

SUSTAINABILITY STATEMENT

Trout Road

Produced by XCO2 for Troutbourne LLP

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EXECUTIVE SUMMARY

The sustainability strategy for Trout Road has been developed with the design team to comply with the relevant environmental policies from the London Borough of Hillingdon and the London Plan. Relevant energy policies have been addressed in the accompanying Energy Statement. The proposed Site is currently expected to achieve BREEAM 'Excellent' and expected to reduce on-site regulated carbon emissions by 80.6% for the domestic part and 93.7% for the non-domestic part of the development, against a Part L 2021 compliant scheme with SAP10.2 carbon factors.

This report outlines the sustainability strategy for the proposed Site at Rainbow and Kirby Industrial Estates, Trout Road, Yiewsley, UB7 7XT, in line with the requirements set out by the London Plan and the London Borough of Hillingdon.

This sustainability statement is divided into three parts:

- Planning Policies;
- Sustainability Measures; and
- Sustainability Standards.

The first part provides an overview of the Site and planning policies applicable to this development in accordance with the London Plan and relevant local borough policies.

The second part then outlines the sustainability strategy that has been employed to address the relevant planning policies.

The third part of this report outlines how the proposed Site aims to achieve a BREEAM New Construction 'Excellent' rating for the non-domestic areas.

The key sustainable design and construction measures incorporated in the proposals are summarised below:

- The re-use of previously developed land;
- Effective site layout in response to the neighbouring context;
- Efficient design of the proposed massing, openings and internal layouts so that habitable spaces benefit from abundant daylight and sunlight levels, whilst impacts to neighbouring buildings are minimised;
- The proposed development will provide adequate levels of daylight and sunlight proposed units in line with BRE guidance

- The specification of water efficient fittings to limit water consumption to less than 105 litres per person per day for domestic uses;
- Urban Greening Factor of 0.44, indicating good performance of urban greening and biodiversity;
- The incorporation of SUDS through biodiverse roofs with attenuation;
- Specification of high-performance fabric including glazing to minimise heat losses;
- The incorporation of renewable technologies via the specification of rooftop photovoltaics and air source heat pumps;
- To reduce air pollution from vehicular transport, the development has been designed to encourage cycling via dedicated cycle parking and reducing car parking to 0.14 spaces per dwelling;
- Effective pollution management and control: the development is not expected to have any significant adverse effects to air, noise, land or watercourses.

In summary, the proposed Site at Rainbow and Kirby Industrial Estates, Trout Road, Yiewsley, UB7 7XT, meets the targets set out by London Borough of Hillingdon and the Greater London Authority (GLA). The industrial element of the scheme could achieve a BREEAM score of 74%, while the retail element could achieve 73.2%, both exceeding the BREEAM 'Excellent' target of 70%.

The number of credits obtained in the BREEAM pre-assessment/sustainability measures incorporated reflect the client and design team's aspirations in integrating sustainability measures and demonstrates that the project is designed to exceed the planning policy sustainability requirements.

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SITE

The proposed residential-led mixed-use development at Rainbow and Kirby Industrial Estates, Trout Road, Yiewsley, UB7 7XT is located within the London Borough of Hillingdon. This section presents the description of the proposed Site.

The site comprises Rainbow and Kirby Industrial Estates, located between the Grand Union Canal and Yiewsley High Street and extends to approximately 2.3 hectares (5.7 acres) within the London Borough of Hillingdon. The site fronts the south side of Trout Road, the western side of Yiewsley High Street, and the northwest side of St Stephen's Road, with its southwest boundary along the Grand Union Canal. It is currently occupied by a mix of single- and two-storey industrial buildings, many of which are in poor condition, especially those along Trout Road.

The proposed development comprises nine blocks of mixed-use buildings, ranging in height from 3 to 11 storeys. It includes approximately 36,858.24m² of

residential floorspace (providing 430 flats and 3 townhouses), 286.3 m² of commercial space (Class E), 2,005.5 m² of light industrial floorspace (Class E) and approximately 3,028.9 m² of ancillary spaces.

The proposal will include associated hard and soft landscaping, car and cycle parking, servicing areas, and energy centre, refuse and plant enclosures, public realm enhancements, highway improvements, and other works related to the development.

The approximate location and boundary of the application site is shown in Figure 1 below.

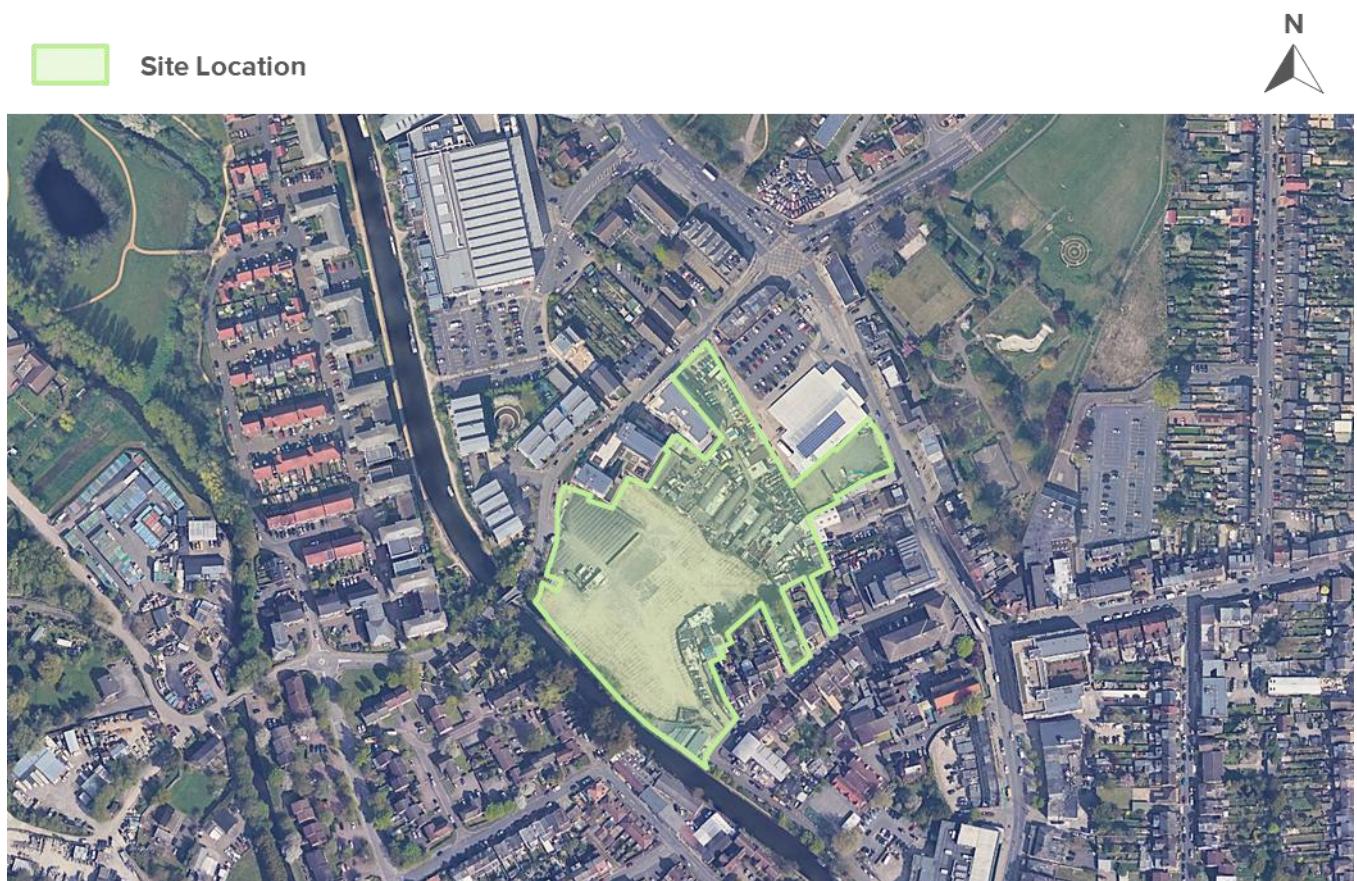


Figure 1: Approximate location of application site

PLANNING POLICY

The proposed Site at Rainbow and Kirby Industrial Estates, Trout Road, Yiewsley, UB7 7XT has been designed in line with the requirements set out by the London Borough of Hillingdon as well as the London Plan.

The relevant planning policy documents for sustainability are:

- The London Plan (2021);
- Housing Supplementary Planning Guidance (2016); >
- Hillingdon Local Plan 2012

THE LONDON PLAN (2021)

The London Plan (2021) published 2nd March 2021 sets out the Mayor's overarching strategic spatial development strategy for greater London and underpins the planning framework from 2019 up to 2041. This document replaced the London Plan 2016.

The new Plan has a strong sustainability focus with many new policies addressing the concern to deliver a sustainable and zero carbon London.

Policy GG6 Increasing Efficiency and Resilience is an overarching policy references London's target to become zero carbon by 2050 and the need to design buildings and infrastructure for a changing climate, addressing water, flood and urban heat island.

Sustainability is a trend through the whole Plan but is particularly addressed in chapter 9 Sustainable Infrastructure. The following sections outline the key principles of sustainable design and construction to be incorporated in major proposals.

Policy SI1 Improving air quality requires development proposals to be at least air quality neutral and submit an Air Quality Assessment.

“...

Development plans, through relevant strategic, site specific and area-based policies should seek opportunities to identify and deliver further improvements to air quality and should not reduce

air quality benefits that result from the Mayor's or boroughs' activities to improve air quality.
...”

Any mitigation required to meet the Air Quality Neutral target should be done on site preferably.

Policy SI2 Minimising greenhouse gas emissions sets the requirements for all major developments to follow the energy hierarchy and achieve net-zero-carbon for both residential and non-residential schemes (via on-site carbon reductions and offset payments) and introduces new targets at Lean stage:

“...

This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in accordance with the following energy hierarchy:

- 1) *be lean: use less energy and manage demand during operation*
- 2) *be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly*
- 3) *be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site*
- 4) *be seen: monitor, verify and report on energy performance.*

...”

“...

A minimum on-site reduction of at least 35 per cent beyond Building Regulations is required for major development. Residential development should achieve 10 per cent, and non-residential development should achieve 15 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided, in agreement with the borough, either:

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*1) through a cash in lieu contribution to the borough's carbon offset fund, or
2) off-site provided that an alternative proposal is identified and delivery is certain.
..."*

This policy also sets the requirements to consider whole-life carbon emissions, including embodied carbon and unregulated emissions:

*"...
Major development proposals should calculate and minimise carbon emissions from any other part of the development, including plant or equipment, that are not covered by Building Regulations, i.e. unregulated emissions.*

*Development proposals referable to the Mayor should calculate whole lifecycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions.
..."*

The policy supporting text provides additional clarifications on the requirements for major developments:

- Developments including major refurbishments should also aim to meet the net-zero carbon target.
- All developments should maximise opportunities for on-site electricity and heat production from solar technologies (photovoltaic and thermal), use innovative building materials and smart technologies.
- Recommendation to use SAP10 carbon factors as per GLA Energy Guidance.
- Recommended carbon offset price of £95 per tonne CO₂.
- Requirement for major developments to monitor and report operational energy performance to the GLA.

Policy SI 3 Energy Infrastructure requires all major developments within Heat Network Priority Areas will need to utilise a communal low-temperature heating system. Where developments are utilising CHP this policy also requires them to demonstrate that 'the emissions relating to energy generation will be equivalent or lower than those of an ultra-low NOx gas

boiler'. Any combustion on site should meet the requirements of part B of Policy SI1.

Policy SI 4 Managing heat risk requires:

A Development proposals should minimise adverse impacts on the urban heat island through design, layout, orientation, materials and the incorporation of green infrastructure.

B Major development proposals should demonstrate through an energy strategy how they will reduce the potential for internal overheating and reliance on air conditioning systems in accordance with the following cooling hierarchy:

- 1) reduce the amount of heat entering a building through orientation, shading, high albedo materials, fenestration, insulation and the provision of green infrastructure*
- 2) minimise internal heat generation through energy efficient design*
- 3) manage the heat within the building through exposed internal thermal mass and high ceilings*
- 4) provide passive ventilation*
- 5) provide mechanical ventilation*
- 6) provide active cooling systems.*

Policy SI5 Water infrastructure sets the requirements to manage water resources efficiently:

*"...
Development proposals should:
1) through the use of Planning Conditions minimise the use of mains water in line with the Optional Requirement of the Building Regulations (residential development), achieving mains water consumption of 105 litres or less per head per day (excluding allowance of up to five litres for external water consumption)
2) achieve at least the BREEAM excellent standard for the 'Wat 01' water category or equivalent (commercial development)
3) incorporate measures such as smart metering, water saving and recycling measures, including retrofitting, to help to achieve lower water consumption rates and to maximise future-proofing.
..."*

Policy SI 7 Reducing waste and supporting the circular economy introduces the notion of circular

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economy whereby materials are retained in use at their highest value for as long as possible. For referable applications a Circular Economy Statement demonstrating how developments promote circular economy and aim to be net zero-waste must be submitted.

Policy SI12 Flood risk management and **Policy SI 13 Sustainable drainage** sets the requirements for development proposals to ensure that flood risk is minimised, and that sustainable drainage is incorporated. This should be pursued by integrating different strategies including natural flood management. Development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible. For this green features should be employed, following the drainage hierarchy.

Policy D14 Noise requires that noise impacts are minimised and mitigated to avoid any adverse impacts on health and quality of life and to reflect the principles set in **Policy D13 Agent of Change** that “*places the responsibility for mitigating impacts from existing noise and other nuisance-generating activities or uses on the proposed new noise-sensitive development.*”

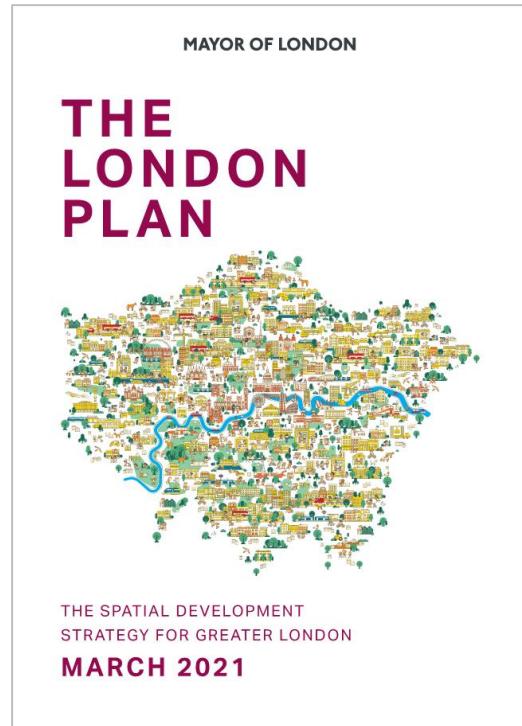
Policy G5 Urban greening requires major developments to contribute to greening of London assessed by an Urban Greening Factor (UGF).

