

2.6 Water Use and Sustainable Drainage

2.6.1 Potable water use reduction

The proposed development will minimise the consumption of potable water in sanitary applications and landscape irrigation. The strategies are summarised in Figure 2.28.

Water-efficient fixtures and fittings, such as dual flush WCs and low flow wash hand basins and kitchen taps, will be installed in the proposed WCs, shower rooms, etc. The flow rates proposed at this stage are commensurate with the requirements to achieve BREEAM "Outstanding".

Greywater and rainwater harvesting systems are proposed as a further means of reclaiming non-potable water and reducing potable water demand. Greywater will be collected from showers in the basement, and used for WC flushing on the lower 13 storeys. Rainwater will be harvested from the roof and other external areas, and stored in the basement tanks for WC flushing. As a further potable water use reduction strategy, rainwater will be harvested and passively stored in oversized pipework for WC flushing for the upper 5 storeys, as part of a FlowStow system. In all scenarios, if there is no supply of harvested greywater or rainwater, the system will switch to mains cold water supply.

Water use for irrigation will also be minimised. An efficient irrigation system will be adopted to deliver water only where and when it is needed.

A water meter with pulsed or other open protocol communication output to enable connection to an appropriate utility monitoring and management system, e.g. a building management system (BMS), will be proposed on the mains water supplies to the proposed development. This strategy ensures water consumption can be monitored and managed, therefore encouraging reductions.

A leak detection system capable of detecting leaks on the mains water supply within and to the building is proposed to reduce the impact of major water leaks that may otherwise go undetected.

Flow control devices will be fitted to minimise water leaks and wastage from sanitary fittings.

2.6.2 Sustainable stormwater drainage

The Environment Agency's Indicative Floodplain Map shows that the site lies in Zone 1, and therefore is at negligible risk of fluvial or tidal flooding. However, under the requirements of the NPPF a detailed Flood Risk Assessment is still required as the site is within a Critical Drainage Area (CDA) as highlighted within the London Borough of Camden (LBC) Strategic Flood Risk Assessment (SFRA).

Accordingly, a Flood Risk Assessment has been conducted by Arup, showing a low risk of flooding for all flood sources assessed. Refer to the *Flood Risk Assessment prepared by Arup dated December 2023, updated December 2024*.

A Sustainable Drainage System (SuDS) strategy has been prepared by Arup in accordance with the drainage hierarchy from London Plan Policy SI 13 and Camden Local Plan Policy CC3.

The proposed discharge rate will be limited to 39.0l/s for all storm events up to and including the 1-in-100 year event, including a 40% allowance for climate change. The SuDS comprises the following strategies to reduce the discharge rate from the existing 123.0l/s (based on the 1-in-100 year event):

- Rain water harvesting
- Bio-retention features in the public realm
- Subsurface stormwater storage (380 m³ attenuation located in the basement).

The proposed peak runoff rate has been reduced to 2.0l/s, which represents a 92% reduction on the 1-in-1 year return period storm event compared to the existing condition.

An allowance of 40% has been made for climate change in all calculations in line with the Environment Agency's guidance.

The Flood Risk Assessment and Drainage Report are included as part of the full planning application. Refer to the *Flood Risk Assessment prepared by Arup dated December 2023, updated December 2024*, and the *Drainage and SuDS Strategy prepared by Arup dated December 2023, updated December 2024* respectively.

