
Sustainable Design and Construction Statement including BREEAM Pre Assessment Report

as required by the Reading Supplementary Planning Document



Site: 7 Blagrove Road, Reading

Client: Murli Bhatti



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Sustainable Design and Construction Statement Rev0

7 Blagrove Road, Reading

Prepared by	Checked by	Date	Version
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1 Introduction

This Sustainable Design and Construction Statement (SDCS) has been prepared in support of the planning application for the proposed redevelopment of 7 Blagrove Street, Reading, RG1 1PJ.

2 Planning Policies

National Planning Policy

All planning applications across the area are to take into account the National Planning Policy requirements of the following:

National policy is giving increasing emphasis and weight to addressing sustainability, carbon reductions, climate change and waste reduction. As stated in paragraph 1.16 of this document, planning considerations in this area are mainly set out in;

- Planning Policy Statement 1: Delivering Sustainable Development (PPS1);
- Planning Policy Statement: Planning and Climate Change – Supplement to Planning Policy Statement 1;
- Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS10); and
- Planning Policy Statement 22: Renewable Energy (PPS22).



Reading Council - Regional Policy

Policy CS1: Sustainable Construction and Design submission requirement for a Non Domestic Building minor building would be a BREEAM Assessment and Certification.

Policy CS1: Sustainable Construction and Design

Proposals for new development, including the construction of new buildings and the redevelopment and refurbishment of existing building stock, will be acceptable where the design of buildings and site layouts use energy, water, minerals, materials and other natural resources appropriately, efficiently and with care and take account of the effects of climate change.

To meet these requirements:

- All new housing is required to meet the most up to date Eco-Homes 'Very Good' as a minimum standard, and all new commercial developments are required to meet the most up to date BREEAM 'Very Good' as a minimum standard;

Below is the summary of the submission requirements at each stage of the development. A BREEAM assessment is highlighted as a requirement with a final certificate to approve the post construction stage.

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Pre-application stage

- Pre-assessment estimator incorporating a 3% buffer⁴ or for minor development, provision of other appropriate information to provide confidence to the LPA* that policy CS1 requirements can be achieved;
- Draft Sustainability statement⁵ for all major development;
- Draft Energy Statement for all major development.

Submission with a formal planning application

- A Pre-assessment estimator incorporating a 3% buffer or for minor development, provision of other appropriate information to provide confidence to the LPA that policy CS1 requirements can be achieved;
- Sustainability Statement for all major development;
- Energy Statement⁶ for all major development.

Post-approval stage

- Condition to ensure sustainability requirements as set out in policy CS1 are met. Typically this would be through a condition requiring an Interim Code/ BREEAM Certificate as appropriate to be submitted prior to commencement of development and a Final Code/ BREEAM Certificate, again as appropriate, to be submitted prior to occupation of the development.

The BREEAM level stated is for a BREEAM 'Very Good' rating

Non-residential development	Minor	BREEAM level 'Very Good'.
	Larger developments of more than 1,000sqm non-residential floorspace	Minimum 50% BREEAM level 'Excellent' and remainder BREEAM level 'Very Good'.



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The aim of this SDCS is to demonstrate how the proposed building could meet the standards set out in Policy CS1 Sustainable Construction and Design. Through consideration of sustainability at the early stages of the project (Riba Stages 2 and 3), this affords the opportunity for sustainable design features to be feasibly infused within the development.

3 Existing and Proposed Development

The site is located off Blagrove Street which leads from Friar Street and Valpy Street.

The site is currently a commercial ground floor A3 cafe and top floor is a C1 bed and breakfast.

Proposals are for the redevelopment of the commercial premises is to expand the C2 use on the new upper floors to create additional Bed and Breakfast accommodation and also the expansion of the A3 ancillary facilities in the basement area.

The site is located within an area which is comprised of retail units and some having residential flats above the units.

Given the scale and nature of the development, this constrains the development proposals in terms of the layout, positioning and orientation of the proposed dwelling. Subsequently, these constraints will impact on the feasibility of certain sustainability and energy efficient measures that can feasibly be incorporated into the development (as discussed in Section 4 of this report).

4 Sustainability Statement

The following is based on the policies and best practise standards as required under Policy CS1: Sustainable Construction and Design and will also take in account the BREEAM issues where relevant in aiding to achieve a 'Very Good' rating.