Boroughs should develop their UGF but “*the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses).*”

Separate guidance on UGF is under consultation in Spring/Summer 2021.

Policy G6 Biodiversity and access to nature states:

“...
Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.
...”



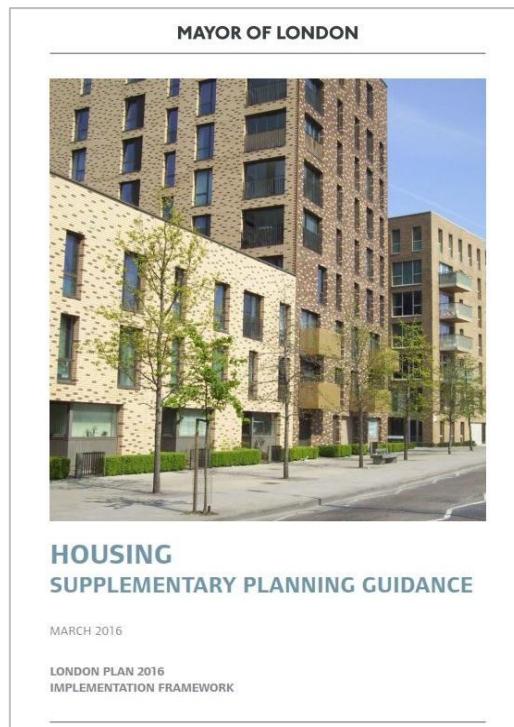
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HOUSING SPG

This document provides guidance on the implementation of housing policies in the London Plan and it replaces the 2012 Housing SPG.

Part 2 covers housing quality and updates London housing standards to reflect the implementation of the government's new national technical standards through the Minor Alterations to the London Plan (2015-2016).

As design affects the quality of life, health & wellbeing, safety and security of users and neighbours, this guidance is integral to sustainable development and will be cross-referenced as relevant in the subsequent sections.



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LOCAL BOROUGH POLICY

LONDON BOROUGH OF HILLINGDON LOCAL PLAN 2012

The Council's Local Plan (adopted in November 2012) sets out the following policies relevant to this energy statement:

POLICY EM1: CLIMATE CHANGE ADAPTATION AND MITIGATION:

“....

5. *Promoting the use of decentralised energy within large scale development whilst improving local air quality levels.*
8. *Encouraging the installation of renewable energy for all new development in meeting the carbon reduction targets savings set out in the London Plan. Identify opportunities for new sources of electricity generation including anaerobic digestion, hydroelectricity and a greater use of waste as a resource.*

....”

POLICY BE1: BUILT ENVIRONMENT:

“....

10. *Maximise the opportunities for all new homes to contribute to tackling and adapting to climate change and reducing emissions of local air quality pollutants. The Council will require all new development to achieve reductions in carbon dioxide emission in line with the London Plan targets through energy efficient design and effective use of low and zero carbon technologies. Where the required reduction from on-site renewable energy is not feasible within major developments, contributions off-site will be sought.*

....”

POLICY DMEI 2: REDUCING CARBON EMISSIONS:

“....

- A) *All developments are required to make the fullest contribution to minimising carbon dioxide emissions in accordance with London Plan targets.*
- B) *All major development proposals must be accompanied by an energy assessment showing how these reductions will be achieved.*
- C) *Proposals that fail to take reasonable steps to achieve the required savings will be resisted. However, where it is clearly demonstrated that the targets for carbon emissions cannot be met onsite, the Council may approve the application and seek an off-site contribution to make up for the shortfall.*

....”

POLICY DMEI 3: DECENTRALISED ENERGY:

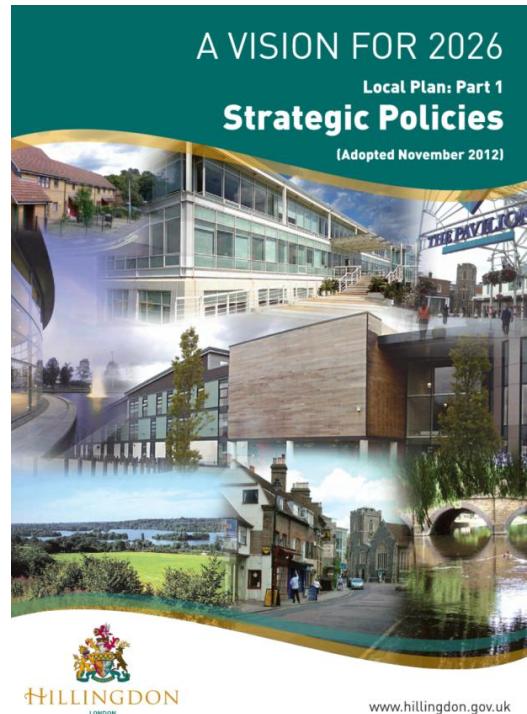
“....

- A) *All major developments are required to be designed to be able to connect to a Decentralised Energy Network (DEN).*
- B) *Major developments located within 500 metres of an existing DEN, and minor new-build developments located within 100 metres, will be required to connect to that network, including provision of the means to connect to that network and a reasonable financial contribution to the connection charge, unless a feasibility assessment demonstrates that connection is not reasonably possible.*
- C) *Major developments located within 500 metres of a planned future DEN, which is considered by the Council likely to be operational within 3 years of a grant of planning permission, will be required to provide a means to connect to that network and developers shall provide a reasonable financial contribution for the future cost of connection and a commitment to connect via a legal agreement or contract, unless a feasibility assessment demonstrates that connection is not reasonably possible.*

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D) The Council will support the development of DENs and energy centres in principle, subject to meeting the wider policy requirements of this plan and in particular on design and air quality.

...."



PROPOSED SUSTAINABILITY MEASURES

This part of the report presents the key elements of the proposal that underpin environmental sustainability, demonstrates how the development complies with sustainable development policies and incorporates guidance on sustainable design and construction.

LAND AND SITE LAYOUT

Land use

The land for this proposal is efficiently used as the scheme will be constructed on previously developed land. The site is currently occupied by the Rainbow and Kirby Industrial Estates. The site is predominantly occupied by a mix of single- and two-storey industrial buildings.

Reuse of Existing Buildings

The existing buildings on the site are not suitable for retention or reuse due to structural limitations and their incompatibility with the proposed development brief. The site is currently occupied by a range of predominantly single- and two-storey industrial buildings, many of which, particularly those fronting Trout Road, are in a poor state of repair.

Given their condition and form, the buildings are not fit for purpose and cannot be viably adapted to accommodate a residential-led, mixed-use scheme.

Land Form and Site Layout

The proposed development comprises nine plots, with buildings ranging from 3 to 11 storeys in height (including ground level). The scheme will deliver a mix of residential units (Class C3), flexible retail, café and restaurant floorspace (Class E), and light industrial floorspace (Class E).

The development will also include associated hard and soft landscaping, car and cycle parking, servicing areas, refuse and plant enclosures, public realm enhancements, highway improvements, and other supporting infrastructure.

Consideration has been given to the layout and scale of the surrounding buildings. The surrounding context features a mix of industrial, commercial, and residential uses, with building heights typically ranging from two to five storeys.

The scale of the development follows a principle of densification but, at the same time, it takes into account the neighbouring buildings with regard to height and overall volume. Taller buildings are positioned along the southwestern boundary adjacent to the Grand Union Canal, while lower-rise elements are placed along the High Street frontage.

Daylight & Sunlight Impacts

Consideration has been given to neighbouring amenity and open spaces; due to appropriate design of the building and overall site layout these will experience minimal overshadowing effects.

It is understood that the scheme is not anticipated to cause adverse effects on access to daylight and sunlight of neighbouring properties.

Micro-climate

A microclimate is the distinctive climate of a small-scale area and the variables within it, such as temperature, rainfall, wind or humidity may be subtly different to the conditions prevailing over the area as a whole. The main characteristics of microclimates within London are temperatures and wind.

It is understood that the proposed scheme would not have significant adverse impacts on wind conditions around the site or on pedestrian and residents' comfort.

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Urban Greening

The proposed development maximises contributions to green infrastructure across the site, achieving an Urban Greening Factor (UGF) of 0.44, as outlined in the landscape masterplan report dated 26th March 2025. The proposed scheme will enhance green spaces within London by providing landscaped areas. These features will promote physical activity and relaxation for occupants, improve local air quality, and reduce the Urban Heat Island effect.

Impacts on Neighbours from Demolition and Construction

The use of the Considerate Constructors Scheme will be encouraged to ensure that contractors carry out their operations in a safe and considerate manner to avoid disturbances to neighbours.

Construction impacts such as dust generation and increased traffic movements will be minimised through adoption of best practice construction measures, formalised through the production of a Construction and Environmental Management Plan to be delivered by the main contractor where appropriate.

Land Contamination

In the event of any discovery of potentially contaminated soils or materials, this discovery will be quarantined and reported to the most senior member of site staff or the designated responsible person at the site for action. The location, type and quantity will be recorded and the Local Authority, a competent and appropriate third-party environmental consultant will be notified immediately. An approval from the Local Authority will be sought prior to implementing any proposed mitigation action.



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HEALTH AND WELLBEING

Inclusive Design

The development aims to prioritise the future needs of occupants by ensuring that all dwellings and shared amenity spaces are designed to comply with Part M of the Building Regulations and includes 43 full wheelchair accessible units.

Safety and Security

The design team will comply with the principles of Secured by Design to provide safe and secure spaces to all residents.

Open Spaces/Amenity

Private and communal open spaces will be provided through communal outdoor rooftop gardens to allow residents to gather, socialise and connect to the natural environment. This will also enhance the occupants wellbeing as nature can significantly improve mood and happiness.

Play spaces will be provided to provide safe access to good quality, well designed and secure recreation spaces for children and young people, incorporating trees and greenery wherever possible.

Daylight/Sunlight

By having window openings that are sized and positioned to maximise both daylight and views, the proposed development ensures that occupants enjoy satisfactory levels of visual comfort and beneficial effects from daylight exposure, whilst also reducing energy consumption by minimising the use of artificial lighting as far as feasible.

As detailed in the internal Daylight and Sunlight Report by GIA (dated 29th August 2025), the development performs well in providing adequate daylight and sunlight levels, which enhances overall well-being of the occupants.

Physical activity

The presence of amenity providers (shops, pharmacies, public park) within walking distance to the development will encourage residents to walk rather than use personal vehicles. The provision of cycle storage spaces will also encourage the use of alternative means of transportation for longer

distances trips. Further details are outlined in the transport section of this statement.



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ENERGY & CARBON DIOXIDE EMISSIONS

The Energy Strategy for the development has been designed in line with the London Plan's Policy SI2 or other local policy, which states that every effort should be made to minimise carbon dioxide emissions in accordance with the following energy hierarchy:

1. Be lean: use less energy
2. Be clean: supply energy efficiently
3. Be green: use renewable energy
4. Be seen: monitoring

Be Lean

The buildings have been thoughtfully designed to reduce energy demand through an enhanced building fabric, minimising heat loss through air infiltration, reducing reliance on artificial lighting, utilising low energy lighting and ensuring adequate levels of ventilation are maintained whilst reducing heat loss through the specification of MVHR.

Be Clean

As discussed in detail in the Energy Statement, a site-wide heat network incorporating low carbon heat generation is proposed; the strategy will future proof the connection of the development to a district heating network when and if one becomes available. The energy centre will comprise communal ASHP systems and high efficiency VRF systems.

Since a district heat network connection is not proposed, there are no savings at the Be Clean stage.

Be Green

A range of renewable technologies were considered for generating on-site renewable energy. Photovoltaic panels and air source heat pumps (ASHP) were considered suitable technologies for this development due to adequate flat roof space, easy installation process, and substantial CO₂ savings. The incorporation of these two technologies into this development would contribute a reduction of 65.3% resulting in a total offset of 80.7% of regulated CO₂ emissions over the baseline emissions.

Further details about the photovoltaic and/or ASHP strategy, alternative renewable technology options and site-wide CO₂ emission reductions can be found in the accompanying Energy Statement.

Be Seen

Following the implementation of the three previous stages of the hierarchy, a monitoring strategy will be put in place to ensure that the actual energy performance of the development can be monitored and reported post-occupation.

The relevant parties will also be made aware of their responsibilities at subsequent reporting stages.



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WATER

Water Efficiency

The development at Trout Road aims to reduce water consumption to less than 105 litres per person per day, in line with the recommended target set out in the Housing SPG/Part G enhanced target, through the use of water efficient fittings, and these are listed below.

Table 1: Recommended specification for sanitary fittings

Fitting	Fitting specification
WC	4/2.6 litres dual flush
Kitchen sink tap	5 litres per min
Wash basin tap	4 litres per min
Shower	7.5 litres per min
Bath	170 litres
Washing machine	7.5 litres/kg
Dishwasher	0.85 litres/place setting



The commercial spaces at ground floor Blocks F, G and J will target at least the BREEAM 'Excellent' standard for the 'Wat 01' water category or equivalent, in line with London Plan Policy SI5.



Water Reuse

Whilst the development aims to reduce water demand in the first instance, consumption will also be offset through the provision of rainwater collection butts, which will enable the reduction of potable water use for irrigation purposes.

Water Efficient Landscaping

Potable water consumption reduction from irrigation can be further maximised through a combination of water reuse and use of both native and drought resistant plant species, which will thrive with little to no irrigation and rely only on natural rainfall.

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MATERIALS AND WASTE

Responsible Sourcing

100% of the timber used during construction will be sourced from accredited Forest Stewardship Council (FSC) or Programme for the Endorsement of forestry Certification (PEFC) source.

The main contractor will be required to prioritise products holding responsible sourcing certification (EMS/ISO14001) for the key process as per minimum, to ensure economic, social and environmentally responsible practices are implemented throughout construction products supply chain.

Healthy Materials

To minimise potential sources of indoor air pollution, low VOC paints, finishes and other products will be prioritised as far as practically possible. Best practice design detailing and careful construction techniques will also be employed to reduce the risk of thermal bridging and condensation issues, limiting the potential for mould growth.

Embodied Carbon

To further reduce carbon emissions over the lifecycle of the building, low embodied carbon materials will be used as far as practically possible, whilst also focusing on design practices to reduce waste production. Please refer to the Whole Life Cycle Carbon Assessment submitted as part of the planning application for further information.

Circular Economy

Circular economy is based on three key principles: design out waste, keep products and materials in use, and regenerate natural systems. These principles will be applied during the design and construction of the proposed development by following the actions noted below:

- Design out the need for building components and materials;
- Use of reclaimed materials and remanufactured components over new;
- Product selection considering its entire lifecycle, such as products which can be remanufactured or reused; products with high recycled content; products designed for disassembly; and recyclable or compostable materials.