Water Use Reduction Strategies

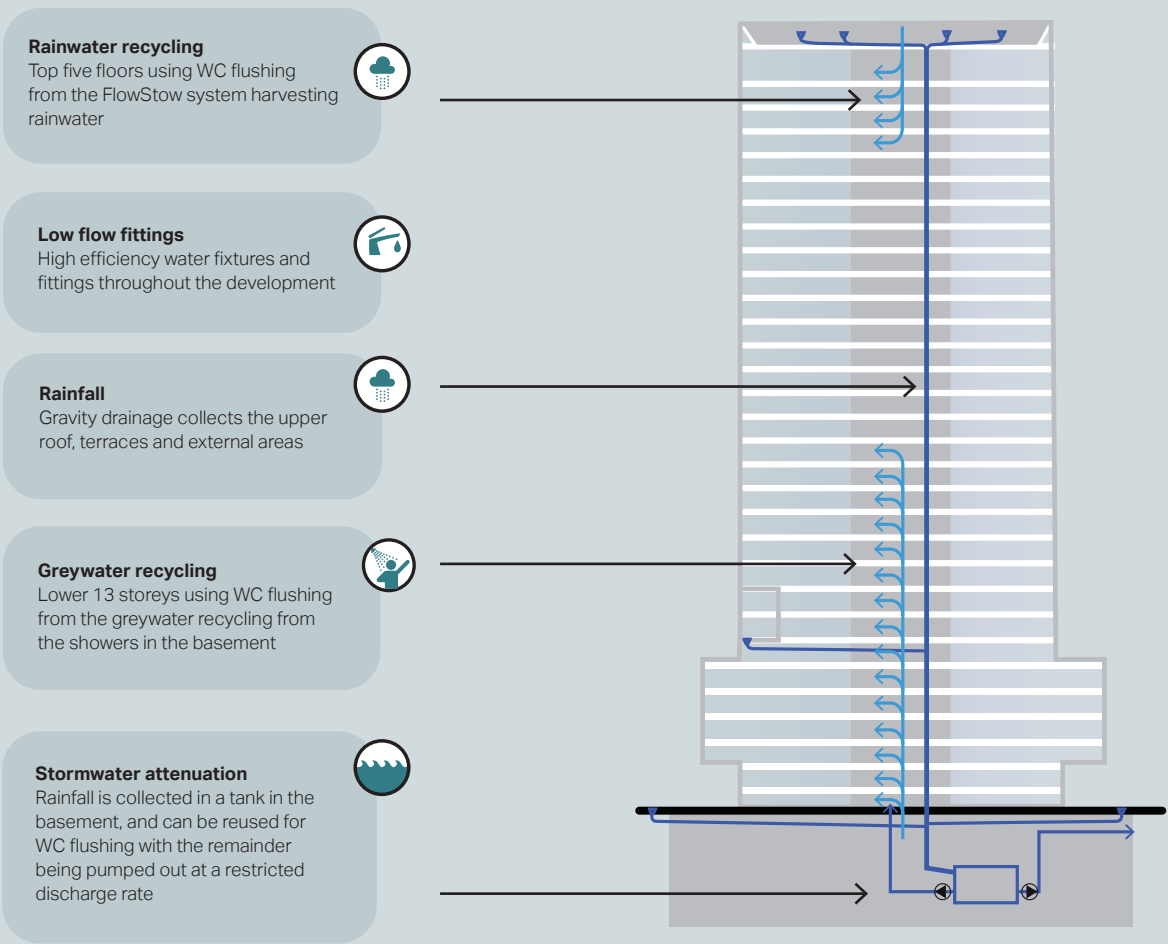


Figure 2.28 Water use demand reduction strategies employed in the proposed development

2.7 Ecology and Land Use

2.7.1 General

The proposed development's footprint is on an area of land which has previously been developed, and includes the existing tower and public realm.

There are opportunities to improve the ecology, biodiversity, and local greening of the development site, and the proposed development aims to enhance this.

2.7.2 Targets

The proposed development is targeting at least the following:

- Urban Greening Factor (UGF) 0.3
- Biodiversity Net Gain (BNG) 10%
- Greenfield runoff rates.

2.7.3 Local greening

The proposed development improves on the local greening with several interventions in the public realm and at various locations on the tower. The following are proposed, refer to *Public Realm and Landscape Design Statement prepared by DSDHA dated December 2023, updated December 2024*, as well as the *Urban Greening Factor Assessment prepared by Greengage dated December 2024*:

- Semi natural wetland to the north-west of the public realm in front of 10 Brock Street
- A series of planters with semi-natural vegetation throughout the public realm, including the open stairs, up the ramp, and terrace at Levels 01 and 02
- Intensive green roofs on terrace at Level 03, Level 11, Level 20, Level 23, Level 26, and the podium roof at Level 06
- Standard trees in connected pits throughout the public realm
- Intensive green roof on the rooftop.

