pumps represent a more sustainable approach to energy generation when considered against the implications of connecting to a decentralised system. |
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| | A feasibility assessment for DH/CHP, including consideration of biomass fuelled CHP, will be required for all applications for non-domestic developments above 1000m2 floorspace. | The proposals do not meet the policy threshold for assessment, but see above regarding the approach to renewable energy generation. |
| Policy ESD 5: Renewable Energy | Planning applications involving renewable energy development will be encouraged provided that there is no unacceptable adverse impact on amenity, highways, landscape, the historic environment and Green Belt. | N/A |
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| | A feasibility assessment of the potential for significant on site renewable energy provision will be required for all applications for non-domestic developments above 1000m2 floorspace. | The proposals do not meet the policy threshold for assessment, but see above regarding the approach to renewable energy generation. |