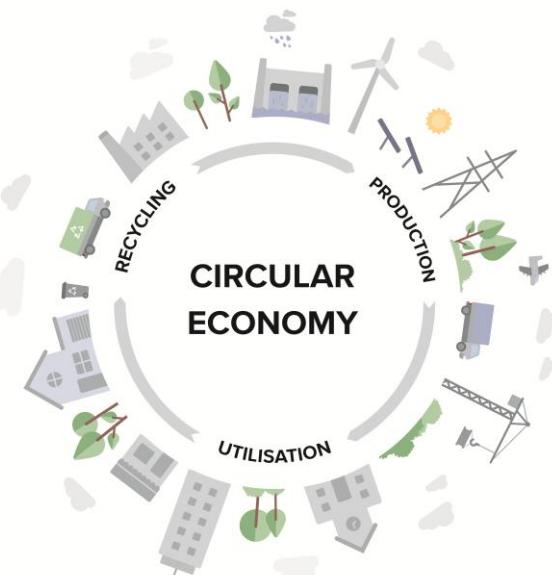
Please refer to the Circular Economy Statement submitted as part of the planning application for further information.

Construction Waste

A site waste management plan will be prepared for the development. The SWMP will outline the methodologies for estimating waste quantities and streams generated during the demolition, excavation and construction stages of the site works, and set out recommended measures required to be adopted by the Main Contractor to minimise these as far as practically possible.

Operational Waste

An operational waste management strategy will be produced and implemented for the proposed development. This will demonstrate how the development has taken into account sustainable methods for waste and recycling management during its operation in order to meet requirements from the London Plan and London Borough of Hillingdon policies and all applicable legal requirements.



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NATURE CONSERVATION & BIODIVERSITY

The ecology on site will be improved via the introduction of landscaped areas within the proposed private and communal gardens and planting on land that is currently covered with hard surfacing or existing buildings. The intended planting strategy for these areas is simple low-level flora, with hedge planting and small ornamental trees. Native plant species will be introduced to these areas where possible. This will help to attract invertebrates, birds and other fauna to the area.

An ecological impact assessment for the proposed Trout Road development is being undertaken and their recommendations will be implemented to ensure the protection of ecological features and enhancement of biodiversity on the development site.

The proposed development aims to improve the green cover of the site by introducing play space and landscaped area and has made provision for communal and private amenity space. Planting will include heat and drought resistant species, where feasible. A green roof and biodiverse roof will also be incorporated.

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CLIMATE CHANGE ADAPTATION

Overheating

The potential risk of overheating will be mitigated by incorporating both passive and active design measures.

The space heating and hot water to both the domestic and non-domestic elements of the development will be provided by a communal system comprised of ASHP, with heating and cooling provided by individual VRF systems for each commercial unit. All heat sources and pipe work will be sufficiently insulated to avoid excess heat loss into internal space.

Efficient lighting will be used to further minimise internal heat gains and reduce energy expenditure.

Appropriately sized windows will reduce solar heat gains. Internal blinds will be included in the domestic units to reduce the solar gains into occupied rooms where required. Glazing with low transmittance will be used throughout the development to reduce solar gains and reduce the risk of overheating.

The dwellings have allowed for passive ventilation as the main strategy for providing fresh air and dissipating heat through openable windows and solar control strategies including low g-value glazing and external shading were found to significantly reduce the risk of overheating.

However, to ensure compliance, largely due to acoustic concerns, additional measures such as cooling coils within MVHR units are proposed for the dwellings. A VRF system with comfort cooling is proposed for the non-domestic spaces. It is recommended that the cooling system should be of high-efficiency and sized accordingly to achieve thermal comfort.

Surface Water and Flooding

Sustainable urban drainage systems (SUDS), comprising permeable paving and biodiverse roofs, will be incorporated on site and the buildings' fabric and structure will be designed to minimise risk of infiltration and damage via flooding where possible.

In accordance with the London Plan, the peak surface water run-off rates will be reduced to Greenfield run-off rates prior to discharge to the public sewer. The scheme will also incorporate nature-based solutions,

such as dry SuDS 'Canal' attenuation and sunken SuDS areas within ecological and natural play spaces, as outlined in the SuDS strategy in the Design Development Report dated 26th March 2025.



AIR, NOISE AND LIGHT

Air Quality

Air pollution risks from construction and demolition activities on site will be minimal in line with the SPG 'The control of dust and emissions from construction and demolition' under the following categories:

- demolition;
- earthworks;
- construction;
- trackout; and,
- non-road mobile machinery (NRMM).

An air quality assessment has been carried out to determine the impacts from dust PM10 emissions, NRMM and construction traffic during the construction period, as well as any effects on local sensitive receptors. Where necessary, mitigation measures will be recommended and secured through a site-specific Construction Environmental Management Plan (CEMP), including a Dust Management Plan (DMP) and traffic management measures. With these in place, construction impacts are expected to be not significant.

During the operational phase of the development, combustion emissions for heating will be minimised through a zero-emission energy strategy, specifically the use of Air Source Heat Pumps (ASHPs) and Variable Refrigerant Flows (VRF) systems, alongside improved levels of insulation and air-tightness in the building fabric. A life-safety generator will also be provided, although this will operate for testing purposes only (<18 hours per year) and is therefore not expected to result in any significant air quality impacts. Moreover, the development's overall trip generation (excluding taxis, heavy-duty vehicles, deliveries, and servicing) is lower than the benchmarked trip rate. While overall vehicle trips are expected to decrease, although heavy-duty vehicle trips may increase due to the new industrial and commercial uses. However, detailed modelling indicates these changes will not significantly impact local air quality.

Overall, the development will meet 'air quality neutral' benchmarks set out in the London Plan. For further details please refer to the Air Quality Assessment submitted in support of the application.

Noise

The development will incorporate design and building fabric measures to mitigate potential noise levels from the proposed development, and ensure the impact of any external sources on internal ambient noise levels are within acceptable limits.

The Acoustic Assessment confirms that the existing noise climate is dominated by road and rail traffic, with residential and commercial receptors nearby. To address this, high-performance glazing and alternative mechanical ventilation will be installed to achieve internal noise standards without relying on open windows. Construction noise and vibration will be managed through a site-specific CEMP secured by planning condition, including measures such as restricted hours, hoarding, and Best Practicable Means. Operational noise from plant and limited vehicle movements is expected to be negligible. Overall, no significant adverse noise or vibration effects are anticipated.

Light Pollution

The lighting design of the proposed development will follow the recommendations of the Institution of Lighting Engineers' Guidance Notes for the Reduction of Obtrusive Light (2005), to minimise light pollution.

Further mitigation measures will be implemented to ensure disturbance to wildlife is minimal, in line with the ecologist's recommendations.

Water Pollution

Water pollution to surrounding watercourses has been minimised by the increase in permeable ground, thereby reducing surface water runoff. In addition, contractors will adopt best practice policies to mitigate water pollution from construction activities on site.

The development will discharge domestic sewage via a connection to the public foul sewer or combined sewer network where it is reasonable to do so.

TRANSPORT

Alternative means of transportation

In order to underpin the reduction of emissions from transport, the development has been designed to encourage cycling; cycle parking will be provided with 12 short-stay spaces and 734-long stay spaces located in dedicated ground floor stores for residents. In addition, 11 long-stay and 10 short-stay cycle spaces will be provided for non-residential uses.

To avoid overprovision of car parking and promote more sustainable means of transport, the proposals allow 57 car parking spaces, equating to 0.14 spaces per dwelling, along with 3 short-stay visitor spaces and 2 short-stay commercial parking spaces.

Public Transport Accessibility

The development is situated approximately 300 metres north of West Drayton Station, which is served by the Elizabeth Line. Additionally, several bus stops are also located along the A408 (Yiewsley High Street), providing good public transport connectivity.

Proximity to Amenities

The proposed development is located adjacent to Yiewsley High Street, which offers a wide range of local amenities, including pharmacies, schools, healthcare centre, leisure centres, Tesco Superstore, Aldi, Iceland, and Costa Coffee, as well as numerous independent shops, pubs, and restaurants, as stated in the Framework Travel Plan by Velocity Transport Planning.

SUSTAINABILITY STATEMENT

SUSTAINABILITY STANDARDS

Within the London Borough of Hillingdon, the BREEAM standard of ‘Excellent’ is required for all applicable non-residential developments. The following Pre-Assessment demonstrates compliance with the Local Authority’s policies in relation to BREEAM assessments.

BREEAM NEW CONSTRUCTION

BREEAM New Construction V6 is a performance based environmental assessment method and certification scheme for new buildings. The primary aim of BREEAM New Construction is to mitigate the impacts of new developments on the environment over the entire life-cycle of the building in a comprehensive and cost-effective manner. This is achieved through the integration of the BREEAM scheme at key stages of the design and procurement process.

A BREEAM New Construction V6 Shell and Core Pre-Assessment was carried out for the commercial portion of the development and has been assessed under the ‘Retail’ building type and subtype. A separate pre-assessment has been carried out for the ‘workspace/makerspace’ portion of the building under the ‘Industrial’ building type and subtype.

The pre-assessment tool uses established benchmarks to evaluate a building’s specification, design, construction and operation, over a broad range of categories and criteria:

- Management processes
- Health and wellbeing
- Energy use
- Transport
- Water use
- Materials
- Waste
- Land use and ecology
- Pollution
- Innovation

The outcome of the pre-assessment is expressed as a single certified BREEAM rating, ranging from Pass (30%) to Outstanding (85%).

Table 2: BREEAM Certification Thresholds

BREEAM 2018 Rating	Percentage of Credits Required
Outstanding	85%
Excellent	70%
Very Good	55%
Good	45%
Pass	30%

The following table summarises the number of credits targeted to achieve the rating of ‘Excellent’; a detailed analysis of credits targeted can be found in Appendix A – BREEAM Pre-assessment.

SUSTAINABILITY STATEMENT

BREEAM PRE-ASSESSMENT RESULTS

A BREEAM pre-assessment has been undertaken at pre-application stage. Given that the non-domestic elements of the development fall under two distinct planning uses—Flexible Retail/Café/Restaurant (Class E(a, b, c), 324.2 m²) and Light Industrial (Class E(g)(iii), 2,257.1 m²)—it has been determined that two separate BREEAM pre-assessments are required: one for the industrial element and one for the retail element.

The pre-assessments have shown that a score of 74.0% is feasible for the industrial element of the development and 73.2% is feasible for the retail.

The results for the pre-assessment are summarised in the table below, and include a breakdown of the currently targeted score for each issue and category.

Table 3: BREEAM Pre-Assessment Breakdown for the Industrial Assessment

BREEAM Category	Total Credits Available	Score Assessment		
		Sub-total	Weighting	Score (%)
Management	18	13	11.0%	7.94%
Health & Wellbeing	7	7	8.0%	8.00%
Energy	19	15	14.0%	11.05%
Transport	12	9	11.5%	8.63%
Water	9	7	7.0%	5.44%
Materials	14	6	17.5%	7.50%
Waste	10	6	7.0%	4.20%
Land Use & Ecology	13	11	15.0%	12.69%
Pollution	12	10	9.0%	7.50%
Innovation	10	1	10.0%	1.00%
BREEAM Excellent		Total Points Scored: 74.0%		

Table 3: BREEAM Pre-Assessment Breakdown for the Retail Assessment

BREEAM Category	Total Credits Available	Score Assessment		
		Sub-total	Weighting	Score (%)
Management	18	13	11.0%	7.94%
Health & Wellbeing	11	10	8.0%	7.27%
Energy	19	15	14.0%	11.05%
Transport	12	9	11.5%	8.63%
Water	9	7	7.0%	5.44%
Materials	14	6	17.5%	7.50%
Waste	10	6	7.0%	4.20%
Land Use & Ecology	13	11	15.0%	12.69%
Pollution	12	10	9.0%	7.50%
Innovation	10	1	10.0%	1.00%
BREEAM Excellent		Total Points Scored: 73.2%		

CONCLUSION

The sustainability strategy for Trout Road has been developed with the design team to comply with the relevant environmental policies from the London Borough of Hillingdon and the London Plan. Relevant energy policies will be addressed in the accompanying Energy Statement. The proposed development will be expected to reduce on-site regulated carbon emissions by 80.6% for the domestic areas and 93.7% for the non-domestic areas totalling a cumulative site-wide savings of 80.7% against a Part L 2021 compliant scheme.

The sustainability strategy for the scheme at Trout Road has been developed in line with the London Plan and the London Borough of Barnet, and aims at the efficient management of resources, environmental protection and the effective adaptation and mitigation of the development to climate change.

The energy strategy will be developed in line with the three-step Energy Hierarchy and the cumulative CO₂ savings on site are expected to achieve 80.7% site wide against a Part L 2021 compliant scheme.

Key sustainability features of the proposals include:

- The re-use of previously developed land;
- Effective site layout in response to the neighbouring context;
- Efficient design of the proposed massing, openings and internal layouts so that habitable spaces across the site benefit from abundant daylight and sunlight levels, whilst impacts to neighbouring buildings are kept to a minimum;
- The proposed development will provide adequate levels of daylight and sunlight to proposed units in line with BRE guidance;
- The specification of water efficient fittings to limit water consumption to less than 105 litres per person per day for domestic uses;
- Urban Greening Factor of 0.44, indication good performance of urban greening and biodiversity;

- The incorporation of SUDS through biodiverse roofs with attenuation draining into public realm.
- Specification of high-performance fabric incl. glazing to minimise heat losses;
- The incorporation of renewable technologies via the specification of rooftop photovoltaics and air source heat pumps;
- To reduce air pollution from vehicular transport, the development has been designed to encourage cycling via dedicated cycle parking and reducing car parking to 0.14 spaces per dwelling;
- Effective pollution management and control: the development is not expected to have any significant adverse effects to air, noise, land or watercourses.

The sustainability measures incorporated reflect the client and design team's aspirations in integrating sustainability measures and demonstrates that the project is designed to exceed the planning policy sustainability requirements.