Together these green interventions will increase the quality and quantity of urban greening, resulting in a UGF of 0.332. This is shown in Figure 2.29.

2.7.4 Mitigating urban heat islands

In urban areas, intensifying climate change will result in increased rainfall intensity and risk of flash flooding in a largely impermeable environment, while increasing temperatures will exaggerate the urban heat island effect.

Not only will these proposals improve UGF and biodiversity, but they are also adept at enhancing the climate resilience of the built environment, mitigating risks such as flooding and overheating, while providing a wider range of co-benefits.

2.7.5 Sustainable drainage

These green interventions form part of the Sustainable Urban Drainage Systems (SuDS) employed to reduce and mitigate the impacts of flood events. The proposed development is targeting 2.0l/s runoff rate (1-in-1 year event) through such measures, in combination with stormwater attenuation in the basement. Refer to Section 2.6.2.

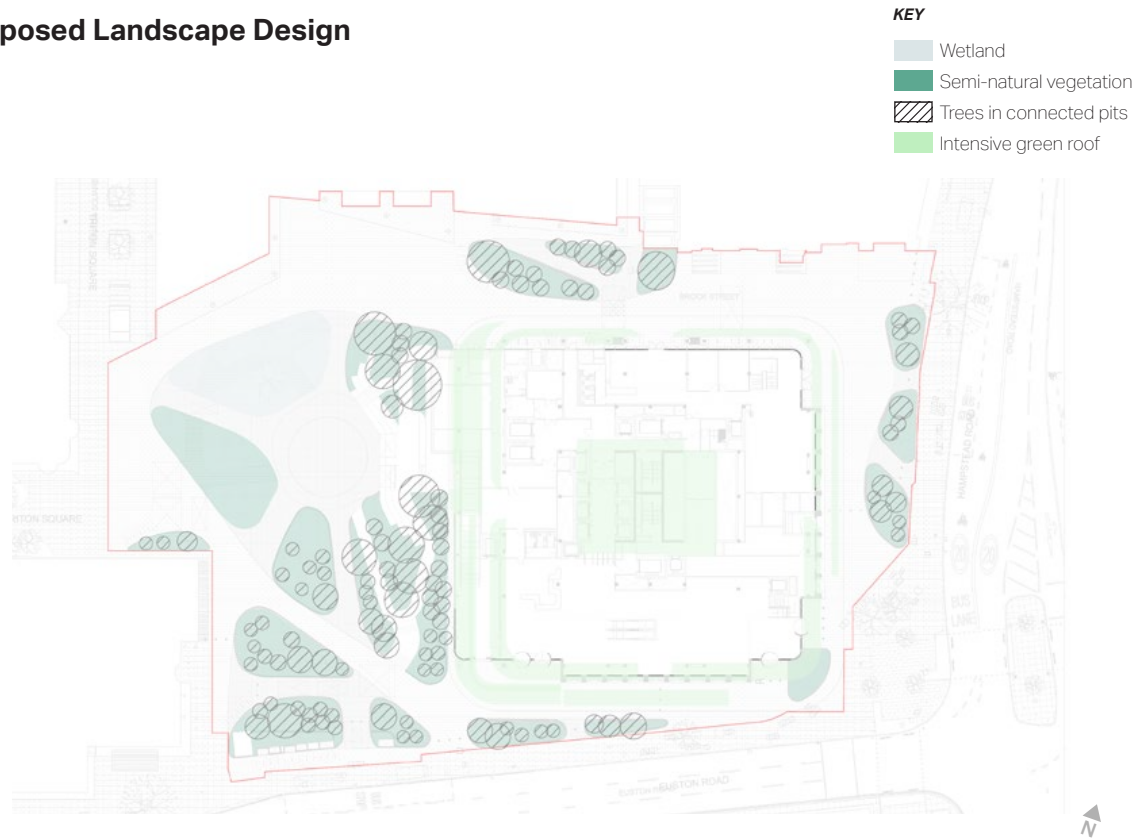
2.7.6 Biodiversity net gain

A Preliminary Ecological Appraisal and a Biodiversity Net Gain Assessment have been conducted by Greengage, refer to *Biodiversity Net Gain Assessment prepared by Greengage dated December 2024*.