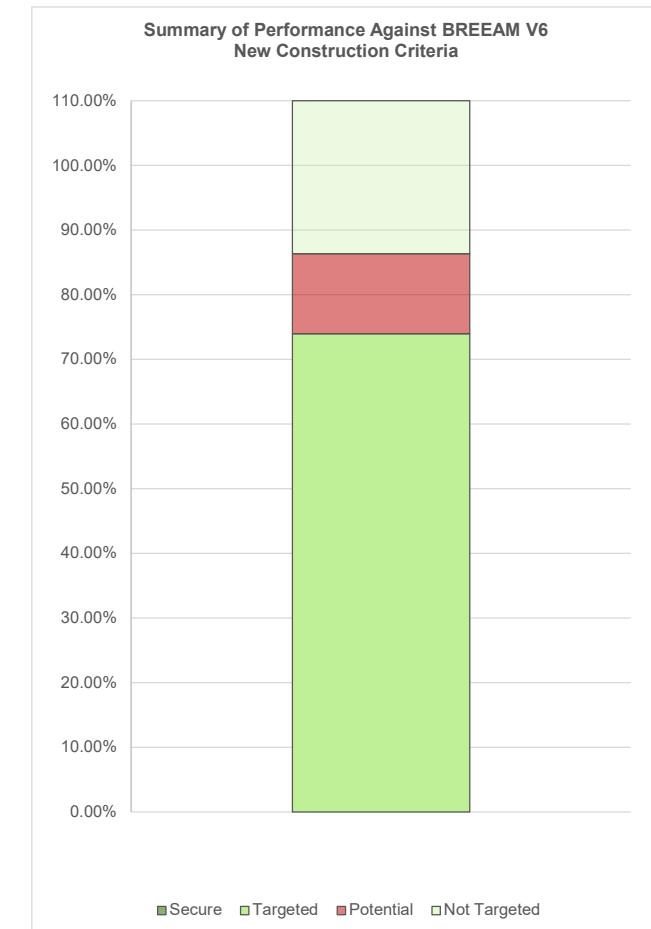
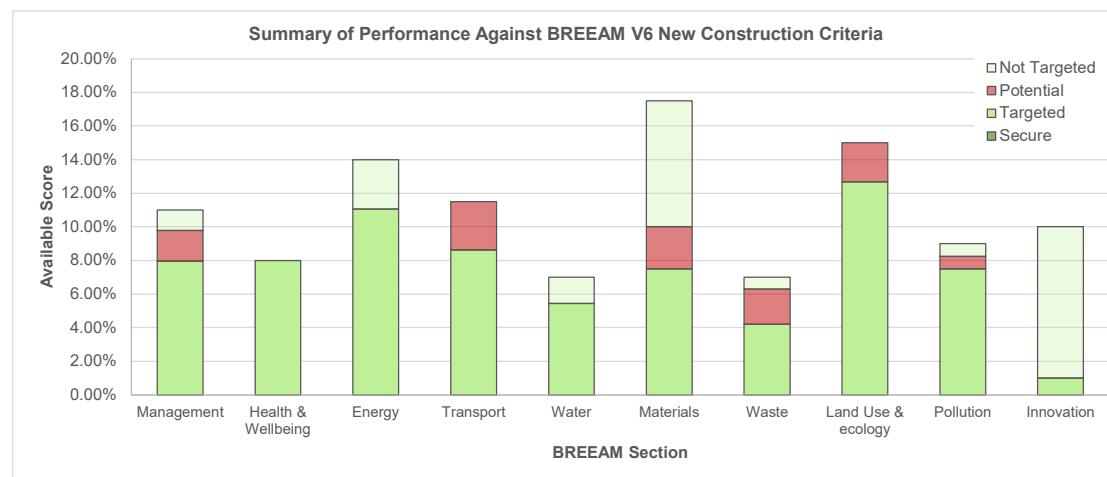
APPENDIX A – BREEAM PRE-ASSESSMENT

SUMMARY OF PERFORMANCE & RATING

Assessment Section	Credits Available	Section Weighting	Credit Value	Credits		Score		
				Targeted	Potential	Targeted	Potential	Awarded
Management	18	11.0%	0.61%	13	3	7.94%	1.83%	0.00%
Health & Wellbeing	7	8.0%	1.14%	7	0	8.00%	0.00%	0.00%
Energy	19	14.0%	0.74%	15	0	11.05%	0.00%	0.00%
Transport	12	11.5%	0.96%	9	3	8.63%	2.88%	0.00%
Water	9	7.0%	0.78%	7	0	5.44%	0.00%	0.00%
Materials	14	17.5%	1.25%	6	2	7.50%	2.50%	0.00%
Waste	10	7.0%	0.70%	6	3	4.20%	2.10%	0.00%
Land Use & ecology	13	15.0%	1.15%	11	2	12.69%	2.31%	0.00%
Pollution	12	9.0%	0.75%	10	1	7.50%	0.75%	0.00%
Innovation	10	10.0%	1.00%	1	0	1.00%	0.00%	0.00%
				BREEAM Score		73.96%	86.32%	0.00%
				BREEAM Rating		Excellent	Outstanding	Unclassified

BREEAM Rating	% Score
Outstanding	85
Excellent	70
Very Good	55
Good	45
Pass	30
Unclassified	<30

Please note: although a score of 110% is available including innovation credits the maximum score that can be achieved is 100%.



		#REF!	#REF!	#REF!	Available Target Potential Awarded Credit Criteria				Responsibility	Timing	
Stage 2 credits	Can be provided by XCO2										
MANAGEMENT											
Man 01	Project brief and design	18	13	3	0						
Man01.1	Project delivery planning	1	0	1		Prior to completion of the Concept Design, the project delivery stakeholders (see Definitions on page 37) meet to identify and define roles, responsibilities and contributions for each key phase of project delivery.		End User & Project Manager	Stage 2 (Concept Design)		
Man01.2	Stakeholder consultation (interested parties)	1	1			Prior to completion of Concept Design, all relevant third party stakeholders have been consulted by the design team and this covers the minimum consultation content. Stakeholder contributions must influence the initial Project Brief and Concept Design. All interested parties must give and receive consultation feedback prior to completion Stage 4).		End User & Project Manager	Stage 2 (Concept Design)		
Man01.3	BREEAM Advisory Professional (Concept and Design)	1	0	1		Involve a BREEAM AP at an appropriate time to work with the project team to consider the links between BREEAM issues and assist in maximising the project's overall performance throughout Concept Design.		BREEAM AP	Stage 2 (Concept Design)		
Man01.4	BREEAM Advisory Professional (Developed Design)	1	0	1		Involve a BREEAM AP at an appropriate time to work with the project team to consider the links between BREEAM issues and assist in maximising the project's overall performance throughout Developed Design.		BREEAM AP	Stage 3-4		
Man 02	Life cycle cost and service life planning	4	2	0	0						
Man02.1	Elemental LCC	2	0			A competent person carries out an outline, entire asset LCC plan at Stage 2 in line with PD 15686:2008. the elemental plan provides an indication of future replacement, service life, maintenance and operation costs over a period of analysis determined by the client (e.g. 20, 30, 50 or 60 years).		Cost Consultant	Stage 2 (Concept Design)		
Man02.2	Component level LCC options appraisal	1	1			A competent person develops a component level LCC options appraisal by the end of Stage 4, including: envelope, services, finishes and external spaces.		Cost Consultant	Stage 4 (Technical Design)		
Man02.3	Capital cost reporting	1	1			Project team to provide written confirmation of capital costs (in pounds per square metre).		End User & Cost Consultant	Stage 4 (Technical Design)		
Man 03	Responsible construction practices	6	6	0	0						
Man03.0	Legally harvested and traded timber		Prerequisite			All timber and timber-based products must comply with the government's definition of 'legally harvested and traded timber' (FSC or PEFC certified).		Contractor	Pre-Tender		
Man03.1	Environmental management	1	1			All parties who at any date manage the construction site (e.g. principal contractor, demolition contractor) must operate an EMS (e.g. ISO14001 or BS8555:2016) and implement best practice pollution prevention policies and procedures (in accordance with PPG6).		Contractor	Pre-Tender		
Man03.2	BREEAM Advisory Professional (site)	1	1			Involve a BREEAM AP in the project at an appropriate time to work with the project team, including the client, to consider the links between BREEAM issues and assist them in achieving and if possible going beyond the design intent, to maximise the project's performance against the agreed performance targets throughout the Construction, Handover and Close Out stages.		Contractor	Pre-Tender		
Man03.3	Responsible construction management	2	2			Up to two credits available for implementing responsible construction management items, including actions on:		Contractor	Pre-Tender		
						- Risk evaluation and implementation;					
						- Training, awareness and feedback; and					
						- Monitoring and reporting.					
Man03.4	Monitoring of construction site impacts (energy and water)	1	1			The principal contractor must set energy and water consumption targets, monitor the actual energy and water use against these targets and report their performance.		Contractor	Pre-Tender		
Man03.5	Monitoring of construction site impacts (transport)	1	1			The principal contractor monitors and records transport data for the delivery of materials to site and removal of waste from site (n.b. data for deliveries and waste removal must be reported separately).		Contractor	Pre-Tender		
Man 04	Commissioning and handover	4	4	0	0						
Man04.1	Commissioning - testing schedule and responsibilities	1	1			The principal contractor produces a schedule of commissioning and testing that identifies and includes a suitable timescale for commissioning and re-commissioning of all complex and non-complex building services and control systems and testing and inspecting building fabric.		Contractor	Pre-Tender		
Man04.2	Commissioning - design and preparation	1	1			During design stage the client or principal contractor appoints a specialist commissioning manager, with responsibility for:		Contractor	Pre-Tender		
						(a) Undertaking design reviews and giving advice on suitability for ease of commissioning					
						(b) Providing commissioning management input to construction programming and during installation stages					
Man04.3	Testing and inspecting building fabric	1	1			For the assessment of commissioning, re-commissioning and handover see next handover section.		Contractor	Pre-Tender		
						The integrity of the building fabric, including continuity of insulation avoidance of thermal bridging and air leakage paths is quality assured through completion of post construction testing and inspection. This must include a Level 2 thermographic survey in addition to an airtightness test. Any defects identified must be certified.					
Man04.4	Handover	1	1			Prior to handover the contractor must issue:		Contractor	Pre-Tender		
						(a) A non-technical user guide for distribution to the building occupiers;					
						(b) A technical user guide for the premises facilities managers;					
						(c) A non-technical training schedule for the building occupiers; and					
						(d) A technical training schedule for the premises facilities managers.					
HEALTH AND WELLBEING											
Hea 01	Visual comfort	3	4	0	0						
Hea01.2	Daylighting	1	2			Daylighting criteria have been met for different building types, according to the daylight factors outlined in p.70 of the BREEAM New Construction Non-Domestic manual 2018, across 80% of the floor area and a uniformity ratio of 0.3 or minimum point daylight factor of 0.7.		Peter Taylor Architects & XCO2	Stage 2-3		
Hea01.3	View out	1	1			95% of the floor area in each relevant building area is within 8m of a wall which has a window or permanent opening that provides an adequate view out. The window/opening must make up at least 20% of the total wall area. (If there are no relevant areas to assess, credit awarded by default)		Peter Taylor Architects & XCO2	Stage 2-3		
Hea01.4	Internal and external lighting levels, zoning and control	1	1			Internal lighting in all relevant areas of the building is designed to provide illuminance (lux) levels and colouring rendering index in accordance with the SLL Code for Lighting 2012 and any other relevant industry standard. Internal lighting should be appropriate to the tasks undertaken, accounting for building user concentration and comfort levels. For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 7 sections 2.4, 2.13 to 2.15, 2.20, and 6.10 to 6.20. Internal lighting is zoned to allow for occupant control.		XCO2			
						All external lighting located within the construction zone is specified in accordance with BS 5489-1:2013 Code for the practice for the design of road lighting. Lighting of roads and public amenity areas(35) and EN 12464-2:2014(36) Light and lighting - Lighting of work places - Part 2: Outdoor work places. External lighting should provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately, especially during the night.				Stage 4 (Technical Design)	
						For 'shell only' and 'shell & core' projects only the external lighting criteria applies.					
Hea 05	Acoustic performance	1	1	0	0						
Hea05.1	Acoustic performance (indoor ambient noise level)	1	1			Acoustician appointed to confirm that acoustic performance (indoor ambient noise levels) complies with the design ranges given in Section 7 of BS 8233:2014.		Acoustician	Stage 3-4		
Hea 06	Security	1	0	0	0						
Hea06	Security	1	0			A Suitably Qualified Security Specialist (SQSS) conducts an evidence-based Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent). The purpose of the SNA will be to identify attributes of the proposal, site and surroundings which may influence the approach to security for the development .		End User & Peter Taylor Architects	Stage 2 (Concept Design)		
Hea 07	Safe and healthy surroundings	2	2	0	0						
Hea07.1	Safe access	1	1			External areas included in the site boundary (cycle paths, footpaths, pedestrian drop-off areas, vehicle delivery areas and drop-off areas, parking and turning areas) to comply with dedicated safe access criteria.		Peter Taylor Architects	Stage 3 (Spatial Coordination)		
Hea07.2	Outside space	1	1			There is an outside space providing building users with an external amenity area.		Peter Taylor Architects	Stage 3 (Spatial Coordination)		