The assessment shows that the proposed development is predicted to provide a net gain of 0.86 HU (35.39%) associated with area-based habitats compared with the pre-development value. This will be achieved through the following measures:

- A pond (non-priority habitat) will be created and planted with wetland plants
- Urban trees will be planted throughout the site
- A biodiverse roof will be created on the rooftop. It will be planted with a variety of native species and species listed on the RHS Plants for Pollinators list
- Intensive green roof will be created in perimeter planters on the tower. They will be planted with a large variety of native and non-native heathland/upland species.

Proposed Landscape Design



Urban Greening Factor

Surface Cover Type	Factor	Area (m ²)	Contribution
Semi natural vegetation	1.0	1,001	1,001
Wetland or open water	1.0	388	388
Intensive green roof	0.8	986	788.8
Standard trees in connective tree pits	0.8	576	460.8
Urban greening factor			0.332

Figure 2.29 Landscape design for the proposed development and UGF calculation. Drawings and calculations from Public Realm and Landscape Design Statement prepared by DSDHA dated December 2023, updated December 2024

2.8 Health and Wellbeing

2.8.1 Daylight, views, and access to nature

The proposed development has the health and wellbeing of building users at its core.

The building envelope has been designed using a “fabric-first” approach, to ensure good access to daylight and maximise the unique 360° views out. This is balanced with controlling solar heat gains and its associated energy demand, through optimised glazing ratios, external shading, and highly-selective solar control glazing.

Direct and indirect access to nature and greening is provided throughout the proposed development. The public realm provides access to the outdoors, and is complemented by planting to significantly improve local greening and biodiversity.

Within the tower, greening is provided at the terrace edges and in front of any double-height amenity cuts, providing more localised contact with nature for occupiers on those floors.

2.8.2 The indoor environment

The indoor environment will be of the highest quality. The mechanical ventilation systems are designed to provide 100% filtered fresh air at rates well above statutory requirements. This results in improved indoor air quality and the provides an opportunity for low-energy cooling.

Additionally, the facade design will potentially incorporate openable panels for natural ventilation at appropriate times, providing occupants with improved control over the indoor environment, and a direct connection with outdoors.

To ensure a thermally comfortable environment, an overheating assessment has been conducted by Arup. The assessment has been undertaken according to CIBSE TM52, and in line with GLA and BREEAM requirements. The results of the assessment showed that all areas analysed exhibited less than 3% of the proposed development's occupied hours are above an operative temperature of 26°C, and therefore the proposed development is not considered to be at risk of overheating.

To test the strategy's readiness for future climate change, the assessment was also conducted using future weather data (DSY2 and DSY3). Again, the proposed development was not considered to be at risk of overheating.

The results of the overheating assessment are detailed in the Energy Statement that forms part of this planning application, refer to the *Energy Statement prepared by Arup dated December 2024*.

Material specifications will explicitly avoid products that contain Volatile Organic Compounds (VOCs) wherever possible, to minimise the effect on internal air quality. Typical VOC sources include paints, lacquers, some pressed timber products (including some hardboard, particle boards, hardwood plywood wall panelling), glues and adhesives, furniture made from pressed wood products and foamed insulation.

The proposed development will be designed to achieve exemplary indoor ambient noise levels and appropriate sound insulation levels.

2.8.3 Certification

The proposed development is registered for WELL v2 Core Certification. It is targeting features to enable WELL “Gold” certification with aspiration for “Platinum”.

For more detail on the WELL pre-assessment, refer to Section 2.2.

2.9 Sustainable Transport

The proposed development is in close proximity to an excellent public transport network. London Underground, Overground, National Rail, and buses are all available within 2 km walking distance of the site, which will help to reduce transport-related emissions and traffic congestion.

The Site has a PTAL rating of 6b, indicating "excellent" transport connectivity. The Site is mainly served by Warren Street Underground Station (south), Euston Square Underground Station (east) and Great Portland Street Underground Station (west). There are also several bus routes that serve the site along Euston Road (south) and Hampstead Road (east).

A site-specific Transport Assessment has been prepared by Velocity Transport Planning in accordance with TfL's Healthy Streets Approach, and forms part of this planning application. Refer to *Transport Assessment prepared by Velocity Transport Planning dated December 2023, updated December 2024*. In addition, an Outline Travel Plan has been prepared which looks to introduce and promote sustainable travel measures throughout the development's life. Refer to *Outline Travel Plan prepared by Velocity Transport Planning dated December 2023, updated December 2024*.

The Healthy Streets Travel Assessment has been developed to accommodate a range of travel options for building users, encouraging reduced reliance on the forms of travel that have an injurious environmental impact. The provision of cycle parking, and the restricted car parking at the site will further discourage the use of private vehicles travelling to / from the site, and will promote travel by non-car modes, especially walking and cycling.

The proposed development will be car-free except two blue-badge parking spaces.

A variety of cycle parking will be provided to encourage active and sustainable travel. 890 long-stay cycle parking spaces will be provided in the secure basement. This will be complete with end of trip facilities including changing rooms, lockers, showers, WCs, maintenance facilities, and water dispensers.

100 short-stay spaces will be located in the public realm, making the total cycle parking provision for the proposed development 990 spaces, in line with London Plan cycle parking standards.

2.10 Local Impacts

2.10.1 Local air pollution

The energy strategy for the proposed development comprises all-electric heating and cooling, eliminating on-site combustion of fossil fuel, and therefore has no adverse impact on local air pollution. The proposed development may include a life-safety generator, however backup plant installed for emergency and life-safety power supply is excluded from the consideration for building emissions. The proposed development is considered better than air quality neutral in terms of building emissions.

The proposed development will be car-free except for two blue-badge parking spaces. As per the GLA's Air Quality Neutral Guidance, the proposed development is considered air quality neutral with regards to transport emissions.

Considering both building and transport emissions, accordingly the proposed development is considered air quality neutral. More detail is contained within the *Environmental Statement prepared by Trium dated December 2023, updated December 2024*.

The proposed air source heat pumps (ASHPs) and chillers will use refrigerants with low global warming potential (GWP), where commercially available and technically feasible based on other performance requirements.

Insulating materials are recommended to use substances that have global warming potential (GWP) of less than 5. This will contribute to reducing blowing agent emissions associated with the manufacture, installation, use and disposal of foamed thermal and acoustic insulating materials.

2.10.2 Local light pollution

Night-time light pollution will be minimised by carefully selecting equipment with appropriate optics and baffles and positioned to ensure that light pollution is kept to a minimum as not to disturb residents in the neighbouring properties.

All external lighting, including that in the public realm, will be specified to BREEAM Ene 03 requirements. It will endeavour to meet best practice efficacy with automatic lighting control to prevent operation during daylight hours. For areas

of intermittent pedestrian traffic, presence detection will be considered where appropriate.

Night-time light pollution will be minimised through the appropriate location and selection of external luminaires and light controls.

2.10.3 Local noise pollution

Noise from the proposed development affecting nearby noise-sensitive buildings will be reduced by adopting noise attenuation measures, where required.

A Noise Impact Assessment was conducted by Hann Tucker Associates. The assessment establishes baseline noise conditions by means of a detailed noise survey. These findings are used to assess the suitability of the site for commercial use, and to set noise emission limits from the development to minimise the possibility of noise nuisance to neighbours. The Noise Impact Assessment is included as part of the planning application. Refer to *Noise Impact Assessment Report prepared by Hann Tucker Associates dated December 2023, updated December 2024*.

2.10.4 Construction impacts

A Construction Management Plan has been developed by Velocity Transport Planning to help manage noise, dust, and pollution impacts during construction.

The CMP is included as part of the planning application. Refer to *Construction Management Plan prepared by Velocity Transport Planning dated December 2024*.

2.11 Management

Sustainable management practices relating to design, construction, commissioning, and handover will be sought in order to ensure robust sustainability objectives are set and then followed from design through to operation.