		Available	Target	Potential	Awarded	Credit Criteria	Responsibility	Timing
ENERGY		19	15	0	0			
Ene 01	Reduction of energy use and CO2	13	10	0	0			
Ene01.1	Energy performance	9	6			Calculate the building's Energy Performance Ratio (EPR NC) and compare this with the BREEAM benchmarks. Credits are awarded for demonstrating a reduction in the building's heating and cooling energy demand, primary energy consumption and total CO2 emissions (compared with the notional building). Zero net regulated emissions achieves 9 credits.	Energy Assessor	Stage 2 - Draft calculations
Ene01.2	Prediction of operational energy consumption	4	4			Undertake additional energy modelling during the design and post-construction stage to generate predicted operational energy consumption figures (see Prediction of operational energy consumption on page 124). Report predicted energy consumption targets by end use, design assumptions and input data (with justifications). Carry out a risk assessment to highlight any significant design, technical, and process risks that should be monitored and managed throughout the construction and commissioning process	Energy Assessor	Stage 3/4 - Design stage energy modelling
Ene 02	Energy Monitoring	2	2	0	0			
Ene02.1	Sub-metering of end-use categories	1	1			Install energy metering systems so that at least 90% of the estimated annual energy consumption of each fuel is assigned to the end-use categories.	XCO2	Stage 4 (Technical Design)
Ene02.2	Sub-metering of high energy load and tenancy areas	1	1			Install suitable energy metering (BMS) to allow warehouse, office, reception and kitchen spaces (where present) to be separately monitored. The office should also be separately metered by floorplate.	XCO2	Stage 4 (Technical Design)
Ene 03	External lighting	1	1	0	0			
Ene03	External lighting	1	1			The average initial luminous efficacy of all external light fittings must be greater than 70 luminaire lumens per circuit Watt. All external light fittings must be automatically controlled to prevent operation during daylight hours and have presence detection in areas with intermittent pedestrian traffic.	XCO2	Stage 4 (Technical Design)
Ene 04	Low carbon design	3	2	0	0			
Ene04.1	Passive design	1	1			The project team analyses the proposed building design and development during Concept Design to identify opportunities for the implementation of passive design measures. Passive design measures implemented to reduce total heating, cooling, mechanical ventilation, lighting loads and energy consumption in line with the passive design analysis findings. Quantify the reduced total energy demand and carbon dioxide (CO ₂) emissions resulting from the passive design measures.	Energy Assessor	Stage 2 (Concept Design)
Ene04.2	Free cooling	1	0			The project utilises a compliant free cooling strategy to reduce cooling demand and prevent the need for active cooling (e.g. night time cooling, ground coupled cooling, displacement vent, ground/surface water cooling, evaporative cooling, absorption cooling using waste heat).	Energy Assessor & XCO2	Stage 2 (Concept Design)
Ene04.3	Low and zero carbon technologies	1	1			A certified energy assessor completes a feasibility study to determine the most applicable local low or zero carbon (LZC) energy source. This report must include life cycle cost analysis of the potential specification, accounting for payback.	Energy Assessor	Stage 2 (Concept Design)
TRANSPORT		12	9	3	0			
Tra 01	Transport assessment and travel plan	2	2	0				
Tra01	Transport Assessment and Travel plan	2	2			During the feasibility and design stages, develop a travel plan based on a site-specific travel assessment or statement.	Velocity	Stage 2 (Concept Design)
Tra 02	Sustainable transport measures	10	7	3	0			
Tra02.0	Prerequisite - travel plan			Prerequisite		A site-specific Travel Plan has been produced for managing all travel and transport within the proposed development. It contains both physical and behavioural measures aimed at increasing travel choices, through the use of sustainable modes of transport to a site or development.	Velocity	Stage 2 (Concept Design)
Tra02.1	Transport options and implementation	10	7	3		Credits are awarded for providing sustainable transport measures appropriate to the site; for example: providing a dedicated bus service; installing electric vehicle recharging stations; setting up a car sharing group; or installing cycle storage. Points are awarded based on the number of sustainable transport measures provided and the number of credits awarded depends on the project's accessibility index (AI): PTAL Score of 3	Peter Taylor Architects	Stage 4 (Technical Design)
						Building AI is less than 25 therefore each point equates to one credit (up to max of 10 credits).		
WATER		9	7	0	0			
Wat 01	Internal water consumption	5	3	0	0			
Wat01	Water consumption	5	3			Reducing the demand for potable water through the provision of efficient sanitary fittings, rainwater collection and water recycling systems.	Peter Taylor Architects & XCO2	Stage 4 (Technical Design)
Wat 02	Water monitoring	1	1	0	0			
Wat02	Water monitoring	1	1			A water meter must be provided on the mains water supply to the assessed building area. The meter must have a pulsed or other open protocol communication output to enable connection to an appropriate utility monitoring and management system.	XCO2	Stage 4 (Technical Design)
Wat 03	Water leak detection and prevention	2	2	0	0			
Wat03.1	Leak detection system	1	1			A leak detection system must be installed which is capable of detecting a major water leak on the mains water supply within the building and between the building and the utilities water meter is installed.	XCO2	Stage 4 (Technical Design)
Wat03.2	Flow control devices	1	1			Flow control devices that regulate the supply of water to WCs and taps according to demand are installed (and therefore minimise water leaks and wastage from sanitary fittings).	XCO2	Stage 4 (Technical Design)
Wat 04	Water efficient equipment	1	1	0	0			
Wat04	Water efficient equipment	1	1			Identify systems or processes to reduce the relevant water demand, (e.g. by using harvested rainwater for irrigation), and establish, through either good practice design or specification, a demonstrable reduction in the total water demand of the building.	XCO2	Stages 3-4
MATERIALS		14	6	2	0			
Mat 01	Environmental impact of materials	7	2	0	0			
Mat01.1	Superstructure (Stage 2)	4	0			During the Concept stage, carry out a building LCA on of the superstructure design using either the BREEAM Simplified Building LCA tool or an IMPACT Compliant LCA tool, including Options Appraisal and Results Submission Tools and submit it to the BRE BEFORE planning submission.	XCO2	Stage 2 (Concept Design)
Mat01.2	Superstructure (Stage 4)	2	2			During the Technical Design stage, carry out a building LCA on of the superstructure design using either the BREEAM Simplified Building LCA tool or an IMPACT Compliant LCA tool, including Options Appraisal and Results Submission Tools and submit it to the BRE.	Contractor/Sustainability Consultant	Stage 4 (Technical Design)
Mat01.3	Substructure and hard landscaping	1	0			During the Concept Design stage, carry out a building LCA on the substructure including an options appraisal of a combined total of at least six significantly different substructure or hard landscaping design options (minimum two substructure and two hard landscaping) using an IMPACT Compliant LCA tool.	XCO2	Stage 2 (Concept Design)
Mat 02	Environmental impacts from construction products	1	1	0	0			
Mat02	Specification of products with a recognised environmental product declaration (EPD)	1	1			Specify construction products with EPD that achieve a total EPD points score of at least 20, as verified by MAT01/02 Results Submission Tool. Depends on whether products/materials with EPDs are specified.	Peter Taylor Architects & Contractor	Pre-Tender
Mat 03	Responsible sourcing of materials	4	2	2	0			
Mat03.0	Timber sourcing			Prerequisite		All timber must be either FSC or PEFC certified.	End User & Contractor	Pre-Tender
Mat03.1	Enabling sustainable procurement	1	1			A Sustainable Procurement Plan, to guide the procurement of materials, must be used by the design stage and be in place before Concept Design. It must include sustainability aims, objectives and strategic targets to guide procurement activities, include a requirement for assessing the potential to procure construction products locally. It may include details of procedures in place to check and verify its effective implementation.	Project Manager & C&G	Stage 2 (Concept Design)
Mat03.2	Measuring responsible sourcing	3	1	2		All major building materials (superstructure, internal finishes, substructure and hard landscaping) to carry a responsible sourcing certificate (either BES 6001 or ISO 14001). As many materials as possible must be BES 6001 certified - as a minimum this must include all insulation, concrete, stone and clay based materials.	Peter Taylor Architects & Contractor	Pre-Tender
Mat 05	Designing for durability and resilience	1	1	0	0			
Mat05	Designing for durability and resilience	1	1			Protection measures are incorporated into the building's design and construction to reduce damage. Key exposed building elements have been designed and specified to limit long and short term degradation due to environmental factors.	Peter Taylor Architects	Pre-Tender
Mat 06	Material efficiency	1	0	0	0			
Mat06	Material efficiency	1	0			At the Preparation and Brief and Concept Design stages, opportunities have been identified and targets have been set for optimising use of materials throughout RIBA Stages 1-5, with reports identifying appropriate methods. The implementation of these measures for material efficiency should be recorded throughout RIBA Stages 3-5, and final reports produced on the actual material efficiencies achieved.	Peter Taylor Architects	Stage 2 (Concept Design)

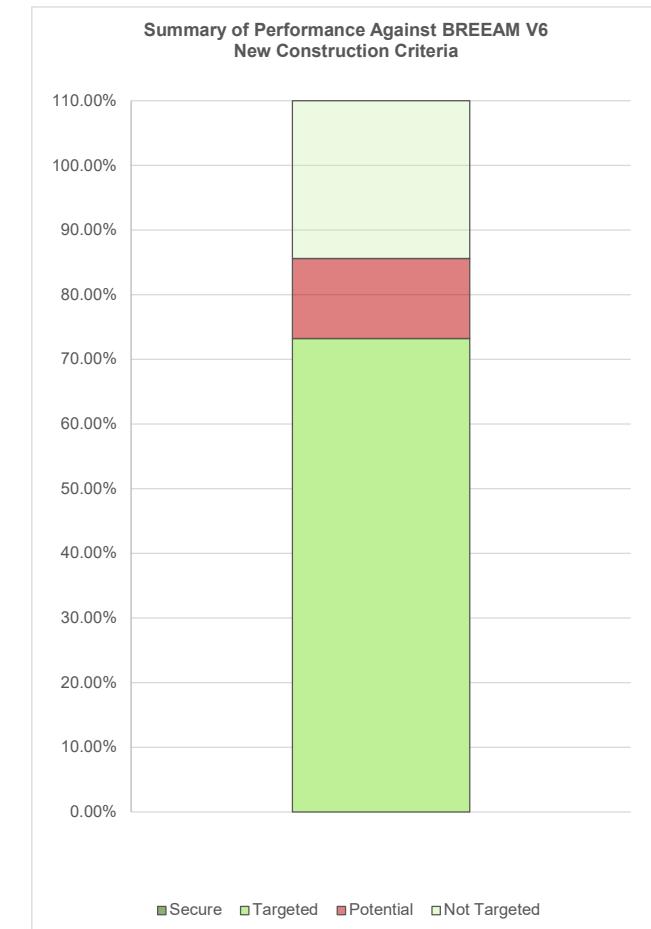
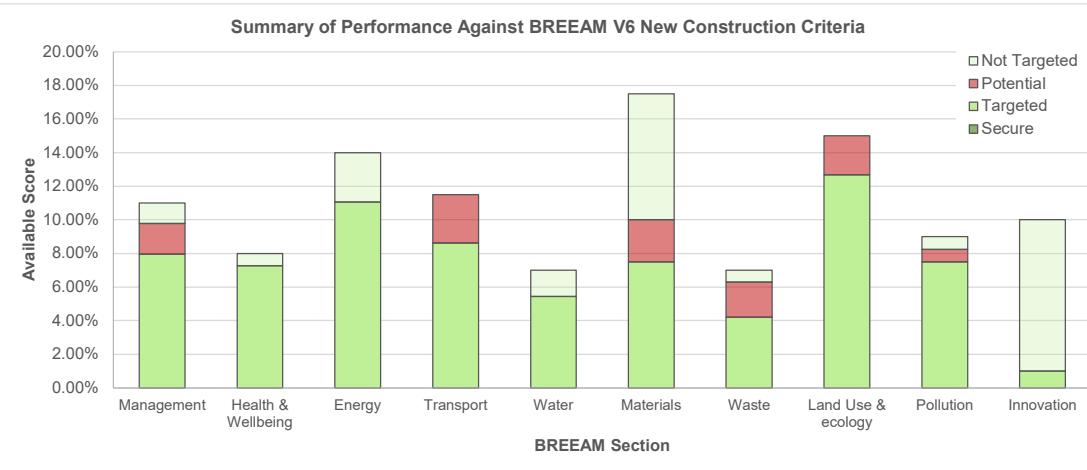
		Available	Target	Potential	Awarded	Credit Criteria	Responsibility	Timing
WASTE		10	6	3	0			
Wst 01	Construction waste management	5	4	0	0			
	Wst01.1 Pre-demolition audit	1	1			If demolition is being carried out the demolition contractor must complete a pre-demolition waste audit to maximise the recovery of material from demolition.	Project Manager& Demolition Contractor	Stage 2 (Concept Design)
	Wst01.2 Construction resource efficiency	3	2			The principal contractor must implement to Resource Management Plan (SWMP) to promote resource efficiency. This must include a target for the amount of construction, demolition and excavation waste that will be generated. - One credit: < 11.1 tonnes of construction waste generated per 100m ² of GIA. - Two credits: < 6.5 tonnes of construction waste generated per 100m ² of GIA - Three credits: < 3.2 tonnes of construction waste generated per 100m ² GIA	Contractor	Pre-Tender
	Wst01.3 Diversion of resources from landfill	1	1			The principal contractor must divert at least 80% of non-demolition and 90% of demolition waste from landfill.	Contractor	Pre-Tender
Wst 02	Recycled aggregates	1	1	0	0			
	Wst02.0 Pre-demolition audit			Prerequisite		As above (WST01.1)	End User & Project Manager& Demolition Contractor	Stage 2 (Concept Design)
	Wst02.1 Project Sustainable Aggregate Points	1	1			Use WST02 calculator to assess Project Sustainable Aggregate points (>3.5 required), which determines mineral resource depletion, social cost of transport, carbon footprint and corresponding BREEAM credits.	Contractor	Pre-Tender
Wst 03	Operational waste	1	1	0	0			
	Wst03 Operational waste	1	1			A dedicated storage area, appropriate to the size of the building and expected waste streams, must be provided. Where the expected waste streams are likely to be sufficient additional space must be provided for a waste compactor (e.g. for cardboard or packaging waste).	Peter Taylor Architects	Stage 3 (Spatial coordination)
Wst 04	Speculative finishes	0	0	0	0			
	Wst04 Speculative finishes	0				Where the future building occupier is not known carpets or other floor or ceiling finishes must only be installed in a show area.	Peter Taylor Architects	Stage 4 -5
Wst 05	Adaptation to climate change	1	0	1	0			
	Wst05 Resilience of structure, fabric, building services and renewables installation	1	0	1		Complete a climate change adaptation strategy appraisal for structural and fabric resilience. This should be based on a systematic risk assessment to identify the impact of expected extreme weather conditions arising from climate change on the building over its projected life cycle. Develop recommendations or solutions based on the climate change adaptation strategy appraisal, before or during Concept Design, that aim to mitigate the identified impact.	XCO2	Stage 2 (Concept Design)
Wst 06	Design for disassembly and adaptability	2	0	2	0			
	Wst06.1 Design for disassembly and functional adaptability - recommendations	1	0	1		Conduct a study to explore the ease of disassembly and the functional adaptation potential of different design scenarios by the end of Concept Design. Develop recommendations or solutions based on the study during or prior to Concept Design, that aim to enable and facilitate disassembly and functional adaptation.	XCO2 & Peter Taylor Architects & Structural Engineer	Stage 2 (Concept Design)
	Wst06.2 Disassembly and functional adaptability – implementation	1	0	1		Produce a building adaptability and disassembly guide to communicate the characteristics allowing functional adaptability and disassembly to prospective tenants.	XCO2 & Peter Taylor Architects & Structural Engineer	Stage 4 (Technical Design)
LAND USE AND ECOLOGY		13	11	2	0			
LE 01	Site selection	2	2	0	0			
	LE01.1 Previously occupied land	1	1			At least 75% of the proposed development's footprint is on an area of land which has previously been occupied. See Building Type Specific 2.0 note. A playing field within the development footprint can be considered as previously occupied land, provided an equivalent area of playing field is reinstated on land of low ecological value within one year of completing the construction works.	Peter Taylor Architects	Stage 2-3
	LE01.2 Contaminated land	1	1			A contaminated land professional's site investigation, risk assessment and appraisal has deemed land within the site to be affected by contamination.	End User	Stage 2-3
LE 02	Ecological risks and opportunities	2	2	0	0			
	LE02.0 Statutory obligations			Prerequisite		The client or contractor confirms compliance is monitored against all relevant UK and EU or international legislation relating to the ecology of the site.	End User	Stage 2 (Concept Design)
	LE02.1 Survey and evaluation	1	1			A Suitable Qualified Ecologist (SQE) carries out a survey and evaluation for the site early enough to influence site preparation works, layout and, where necessary, strategic planning decisions.	Ecology	Stage 2 (Concept Design)
	LE02.2 Determining the ecological outcomes	1	1			During Concept Design, the project team liaise and collaborate with representative stakeholders to identify optimal ecological outcomes for the site and identify, appraise and select measures to meet these outcomes.	Project Manager & Ecology	Stage 2 (Concept Design)
LE 03	Managing impacts on ecology	3	3	0	0			
	LE03.0 Ecological risks and opportunities			Prerequisite		LE02 must be achieved and compliance must be monitored against all relevant UK, EU and International legislation relating to ecology on site.	End User	Stage 2 (Concept Design)
	LE03.1 Planning and measures onsite	1	1			Further planning to avoid and manage negative ecological impacts on-site is carried out, with roles and responsibilities in the project team clearly defined at an early stage. On-site measures for managing negative ecological impacts during site preparation and construction are implemented in-practice (e.g. mitigation measures to protect existing ecological features).	End User & Project Manager & Ecology	Stages 2-5
	LE03.2 Managing negative impacts	2	2			Negative impacts from site preparation and construction works have been managed according to the mitigation hierarchy, in line with the SQE's recommendations, to result in no overall loss of ecological value.	Contractor	Stage 5 (Construction)
LE 04	Ecological change and enhancement	4	2	2	0			
	LE04.0 Managing negative impacts on ecology			Prerequisite		LE 03 has been achieved.		
	LE04.1 Change and enhancement of ecology	1				Measures have been implemented that enhance ecological value, which are based on input from the project team and SQE in collaboration with representative stakeholders.	Ecology	Stage 3-5
	LE04.2 Ecological enhancement	1	1			Measures have been implemented that enhance ecological value, which are based on input from the project team and SQE in collaboration with representative stakeholders.	Ecology	Stage 3-5
	LE04.3 Change and enhancement of ecology	3	1	2		Up to three credits are awarded based on the change in ecological value occurring as a result of the project. This must be calculated in accordance with the process set out in GN36 - BREEAM, CEEQUAL and HQM Ecology Calculation Methodology – Route 2. Credits are awarded in line with the Reward Scale table in GN36 where there are no residual impacts on protected sites or irreplaceable habitats.	Ecology	Stage 3-5
LE 05	Long term ecology management and maintenance	2	2	0	0			
	LE05.0 Statutory obligations, planning and site implementation			Prerequisite		The client or contractor has confirmed that compliance is being monitored against all relevant UK, EU and international standards relating to the ecology of the site. Negative impacts from site preparation and construction works have been managed according to the mitigation hierarchy, in line with the SQE's recommendations.	End User	Pre-tender and Stage 5 (Construction)
	LE05.1 Management and maintenance throughout the project	1	1			Measures have been implemented to manage and maintain ecology throughout the project. A section on Ecology and Biodiversity is included in the handover documents to inform the owner or occupant of local ecological features, value and biodiversity on or near the site.	Ecology & Contractor	Stages 3-6
	LE05.2 Landscape and ecology management plan	1	1			Landscape and ecology management plan is developed in accordance with BS 42020:2013 Section 11.1, covering as a minimum the first five years after project completion.	Ecology	Stage 5 (Construction)
POLLUTION		12	10	1	0			
Pol 01	Impact of refrigerants	3	1	1	0			
	Pol01.0 Compliance with BS EN 378:2016 (parts 2 and 3)			Prerequisite		All systems with electric compressors must comply with BS EN 378:2008.	XCO2	Stage 4 (Technical Design)
	Pol01.1 Impact of refrigerants	2	1			1 credit: the Direct Life Cycle CO ₂ equivalent emissions of all refrigerants are less than 1000 2 credits: the Direct Life Cycle CO ₂ equivalent emissions of all refrigerants are less than 100 (or all refrigerants used have a global warming potential ≤100).	XCO2	Stage 4 (Technical Design)
	Pol01.2 Leak detection	1	0	1		All systems are hermetically sealed or only use environmentally benign refrigerants OR a permanent automated refrigerant leak detection system must be installed or an inbuilt automated diagnostic procedure for detecting leakage installed. In all instances a robust and tested refrigerant leak detection system must be installed and must be capable of continuously monitoring for leaks. * 1 credit awarded where there is no refrigerant use within the installed plant or systems.	XCO2	Stages 4-5
Pol 02	Local air quality	2	2	0	0			
	Pol02 Local air quality	2	2			All heating and hot water is supplied by non-combustion systems, for example only powered by electricity. Alternatively, emissions from all installed combustion plant that provide space heating and domestic hot water do not exceed the levels set in Table 12.4 and Table 12.5 of p.306 in the BREEAM New Construction Non-Domestic manual 2018	XCO2	Stage 4 (Technical Design)