The proposed development has engaged in a thorough co-design and consultation process, integrating the community and other relevant stakeholders in the design process. This included sessions on inclusivity in the public realm, interior spaces and programming, and exterior spaces and programming, as well as events focused on environmental sustainability, and a youth engagement workstream. The process is documented in the Statement of Community Involvement (SCI) that forms part of the planning application. Refer to *Statement of Community Involvement and Social Impact prepared by LCA dated December 2023, updated December 2024*.

Building services commissioning will be carried out in a coordinated and comprehensive manner with regard to the scope of services being specified/installed, ensuring optimised performance under actual occupancy and usage conditions. The proposed development is targeting a NABERS rating which will require at least a year's worth of building monitoring and tuning, to deliver the targeted rating.

A Building Users' Guide (BUG) will be provided to the relevant Facilities Management (FM) teams to enable them to understand and operate their premises efficiently and make the best use of local facilities. This non-technical users' guide will cover information on the operation and environmental performance of the building, and provide information relating to the site and its surroundings.

The construction site will be managed in an environmentally sound manner in terms of resource use (including construction materials and waste), energy and water consumption, and air and water pollution. The site will be managed adhering to the Considerate Constructors Scheme, and the project will endeavour to achieve a high score of 40/45 or higher.

Management of noise, dust, and pollution impacts during construction is addressed in the Construction Management Plan. Refer to *Construction Management Plan prepared by Velocity Transport Planning dated December 2024*.

3

Euston Tower

Summary and Conclusions

3.1 Conclusion

This Sustainability Statement demonstrates British Land's commitment to delivering a world leading science, technology and innovation building and public realm for Camden and the Knowledge Quarter that inspires, connects, and creates opportunities for local people and businesses.

Sustainability is a cornerstone of this vision. As outlined in this statement, the proposed development adopts a sustainable approach across all areas of design, construction, and operation. This will ensure that it delivers world leading sustainability performance that is fit for today and the future.

Wherever technically, practically, and economically feasible, the proposed development meets and exceeds the sustainability requirements of planning policy and the Building Regulations.

The proposed development includes a range of sustainable strategies and approaches, as detailed in this statement and its supporting documents, including:

- **High quality certification**
 - Targeting BREEAM "Outstanding" NC 2018 for offices with research and development areas, and BREEAM "Excellent" NC 2018 retail areas
 - Registered for WELL v2 Core Certification targeting WELL "Gold" certification, with aspiration for "Platinum"
 - Aspiring to NABERS 5* in operation.
- **Net zero carbon in construction and operation**
 - Embodied carbon design optimisation and carbon-considered procurement
 - Upfront embodied carbon currently estimated as 725 kgCO₂e/m² GIA [A1-A5] (including demolition), outperforming the GLA benchmark for offices
 - Whole life-cycle embodied carbon currently estimated as 1,225 kgCO₂e/m² GIA [A-C excl. B6&B7] (including sequestration), outperforming the GLA benchmark for offices
 - Residual embodied carbon emissions will be offset through payment into British Land's transition fund
- **Fabric first and low energy**
 - Residual regulated operational carbon emissions offset through payment into the Camden Climate Fund.
 - Limiting internal heat gains by challenging design criteria to reduce space cooling demand and maximise free cooling potential
 - Facade designed to significantly limit solar heat gain (LETI-compatible 35 W/m²) with rationalised glazing ratios, external shading, and solar control glass
 - Potential integration of openable vents as a means of passive ventilation and cooling
 - Regulated operational carbon emissions are reduced by 8% due to energy efficiency measures alone compared to the GLA's Part L 2021 baseline ("Be Lean")
 - An all-electric heating and cooling energy strategy is proposed to benefit from future electrical grid decarbonisation, using air source heat pumps (ASHPs) and chillers for all heating and cooling
 - Through the use of ASHPs and rooftop photovoltaic (PV) panels, the regulated operational carbon emissions are reduced by 16% overall, compared to the GLA's Part L 2021 baseline ("Be Green")
 - Whole building energy demand estimated using a CIBSE TM54 approach as 158 kWh/m² for office and lab-enabled split ("Be Seen")
 - For comparison, the office-only performance is estimated as 106 kWh/m²
 - Base build energy demand will be provided by 100% Renewable Energy Guarantee of Origin backed (REGO) electricity, in line with British Land's net zero pathway¹.