		Available	Target	Potential	Awarded	Credit Criteria	Responsibility	Timing
Pol 03	Flood risk and surface water run-off	5	5	0	0			
	Pol03.0 Appointment of appropriate consultant			Prerequisite		An appropriate consultant is appointed to carry out and demonstrate the development's compliance with all criteria.	End User & Project Manager	Stage 3-4
	Pol03.1 Flood resilience	2	2			A site-specific flood risk assessment (FRA) confirms the development is in a flood zone that is defined as having a low annual probability of flooding (Flood Zone 1). The FRA takes all current and future sources of floodline into consideration.	Flood risk consultant	Stage 3-4
	Pol03.2 Surface water run-off (Rate)	1	1			Bespoke surface water run-off design solutions must be utilised, with justification given by an appropriate consultant where water is allowed to leave the site. Peak rate of run-off from the site to the watercourses (natural or municipal) must show a 30% improvement for the developed site compared with the pre-developed site.	Flood risk consultant	Stage 3-4
	Pol03.3 Surface water run-off (Volume)	1	1			Flooding of property will not occur in the event of local drainage system failure (caused either by extreme rainfall or a lack of maintenance); AND Drainage design measures are specified so that the post-development run-off volume, over the development lifetime, is no greater than it would have been prior to the assessed site's development. This must be for the 100-year 6-hour event, including an allowance for climate change	Flood risk consultant	Stage 3-4
	Pol03.4 Minimising watercourse pollution	1	1			Calculations are carried out to show that there will be no discharge from the developed site for rainwater depths of up to 5mm and (if necessary) measures will be implemented to prevent watercourse pollution.	Flood risk consultant	Stage 3-4
Pol 04	Reduction of night time light pollution	1	1	0	0			
	Pol04 Reduction of night time light pollution	1	1			External lighting pollution has been eliminated through effective design that removes the need for external lighting. This does not adversely affect the safety and security of the site and its users. OR alternatively, where the building does have external lighting, the external lighting strategy has been designed in compliance with Table 2 (and its accompanying notes) of the Institution of Lighting Professionals (ILP) Guidance notes for the reduction of obtrusive light, 2011. All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00.	XCO2	Stage 3-4
Pol 05	Reduction of noise pollution	1	1	0	0			
	Pol05 Reduction of noise pollution	1	1			Compliance by default is there are no noise-sensitive areas within the assessed building or within 800 m radius of the assessed site. OR Where there are noise-sensitive areas within the assessed building or noise-sensitive areas within 800 m radius of the assessed site, a noise impact assessment compliant with BS 4142-2014 is commissioned.	Acoustician	Stage 3-4
INNOVATION		10	1	0	0			
Man 03	Responsible construction practices		1	0	0			
	Man03EXE Exemplary level	1	1			Achieve all items on Responsible Construction Management table.		
Hea 01	Visual comfort		0	0	0			
	Hea01EXE1 Exemplary level	1	0			Relevant building areas meet exemplary daylight factors.		
	Hea01EXE2 Exemplary level	0	0					
Hea 02	Indoor air quality		0	0	0			
	Hea02EXE Exemplary level	0	0			Three products meet exemplary level emission criteria, e.g.. Paints, floor, glues		
Hea 06	Security		0	0	0			
	Hea06EXE Exemplary level	1	0			A compliant risk based security rating scheme (SABRE) has been used. The performance against the scheme has been confirmed by independent assessment and verification.		
Ene 01	Reduction of energy use and carbon emissions		0	0	0			
	Ene01EXE1 Exemplary level	3	0			The building achieves an EPR NC ≥ 0.9 and zero net regulated CO ₂ -eq emissions. Energy generation from on-site and near-site L2C sources is sufficient to offset carbon emissions from regulated energy use plus a percentage of emissions from unregulated energy use.		
						Beyond net zero regulated carbon - offset % of unregulated energy use: 1 credit: 10% of emissions from unregulated energy uses are offset 2 credits: 50% of emissions from unregulated energy uses are offset 3 credits: >100% of emissions from unregulated energy uses are offset		
						The building is deemed carbon negative where > 100% of carbon emissions from unregulated (and regulated) energy use are offset by energy generated from on-site and near-site L2C sources (see Definitions).		
Wat 01	Water consumption	2	0			Post-occupancy stage - commit to POE for actual energy consumption.		
	Wat01EXE Exemplary level	1	0			65% reduction in water use over baseline building water consumption		
Mat 01	Environmental impacts from construction products		0	0	0			
	Mat01EXE1 Exemplary level (Core building services)	1	0			Building LCA appraisal of at least 3 different core building services options.		
	Mat01EXE2 Exemplary level (LCA/LCC alignment)	1	0			Align LCA options appraisal in Elemental and Component Level LCC reports.		
	Mat01EXE3 Exemplary level (Third party verification)	1	0			External verification of LCAs - to be provided by OneClick LCA.		
Mat 03	Responsible sourcing of materials		0	0	0			
	Mat03EXE Measuring responsible sourcing	1	0			Inclusion of core building services in addition to 3 credit requirements.		
Wst 01	Construction waste management		0	0	0			
	Wst01EXE Exemplary level	1	0			No more than 1.9 tonnes of construction waste generated per 100m ² of GIA and the principal contractor must divert the following percentages of waste from landfill: - 90% non-demolition - 95% demolition - 95% excavation		
Wst 02	Use of recycled and sustainably sourced aggregates		0	0	0			
	Wst02EXE Exemplary level	1	0			>6 Sustainable Aggregate points achieved.		
Wst 05	Adaptation to climate change		0	0	0			
	Wst05EXE Exemplary level (responding to climate change)	1	0			Meet WST05 credit requirements as well as HEA04, ENE01, ENE04, WAT01, MAT05 and POL03 minimum requirements.		
LE02	Identifying and understanding the risks and opportunities for the project		0	0	0			
	LE02EXE Exemplary level	1	0			When determining the optimal ecological outcome for the site consider the wider sustainability-related activities and the potential for ecosystem service related benefits.		
						Also achieve the following credits: Hea07: Safe and healthy surroundings (2 credits) Pol03: Surface water run-off and minimising watercourse pollution credits Pol05: Reduction of noise pollution		

SUMMARY OF PERFORMANCE & RATING

Assessment Section	Credits Available	Section Weighting	Credit Value	Credits		Score		
				Targeted	Potential	Targeted	Potential	Awarded
Management	18	11.0%	0.61%	13	3	7.94%	1.83%	0.00%
Health & Wellbeing	11	8.0%	0.73%	10	0	7.27%	0.00%	0.00%
Energy	19	14.0%	0.74%	15	0	11.05%	0.00%	0.00%
Transport	12	11.5%	0.96%	9	3	8.63%	2.88%	0.00%
Water	9	7.0%	0.78%	7	0	5.44%	0.00%	0.00%
Materials	14	17.5%	1.25%	6	2	7.50%	2.50%	0.00%
Waste	10	7.0%	0.70%	6	3	4.20%	2.10%	0.00%
Land Use & ecology	13	15.0%	1.15%	11	2	12.69%	2.31%	0.00%
Pollution	12	9.0%	0.75%	10	1	7.50%	0.75%	0.00%
Innovation	10	10.0%	1.00%	1	0	1.00%	0.00%	0.00%
				BREEAM Score	73.23%	85.60%	0.00%	
				BREEAM Rating	Excellent	Outstanding	Unclassified	

Please note: although a score of 110% is available including innovation credits the maximum score that can be achieved is 100%.