¹ In addition to, and distinct from, the Mayor of London's net zero operational carbon requirement

- **Circular economy pioneer and waste minimisation**
 - Carbon and waste has been minimised by retaining 31% of the existing structure, following a detailed feasibility study (pre-redevelopment audit), which has been independently reviewed by a third-party assessor, and their report has been issued to Camden
 - A pioneering strategy for material recovery and detailed assessment of opportunities for deconstruction waste reuse/upcycling/recycling submitted as Appendix B to the Circular Economy Statement
 - Prototyping innovative approaches for structural reuse of concrete, not done previously at scale, with testing already conducted at the University of Surrey demonstrating promising results
 - Investigating recycling of building glass at scale, with chemical analyses and methodology testing already undertaken
 - Designing a structure that is long-lasting and adaptable, with elements designed to be disassembled and recovered for reuse where possible
 - Considering the different building elements in layers to enable maintenance and replacement that minimises destructive impacts on other building elements (especially structure)
 - Designing a modular facade with the intention of utilising off-site manufacturing to reduce waste
 - Using reused and/or high recycled content materials where possible, targeting 24% recycled content by value
 - Improving end of life reusability by committing to capture useful data for key building elements in material passports
- Meeting or exceeding the GLA diversion from landfill targets:
 - Zero biodegradable waste to landfill
 - 98% of demolition waste to be diverted from landfill
 - 96% of construction waste to be diverted from landfill
 - 95% of excavation waste to beneficial use
- Contributing to achieving the GLA's target of 65% municipal waste recycling by 2030, and the London Environmental Strategy target of 75% business waste recycling by 2030.
- **Climate resilience, greening, and biodiversity**
 - Use of green roofs, in addition to vegetated areas and bio-retention features in the landscaping, as part of a Sustainable Drainage System (SuDS) that manages surface water runoff and filters rainwater
 - Surface water runoff rates of 39.0l/s, and a 68% reduction in surface water discharge compared to the pre-development condition (1-in-100 year)
 - Mitigation of urban heat island effect through green roofs and biodiverse planting, achieving:
 - Urban Greening Factor (UGF) 0.332
 - Biodiversity Net Gain (BNG) 35.39% (0.86HU)
 - Improved wind conditions compared to the existing situation, achieved through the building and landscaping design.
- **Water conservation**
 - Non-potable water use reduction through use of rainwater and greywater harvesting for WC flushing
 - Innovative StoFlow system designed to passively store rainwater for WC flushing
 - Targeting a minimum 40% potable water reduction compared to BREEAM NC 2018 baseline, exceeding the London Plan requirement of BREEAM "Excellent" standards for Wat 01 water category.

- **Air quality impacts**
 - Air quality neutral achieved through an all-electric infrastructure with no on-site combustion for heating and cooling, and car-free development except for accessible bays (space provision only for back-up tenant generator)
- **Active travel and car-free**
 - A car-free development except two blue-badge parking spaces
 - Provision of end of trip facilities complete with 990 cycle parking spaces (890 long-stay spaces located in a secure basement, 100 short-stay within the public realm), in line with London Plan minimum cycle parking standards
 - To further promote the cycle mode share, end of trip facilities includes changing rooms, lockers, showers, WCs, maintenance facilities, and water dispensers
- **Sustainable management**
 - A thorough co-design and consultation process, integrating the community and other relevant stakeholders in the design process
 - Commitment to managing the construction site in an environmentally sound manner, adhering to the Considerate Constructors Scheme, and considering its impacts during construction in a Construction Management Plan.

To ensure successful implementation, the key initiatives and commitments detailed in this statement, and its supporting documents, will be implemented, monitored, and/or reviewed as the design develops, and subsequently during the operational phase of the proposed development.

A

Euston Tower

Appendices

Appendices

List of Appendices

- A BREEAM Pre-assessment
- B WELL Pre-assessment
- C WLCA Method Statement
- D GLA WLCA Template



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