		Available	Target	Potential	Awarded	Credit Criteria	Responsibility	Timing
Stage 2 credits	Can be provided by XCO ₂							
MANAGEMENT		18	13	3	0			
Man 01	Project brief and design	4	1	3	0			
Man01.1	Project delivery planning	1	0	1		Prior to completion of the Concept Design, the project delivery stakeholders (see Definitions on page 37) meet to identify and define roles, responsibilities and contributions for each key phase of project delivery.	End User & Project Manager	Stage 2 (Concept Design)
Man01.2	Stakeholder consultation (interested parties)	1	1			Prior to completion of Concept Design, all relevant third party stakeholders have been consulted by the design team and this covers the minimum consultation content. Stakeholder contributions must influence the initial Project Brief and Concept Design. All interested parties must give and receive consultation feedback prior to completion Stage 4).	End User & Project Manager	Stage 2 (Concept Design)
Man01.3	BREEAM Advisory Professional (Concept and Design)	1	0	1		Involve a BREEAM AP at an appropriate time to work with the project team to consider the links between BREEAM issues and assist in maximising the project's overall performance throughout Concept Design.	BREEAM AP	Stage 2 (Concept Design)
Man01.4	BREEAM Advisory Professional (Developed Design)	1	0	1		Involve a BREEAM AP at an appropriate time to work with the project team to consider the links between BREEAM issues and assist in maximising the project's overall performance throughout Developed Design.	BREEAM AP	Stage 3-4
Man 02	Life cycle cost and service life planning	4	2	0	0			
Man02.1	Elemental LCC	2	0			A competent person carries out an outline, entire asset LCC plan at Stage 2 in line with PD 156865:2008. the elemental plan provides an indication of future replacement, service life, maintenance and operation costs over a period of analysis determined by the client (e.g. 20, 30, 50 or 60 years).	Cost Consultant	Stage 2 (Concept Design)
Man02.2	Component level LCC options appraisal	1	1			A competent person develops a component level LCC options appraisal by the end of Stage 4, including: envelope, services, finishes and external spaces.	Cost Consultant	Stage 4 (Technical Design)
Man02.3	Capital cost reporting	1	1			Project team to provide written confirmation of capital costs (in pounds per square metre).	End User & Cost Consultant	Stage 4 (Technical Design)
Man 03	Responsible construction practices	6	6	0	0			
Man03.0	Legally harvested and traded timber		Prerequisite			All timber and timber-based products must comply with the government's definition of 'legally harvested and traded timber' (FSC or PEFC certified).	Contractor	Pre-Tender
Man03.1	Environmental management	1	1			All parties who at any date manage the construction site (e.g. principal contractor, demolition contractor) must operate an EMS (e.g. ISO14001 or BS8555:2016) and implement best practice pollution prevention policies and procedures (in accordance with PPG6).	Contractor	Pre-Tender
Man03.2	BREEAM Advisory Professional (site)	1	1			Involve a BREEAM AP in the project at an appropriate time to work with the project team, including the client, to consider the links between BREEAM issues and assist them in achieving and if possible going beyond the design intent, to maximise the project's performance against the agreed performance targets throughout the Construction, Handover and Close Out stages.	Contractor	Pre-Tender
Man03.3	Responsible construction management	2	2			Up to two credits available for implementing responsible construction management items, including actions on:	Contractor	Pre-Tender
						- Risk evaluation and implementation; - Training, awareness and feedback; and - Monitoring and reporting.		
Man03.4	Monitoring of construction site impacts (energy and water)	1	1			The principal contractor must set energy and water consumption targets, monitor the actual energy and water use against these targets and report their performance.	Contractor	Pre-Tender
Man03.5	Monitoring of construction site impacts (transport)	1	1			The principal contractor monitors and records transport data for the delivery of materials to site and removal of waste from site (n.b. data for deliveries and waste removal must be reported separately).	Contractor	Pre-Tender
Man 04	Commissioning and handover	4	4	0	0			
Man04.1	Commissioning - testing schedule and responsibilities	1	1			The principal contractor produces a schedule of commissioning and testing that identifies and includes a suitable timescale for commissioning and re-commissioning of all complex and non-complex building services and control systems and testing and inspecting building fabric.	Contractor	Pre-Tender
Man04.2	Commissioning - design and preparation	1	1			During design stage the client or principal contractor appoints a specialist commissioning manager, with responsibility for:	Contractor	Pre-Tender
						(a) Undertaking design reviews and giving advice on suitability for ease of commissioning (b) Providing commissioning management input to construction programming and during installation stages		
Man04.3	Testing and inspecting building fabric	1	1			For assessment of commissioning, re-commissioning and handover see most handover stage.	Contractor	Pre-Tender
						The integrity of the building fabric, including continuity of insulation avoidance of thermal bridging and air leakage paths is quality assured through completion of post construction testing and inspection. This must include a Level 2 thermographic survey in addition to an airtightness test. Any defects identified must be confirmed.		
Man04.4	Handover	1	1			Prior to handover the contractor must issue:	Contractor	Pre-Tender
						(a) A non-technical user guide for distribution to the building occupiers; (b) A technical user guide for the premises facilities managers; (c) A non-technical training schedule for the building occupiers; and (d) A technical training schedule for the premises facilities managers		
HEALTH AND WELLBEING		11	10	0	0			
Hea 01	Visual comfort	4	4	0	0			
Hea01.2	Daylighting	2	2			Daylighting criteria have been met for different building types, according to the daylight factors outlined in p.70 of the BREEAM New Construction Non-Domestic manual 2018, across 80% of the floor area and a uniformity ratio of 0.3 or minimum point daylight factor of 0.7.	Peter Taylor Architects & XCO ₂	Stage 2-3
Hea01.3	View out	1	1			95% of the floor area in each relevant building area is within 8m of a wall which has a window or permanent opening that provides an adequate view out. The window/opening must make up at least 20% of the total wall area. (If there are no relevant areas to assess, credit awarded by default)	Peter Taylor Architects & XCO ₂	Stage 2-3
Hea01.4	Internal and external lighting levels, zoning and control	1	1			Internal lighting in all relevant areas of the building is designed to provide illuminance (lux) levels and colouring rendering index in accordance with the SLL Code for Lighting 2012 and any other relevant industry standard. Internal lighting should be appropriate to the tasks undertaken, accounting for building user concentration and comfort levels. For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 7 sections 2.4, 2.13 to 2.15, 2.20, and 6.10 to 6.20. Internal lighting is zoned to allow for occupant control.	XCO ₂	
						All external lighting located within the construction zone is specified in accordance with BS 5489-1:2013 Code for the practice for the design of road lighting. Lighting of roads and public amenity areas(35) and EN 12464-2:2014(36) Light and lighting - Lighting of work places - Part 2: Outdoor work places. External lighting should provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately, especially during the night.		Stage 4 (Technical Design)
						For 'shell only' and 'shell&core' projects only the external lighting criteria applies.		
Hea 02	Indoor air quality	1	1	0	0			
Hea02.0	Indoor air quality (IAQ) plan		Prerequisite	Prerequisite		A site-specific Indoor Air Quality Plan has been produced and implemented in accordance with the guidance in Guidance Note GN06. The IAQ plan must consider the following:	GIA	Stage 3-4
						1.a - Removal of contaminant sources 1.b - Dilution and control of contaminant sources, including air quality requirements of specialist areas such as laboratories, where present 1.c - Procedures for pre-occupancy flush out and purge ventilation 1.d - Third party testing and analysis 1.e - Maintaining good indoor air quality in-use 1.f - Any relevant local authority plans or policies (for example, Air Quality Management Areas or Local Air		
Hea02.1	Ventilation	1	1			Fresh air must be provided in accordance with the relevant standard(s) for ventilation. Ventilation pathways are designed to minimise the ingress and build-up of air pollutants inside the building (in line with best practice). HVAC systems designed in line with BS EN 16798-3:2017; filters should achieve an indoor air quality of SUP 2. Occupied spaces must include CO ₂ sensors in accordance with Building Regulations ADF2, linked to mechanical ventilation system, or in the case of naturally ventilated spaces are able to issue an alert when CO ₂ levels exceed a certain point, or can automatically open AOVs / roof vents .The number of sensors must be reported. If naturally ventilated the design should maintain thermal comfort in accordance with CIBSE AM10, or CIBSE AM13 for mixed-mode buildings.	XCO ₂	Stage 4 (Technical Design)
Hea 04	Thermal comfort	2	2	0	0			
Hea04.1	Thermal modelling	1	1			Thermal modelling must be carried out using compliant software in accordance with CIBSE AM11 which provides full dynamic thermal analysis at the detailed design stage.	XCO ₂	Stage 3-4
Hea04.2	Design for future thermal comfort	1	1			The thermal modelling (above) demonstrates that the relevant requirements are achieved for a projected climate change environment.	XCO ₂	Stage 3-4
Hea 05	Acoustic performance	1	1	0	0			
Hea05.1	Acoustic performance (indoor ambient noise level)	1	1			Acoustician appointed to confirm that acoustic performance (indoor ambient noise levels) complies with the design ranges given in Section 7 of BS 8233:2014.	Acoustician	Stage 3-4

Assessment Criteria						Responsibility	Timing	
		Available	Target	Potential	Awarded	Credit Criteria		
Hea 06	Security	1	0	0	0	A Suitably Qualified Security Specialist (SQSS) conducts an evidence-based Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent). The purpose of the SNA will be to identify attributes of the proposal, site and surroundings which may influence the approach to security for the development.	End User & Peter Taylor Architects	Stage 2 (Concept Design)
Hea 07	Safe and healthy surroundings	2	2	0	0	External areas included in the site boundary (cycle paths, footpaths, pedestrian drop-off areas, vehicle delivery areas and drop-off areas, parking and turning areas) to comply with dedicated safe access criteria.	Peter Taylor Architects	Stage 3 (Spatial Coordination)
	Hea07.1 Safe access	1	1					
	Hea07.2 Outside space	1	1			There is an outside space providing building users with an external amenity area.	Peter Taylor Architects	Stage 3 (Spatial Coordination)
ENERGY		19	15	0	0			
Ene 01	Reduction of energy use and CO2	13	10	0	0			
	Ene01.1 Energy performance	9	6			Calculate the building's Energy Performance Ratio (EPR NC) and compare this with the BREEAM benchmarks. Credits are awarded for demonstrating a reduction in the building's heating and cooling energy demand, primary energy consumption and total CO2 emissions (compared with the notional building). Zero net regulated emissions achieves 9 credits.	Energy Assessor	Stage 2 - Draft calculations
	Ene01.2 Prediction of operational energy consumption	4	4			Undertake additional energy modelling during the design and post-construction stage to generate predicted operational energy consumption figures (see Prediction of operational energy consumption on page 124). Report predicted energy consumption targets by end use, design assumptions and input data (with justifications). Carry out a risk assessment to highlight any significant design, technical, and process risks that should be monitored and managed throughout the construction and commissioning process	Energy Assessor	Stage 3/4 - Detailed design calculations
Ene 02	Energy Monitoring	2	2	0	0			
	Ene02.1 Sub-metering of end-use categories	1	1			Install energy metering systems so that at least 90% of the estimated annual energy consumption of each fuel is assigned to the end-use categories.	XCO2	Stage 4 (Technical Design)
	Ene02.2 Sub-metering of high energy load and tenancy areas	1	1			Install suitable energy metering (BMS) to allow warehouse, office, reception and kitchen spaces (where present) to be separately monitored. The office should also be separately metered by floorplate.	XCO2	Stage 4 (Technical Design)
Ene 03	External lighting	1	1	0	0			
	Ene03 External lighting	1	1			The average initial luminous efficacy of all external light fittings must be greater than 70 luminaire lumens per circuit Watt. All external light fittings must be automatically controlled to prevent operation during daylight hours and have presence detection in areas with intermittent pedestrian traffic.	XCO2	Stage 4 (Technical Design)
Ene 04	Low carbon design	3	2	0	0			
	Ene04.1 Passive design	1	1			The project team analyses the proposed building design and development during Concept Design to identify opportunities for the implementation of passive design measures. Passive design measures implemented to reduce total heating, cooling, mechanical ventilation, lighting loads and energy consumption in line with the passive design analysis findings. Quantify the reduced total energy demand and carbon dioxide (CO ₂) emissions resulting from the passive design measures.	Energy Assessor	Stage 2 (Concept Design)
	Ene04.2 Free cooling	1	0			The project utilises a compliant free cooling strategy to reduce cooling demand and prevent the need for active cooling (e.g. night time cooling, ground coupled cooling, displacement vent, ground/surface water cooling, evaporative cooling, absorption cooling using waste heat).	Energy Assessor & XCO2	Stage 2 (Concept Design)
	Ene04.3 Low and zero carbon technologies	1	1			A certified energy assessor completes a feasibility study to determine the most applicable local low or zero carbon (LZC) energy source. This report must include life cycle cost analysis of the potential specification, accounting for payback.	Energy Assessor	Stage 2 (Concept Design)
TRANSPORT		12	9	3	0			
Tra 01	Transport assessment and travel plan	2	2	0				
	Tra01 Transport Assessment and Travel plan	2	2			During the feasibility and design stages, develop a travel plan based on a site-specific travel assessment or statement.	Velocity	Stage 2 (Concept Design)
Tra 02	Sustainable transport measures	10	7	3				
	Tra02.0 Prerequisite - travel plan	Prerequisite				A site-specific Travel Plan has been produced for managing all travel and transport within the proposed development. It contains both physical and behavioural measures aimed at increasing travel choices, through the use of Sustainable modes of transport to a site or development.	Velocity	Stage 2 (Concept Design)
	Tra02.1 Transport options and implementation	10	7	3		Credits are awarded for providing sustainable transport measures appropriate to the site; for example: providing a dedicated bus service; installing electric vehicle recharging stations; setting up a car sharing group; or installing cycle storage. Points are awarded based on the number of sustainable transport measures provided and the number of credits awarded depends on the project's accessibility index (AI): PTAL Score of 3	Peter Taylor Architects	Stage 4 (Technical Design)
		Building AI is less than 25 therefore each point equates to one credit (up to max of 10 credits).						
WATER		9	7	0	0			
Wat 01	Internal water consumption	5	3	0	0			
	Wat01 Water consumption	5	3			Reducing the demand for potable water through the provision of efficient sanitary fittings, rainwater collection and water recycling systems.	Peter Taylor Architects & XCO2	Stage 4 (Technical Design)
Wat 02	Water monitoring	1	1	0	0			
	Wat02 Water monitoring	1	1			A water meter must be provided on the mains water supply to the assessed building area. The meter must have a pulsed or other open protocol communication output to enable connection to an appropriate utility monitoring and management system.	XCO2	Stage 4 (Technical Design)
Wat 03	Water leak detection and prevention	2	2	0	0			
	Wat03.1 Leak detection system	1	1			A leak detection system must be installed which is capable of detecting a major water leak on the mains water supply within the building and between the building and the utilities water meter is installed.	XCO2	Stage 4 (Technical Design)
	Wat03.2 Flow control devices	1	1			Flow control devices that regulate the supply of water to WCs and taps according to demand are installed (and therefore minimise water leaks and wastage from sanitary fittings).	XCO2	Stage 4 (Technical Design)
Wat 04	Water efficient equipment	1	1	0	0			
	Wat04 Water efficient equipment	1	1			Identify systems or processes to reduce the relevant water demand, (e.g. by using harvested rainwater for irrigation), and establish, through either good practice design or specification, a demonstrable reduction in the total water demand of the building.	XCO2	Stages 3-4
MATERIALS		14	6	2	0			
Mat 01	Environmental impact of materials	7	2	0	0			
	Mat01.1 Superstructure (Stage 2)	4	0			During the Concept stage, carry out a building LCA on of the superstructure design using either the BREEAM Simplified Building LCA tool or an IMPACT Compliant LCA tool, including Options Appraisal and Results Submission Tools and submit it to the BRE BEFORE planning submission.	XCO2	Stage 2 (Concept Design)
	Mat01.2 Superstructure (Stage 4)	2	2			During the Technical Design stage, carry out a building LCA on of the superstructure design using either the BREEAM Simplified Building LCA tool or an IMPACT Compliant LCA tool, including Options Appraisal and Results Submission Tools and submit it to the BRE.	Contractor/Sustainability Consultant	Stage 4 (Technical Design)
	Mat01.3 Substructure and hard landscaping	1	0			During the Concept Design stage, carry out a building LCA on the substructure including an options appraisal of a combined total of at least six significantly different substructure or hard landscaping design options (minimum two substructure and two hard landscaping) using an IMPACT Compliant LCA tool.	XCO2	Stage 2 (Concept Design)
Mat 02	Environmental impacts from construction products	1	1	0	0			
	Mat02 Specification of products with a recognised environmental product declaration (EPD)	1	1			Specify construction products with EPD that achieve a total EPD points score of at least 20, as verified by MAT01/02 Results Submission Tool. Depends on whether products/materials with EPDs are specified.	Peter Taylor Architects & Contractor	Pre-Tender
Mat 03	Responsible sourcing of materials	4	2	2	0			
	Mat03.0 Timber sourcing	Prerequisite				All timber must be either FSC or PEFC certified.	End User & Contractor	Pre-Tender
	Mat03.1 Enabling sustainable procurement	1	1			A Sustainable Procurement Plan, to guide the procurement of materials, must be used by the design stage and be in place before Concept Design. It must include sustainability aims, objectives and strategic targets to guide procurement activities, include a requirement for assessing the potential to procure construction products locally. It may include details of procedures in place to check and verify its effective implementation.	Project Manager & C&G	Stage 2 (Concept Design)
	Mat03.2 Measuring responsible sourcing	3	1	2		All major building materials (superstructure, internal finishes, substructure and hard landscaping) to carry a responsible sourcing certificate (either BES 6001 or ISO 14001). As many materials as possible must be BES 6001 certified - as a minimum this must include all insulation, concrete, stone and clay based materials.	Peter Taylor Architects & Contractor	Pre-Tender

		Available	Target	Potential	Awarded	Credit Criteria	Responsibility	Timing
Mat 05	Designing for durability and resilience	1	1	0	0			
Mat05	Designing for durability and resilience	1	1			Protection measures are incorporated into the building's design and construction to reduce damage. Key exposed building elements have been designed and specified to limit long and short term degradation due to environmental factors.	Peter Taylor Architects	Pre-Tender
Mat 06	Material efficiency	1	0	0	0			
Mat06	Material efficiency	1	0			At the Preparation and Brief and Concept Design stages, opportunities have been identified and targets have been set for optimising use of materials <i>throughout RIBA Stages 1-5</i> , with reports identifying appropriate methods. The implementation of these measures for material efficiency should be recorded throughout RIBA Stages 3-5, and final reports produced on the actual material efficiencies achieved.	Peter Taylor Architects	Stage 2 (Concept Design)
WASTE		10	6	3	0			
Wst 01	Construction waste management	5	4	0	0			
Wst01.1	Pre-demolition audit	1	1			If demolition is being carried out the demolition contractor must complete a pre-demolition waste audit to maximise the recovery of material from demolition.	Project Manager & Demolition Contractor	Stage 2 (Concept Design)
Wst01.2	Construction resource efficiency	3	2			The principal contractor must implement to Resource Management Plan (SWMP) to promote resource efficiency. This must include a target for the amount of construction, demolition and excavation waste that will be generated. - One credit: < 11.1 tonnes of construction waste generated per 100m ² of GIA. - Two credits: < 6.5 tonnes of construction waste generated per 100m ² of GIA - Three credits: < 3.2 tonnes of construction waste generated per 100m ² GIA	Contractor	Pre-Tender
Wst01.3	Diversion of resources from landfill	1	1			The principal contractor must divert at least 80% of non-demolition and 90% of demolition waste from landfill.	Contractor	Pre-Tender
Wst 02	Recycled aggregates	1	1	0	0			
Wst02.0	Pre-demolition audit			Prerequisite		As above (WST01.1)	End User & Project Manager & Demolition Contractor	Stage 2 (Concept Design)
Wst02.1	Project Sustainable Aggregate Points	1	1			Use WST02 calculator to assess Project Sustainable Aggregate points (>3.5 required), which determines mineral resource depletion, social cost of transport, carbon footprint and corresponding BREEAM credits.	Contractor	Pre-Tender
Wst 03	Operational waste	1	1	0	0			
Wst03	Operational waste	1	1			A dedicated storage area, appropriate to the size of the building and expected waste streams, must be provided. Where the expected waste streams are likely to be sufficient additional space must be provided for a waste compactor (e.g. for cardboard or packaging waste).	Peter Taylor Architects	Stage 3 (Spatial coordination)
Wst 04	Speculative finishes	0	0	0	0			
Wst04	Speculative finishes	0				Where the future building occupier is not known carpets or other floor or ceiling finishes must only be installed in a show area.	Peter Taylor Architects	Stage 4 -5
Wst 05	Adaptation to climate change	1	0	1	0			
Wst05	Resilience of structure, fabric, building services and renewables installation	1	0	1		Complete a climate change adaptation strategy appraisal for structural and fabric resilience. This should be based on a systematic risk assessment to identify the impact of expected extreme weather conditions arising from climate change on the building over its projected life cycle. Develop recommendations or solutions based on the climate change adaptation strategy appraisal, before or during Concept Design, that aim to mitigate the identified impact.	XCO2	Stage 2 (Concept Design)
Wst 06	Design for disassembly and adaptability	2	0	2	0			
Wst06.1	Design for disassembly and functional adaptability - recommendations	1	0	1		Conduct a study to explore the ease of disassembly and the functional adaptation potential of different design scenarios by the end of Concept Design. Develop recommendations or solutions based on the study during or prior to Concept Design, that aim to enable and facilitate disassembly and functional adaptation.	XCO2 & Peter Taylor Architects & Structural Engineer	Stage 2 (Concept Design)
Wst06.2	Disassembly and functional adaptability – implementation	1	0	1		Produce a building adaptability and disassembly guide to communicate the characteristics allowing functional adaptability and disassembly to prospective tenants.	XCO2 & Peter Taylor Architects & Structural Engineer	Stage 4 (Technical Design)
LAND USE AND ECOLOGY		13	11	2	0			
LE 01	Site selection	2	2	0	0			
LE01.1	Previously occupied land	1	1			At least 75% of the proposed development's footprint is on an area of land which has previously been occupied. See Building Type Specific 2.0 note. A playing field within the development footprint can be considered as previously occupied land, provided an equivalent area of playing field is reinstated on land of low ecological value within one year of completing the construction works.	Peter Taylor Architects	Stage 2-3
LE01.2	Contaminated land	1	1			A contaminated land professional's site investigation, risk assessment and appraisal has deemed land within the site to be affected by contamination.	End User	Stage 2-3
LE 02	Ecological risks and opportunities	2	2	0	0			
LE02.0	Statutory obligations			Prerequisite		The client or contractor confirms compliance is monitored against all relevant UK and EU or international legislation relating to the ecology of the site.	End User	Stage 2 (Concept Design)
LE02.1	Survey and evaluation	1	1			A Suitably Qualified Ecologist (SQE) carries out a survey and evaluation for the site early enough to influence site preparation works, layout and, where necessary, strategic planning decisions.	Ecology	Stage 2 (Concept Design)
LE02.2	Determining the ecological outcomes	1	1			During Concept Design, the project team liaise and collaborate with representative stakeholders to identify optimal ecological outcomes for the site and identify, appraise and select measures to meet these outcomes.	Project Manager & Ecology	Stage 2 (Concept Design)
LE 03	Managing impacts on ecology	3	3	0	0			
LE03.0	Ecological risks and opportunities			Prerequisite		LE02 must be achieved and compliance must be monitored against all relevant UK, EU and International legislation relating to ecology on site.	End User	Stage 2 (Concept Design)
LE03.1	Planning and measures onsite	1	1			Further planning to avoid and manage negative ecological impacts on-site is carried out, with roles and responsibilities in the project team clearly defined at an early stage. On-site measures for managing negative ecological impacts during site preparation and construction are implemented in-practice (e.g. mitigation measures to protect existing ecological features).	End User & Project Manager & Ecology	Stages 2-5
LE03.2	Managing negative impacts	2	2			Negative impacts from site preparation and construction works have been managed according to the mitigation hierarchy, in line with the SQE's recommendations, to result in no overall loss of ecological value.	Contractor	Stage 5 (Construction)
LE 04	Ecological change and enhancement	4	2	2	0			
LE04.0	Managing negative impacts on ecology			Prerequisite		LE 03 has been achieved.		
LE04.1	Change and enhancement of ecology					Measures have been implemented that enhance ecological value, which are based on input from the project team and SQE in collaboration with representative stakeholders.	Ecology	Stage 3-5
LE04.2	Ecological enhancement	1	1			Measures have been implemented that enhance ecological value, which are based on input from the project team and SQE in collaboration with representative stakeholders.	Ecology	Stage 3-5
LE04.3	Change and enhancement of ecology	3	1	2		Up to three credits are awarded based on the change in ecological value occurring as a result of the project. This must be calculated in accordance with the process set out in GN36 - BREEAM, CEEQUAL and HQM Ecology Calculation Methodology – Route 2. Credits are awarded in line with the Reward Scale table in GN36 where there are no residual impacts on protected sites or irreplaceable habitats.	Ecology	Stage 3-5
LE 05	Long term ecology management and maintenance	2	2	0	0			
LE05.0	Statutory obligations, planning and site implementation			Prerequisite		The client or contractor has confirmed that compliance is being monitored against all relevant UK, EU and international standards relating to the ecology of the site. Negative impacts from site preparation and construction works have been managed according to the mitigation hierarchy, in line with the SQE's recommendations.	End User	Pre-tender and Stage 5 (Construction)
LE05.1	Management and maintenance throughout the project	1	1			Measures have been implemented to manage and maintain ecology throughout the project. A section on Ecology and Biodiversity is included in the handbook documents to inform the owner or occupant of local ecological features, value and biodiversity on or near the site.	Ecology & Contractor	Stages 3-6
LE05.2	Landscape and ecology management plan	1	1			Landscape and ecology management plan is developed in accordance with BS 42020:2013 Section 11.1, covering as a minimum the first five years after project completion.	Ecology	Stage 5 (Construction)
POLLUTION		12	10	1	0			
Pol 01	Impact of refrigerants	3	1	1	0			
Pol01.0	Compliance with BS EN 378:2016 (parts 2 and 3)			Prerequisite		All systems with electric compressors must comply with BS EN 378:2008.	XCO2	Stage 4 (Technical Design)
Pol01.1	Impact of refrigerants	2	1			1 credit: the Direct Life Cycle CO ₂ equivalent emissions of all refrigerants are less than 1000 2 credits: the Direct Life Cycle CO ₂ equivalent emissions of all refrigerants are less than 100 (or all refrigerants used have a global warming potential ≤100). * 2 credits awarded where there is no refrigerant use within the installed plant or systems.	XCO2	Stage 4 (Technical Design)
Pol01.2	Leak detection	1	0	1		All systems are hermetically sealed or only use environmentally benign refrigerants OR a permanent automated refrigerant leak detection system must be installed or an inbuilt automated diagnostic procedure for detecting leakage installed. In all instances a robust and tested refrigerant leak detection system must be installed and must be capable of continuously monitoring for leaks. * 1 credit awarded where there is no refrigerant use within the installed plant or systems.	XCO2	Stages 4-5
Pol 02	Local air quality	2	2	0	0			
Pol02	Local air quality	2	2			All heating and hot water is supplied by non-combustion systems, for example only powered by electricity. Alternatively, emissions from all installed combustion plant that provide space heating and domestic hot water do not exceed the levels set in Table 12.4 and Table 12.5 of p.306 in the BREEAM New Construction Non-Domestic manual 2018.	XCO2	Stage 4 (Technical Design)

		Available	Target	Potential	Awarded	Credit Criteria	Responsibility	Timing
Pol 03	Flood risk and surface water run-off	5	5	0	0			
	Pol03.0 Appointment of appropriate consultant			Prerequisite		An appropriate consultant is appointed to carry out and demonstrate the development's compliance with all criteria.	End User & Project Manager	Stage 3-4
	Pol03.1 Flood resilience	2	2			A site-specific flood risk assessment (FRA) confirms the development is in a flood zone that is defined as having a low annual probability of flooding (Flood Zone 1). The FRA takes all current and future sources of floodline into consideration.	Flood risk consultant	Stage 3-4
	Pol03.2 Surface water run-off (Rate)	1	1			Bespoke surface water run-off design solutions must be utilised, with justification given by an appropriate consultant where water is allowed to leave the site. Peak rate of run-off from the site to the watercourses (natural or municipal) must show a 30% improvement for the developed site compared with the pre-developed site.	Flood risk consultant	Stage 3-4
	Pol03.3 Surface water run-off (Volume)	1	1			Flooding of property will not occur in the event of local drainage system failure (caused either by extreme rainfall or a lack of maintenance); AND Drainage design measures are specified so that the post-development run-off volume, over the development lifetime, is no greater than it would have been prior to the assessed site's development. This must be for the 100-year 6-hour event, including an allowance for climate change	Flood risk consultant	Stage 3-4
	Pol03.4 Minimising watercourse pollution	1	1			Calculations are carried out to show that there will be no discharge from the developed site for rainwater depths of up to 5mm and (if necessary) measures will be implemented to prevent watercourse pollution.	Flood risk consultant	Stage 3-4
Pol 04	Reduction of night time light pollution	1	1	0	0			
	Pol04 Reduction of night time light pollution	1	1			External lighting pollution has been eliminated through effective design that removes the need for external lighting. This does not adversely affect the safety and security of the site and its users. OR alternatively, where the building does have external lighting, the external lighting strategy has been designed in compliance with Table 2 (and its accompanying notes) of the Institution of Lighting Professionals (ILP) Guidance notes for the reduction of obtrusive light, 2011. All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00.	XCO2	Stage 3-4
Pol 05	Reduction of noise pollution	1	1	0	0			
	Pol05 Reduction of noise pollution	1	1			Compliance by default is there are no noise-sensitive areas within the assessed building or within 800 m radius of the assessed site. OR Where there are noise-sensitive areas within the assessed building or noise-sensitive areas within 800 m radius of the assessed site, a noise impact assessment compliant with BS 4142-2014 is commissioned.	Acoustician	Stage 3-4
INNOVATION		10	1	0	0			
Man 03	Responsible construction practices		1	0	0			
	Man03EXE Exemplary level	1	1			Achieve all items on Responsible Construction Management table.		
Hea 01	Visual comfort		0	0	0			
	Hea01EXE1 Exemplary level	1	0			Relevant building areas meet exemplary daylight factors.		
	Hea01EXE2 Exemplary level	0	0					
Hea 02	Indoor air quality		0	0	0			
	Hea02EXE Exemplary level	0	0			Three products meet exemplary level emission criteria, e.g.. Paints, floor, glues		
Hea 06	Security		0	0	0			
	Hea06EXE Exemplary level	1	0			A compliant risk based security rating scheme (SABRE) has been used. The performance against the scheme has been confirmed by independent assessment and verification.		
Ene 01	Reduction of energy use and carbon emissions		0	0	0			
	Ene01EXE1 Exemplary level	3	0			The building achieves an EPR NC ≥ 0.9 and zero net regulated CO ₂ -eq emissions. Energy generation from on-site and near-site L2C sources is sufficient to offset carbon emissions from regulated energy use plus a percentage of emissions from unregulated energy use.		
						Beyond net zero regulated carbon - offset % of unregulated energy use: 1 credit: 10% of emissions from unregulated energy uses are offset 2 credits: 50% of emissions from unregulated energy uses are offset 3 credits: >100% of emissions from unregulated energy uses are offset		
						The building is deemed carbon negative where > 100% of carbon emissions from unregulated (and regulated) energy use are offset by energy generated from on-site and near-site L2C sources (see Definitions).		
Wat 01	Water consumption	2	0			Post-occupancy stage - commit to POE for actual energy consumption.		
	Wat01EXE Exemplary level	1	0			65% reduction in water use over baseline building water consumption		
Mat 01	Environmental impacts from construction products		0	0	0			
	Mat01EXE1 Exemplary level (Core building services)	1	0			Building LCA appraisal of at least 3 different core building services options.		
	Mat01EXE2 Exemplary level (LCA/LCC alignment)	1	0			Align LCA options appraisal in Elemental and Component Level LCC reports.		
	Mat01EXE3 Exemplary level (Third party verification)	1	0			External verification of LCAs - to be provided by OneClick LCA.		
Mat 03	Responsible sourcing of materials		0	0	0			
	Mat03EXE Measuring responsible sourcing	1	0			Inclusion of core building services in addition to 3 credit requirements.		
Wst 01	Construction waste management		0	0	0			
	Wst01EXE Exemplary level	1	0			No more than 1.9 tonnes of construction waste generated per 100m ² of GIA and the principal contractor must divert the following percentages of waste from landfill: - 90% non-demolition - 95% demolition - 95% excavation		
Wst 02	Use of recycled and sustainably sourced aggregates		0	0	0			
	Wst02EXE Exemplary level	1	0			>6 Sustainable Aggregate points achieved.		
Wst 05	Adaptation to climate change		0	0	0			
	Wst05EXE Exemplary level (responding to climate change)	1	0			Meet WST05 credit requirements as well as HEA04, ENE01, ENE04, WAT01, MAT05 and POLO3 minimum requirements.		
LE02	Identifying and understanding the risks and opportunities for the project		0	0	0			
	LE02EXE Exemplary level	1	0			When determining the optimal ecological outcome for the site consider the wider sustainability-related activities and the potential for ecosystem service related benefits.		
						Also achieve the following credits: Hea07: Safe and healthy surroundings (2 credits) Pol03: Surface water run-off and minimising watercourse pollution credits Pol05: Reduction of noise pollution		

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