Management Aim: To recognise and encourage environmentally and socially considerate development.	
1. Will guidance for the non technical building user be provided so they can understand and operate the building efficiently and understand how the design reduces the overall environmental impact of the building and raise environmental awareness?	A Building User Guide is to be developed prior to handover of the building and is to include information on the design, aftercare contact, demonstration of installed systems and controls, any key features such as PV, maintenance contracts.
2. What consideration has been given to resource use, energy consumption and pollution in terms of the construction site impacts?	The contractor to be used for this development will need to monitor, record construction site impacts (energy, water and transport), having policies in place for reducing air and surface water pollution. These impacts can be monitored via the BRE smart waste tool. Targets should be set for reducing construction site impacts, more details on the targets can be found on the smart waste website. To recognise and encourage construction-sites which are managed in an environmentally and socially considerate, responsible and accountable manner. The main contractor will be required to register with the considerate constructors scheme to achieve a minimum score of 25

3. Will site investigation and appropriate remedial action be undertaken? 4. Will the community and stakeholders be involved in the design process encouraging flexibly designed buildings which cater for shared use with the local community? 5. How has the building been designed to reduce the opportunity for and the fear of crime?	points. For the proposed development, the contractor will comply with 'The Control of Dust and Emissions during Construction Demolition SPG'. Control measures will need to be implemented by the contractor on site to prevent air and dust pollution. An example of this could be using dust sheets on materials and skips, damping down in waste areas. A site investigation will need to be carried out at Riba stage 2 to provide useful background information on the site and highlight any issues of land and water contamination. Stakeholders will be consulted on the development at Riba Stage 2, here their roles and responsibilities will be determined. Due to the size and nature of the building, shared use will not be viable. The stakeholder meetings will consider, end user requirements, design strategy, construction requirements, budget and if any consultants will be required. Ideally, third party consultation will be carried out to inform local community of the proposals. A security liaison officer qualified to undertake secure by design assessments will be consulted at Riba Stage 2 to provide recommendations on the development, these will need to be incorporated in the design. The Secure by design officer will need to
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	provide a secure by design certificate at the end of construction. By going through this process, should reduce the opportunity and fear of crime.
Health and Well-being Aim: To ensure a good quality amenity level is afforded to occupants of buildings.	
7. How has the development been designed to ensure users have sufficient daylight, an external view, adequate and appropriate lighting, ventilation, air quality and drinking water?	The building location restricts the available daylight and view out due to be surrounding by adjacent commercial shops with flats above. To increase the amount of daylight, windows will have to be greater size to allow more light in, however due to being a guest house, the size and location of the windows need to account for privacy which is also important. Only the office area will need adequate daylight for occupants who maybe working and need more light. A mains fed water cooler will be installed to provide fresh drinking water to the building occupants.

Energy

Aim: To conserve energy and maximise the use of energy efficiency techniques.

8. How has the building been designed to minimise CO2 emissions associated with their operational energy consumption?

The Energy Demand will be reduced through improved fabric insulation with lower u-values for the external envelope and windows, air tightness levels will be designed to be lower than average and therefore a mechanical ventilation system with heat recovery should be installed to reduced the risk of condensation. Having improved insulation will mean the annual primary energy demand will be lower reduced. Potentially a low or zero carbon technology could be installed to further reduce CO2 emissions. Lighting will have to be designed to the following standards. First to be energy efficient going beyond Part L of the building regulations, with the aim to achieve no less than 60 lumens per circuit watt.

9. How has the development been designed to optimise the use of the energy from the sun, natural daylighting and controlled natural ventilation?

Passive design measures help to maximise the use of natural sources of heating, cooling and ventilation.

To incorporate passive design measures the building will be design to have the following features to aid in reducing energy demand:

- Cross ventilation
- Solar gains in winter
- Cooling in summer

10. How will the design of the building make efficient use of energy? (e.g. use of thermally massive materials, levels of insulation and use of green / brown roofs etc). 11. Have renewable energy sources or decentralised energy been considered for this development and if so, how would they be incorporated within the development?	- Air tight building These will be accomplished through: - Improved fabric u-values to meet or exceed Part L 2012 fabric efficiency - Air test design air permeability of between 3-4 m3/hm2 (@50Pa) - Cross ventilation to reduce cooling in the summer The building will use the Energy Hierarchy to 'Be lean: use less energy; Be clean: supply energy efficiently and Be green: use renewable energy'. A fabric first approach using higher insulation levels with low u-values, and high air tightness. These will take the steps of minimising energy demand through fabric energy efficiency, using controls efficiently such as optimise start stop control, temperature control, weather compensator. Given the scale and nature of the site (in particular the adjacent buildings situated in the terrace of commercial buildings), this constrains the development proposals in terms of the layout, positioning and orientation of the proposed development. Subsequently, these constraints will impact on the feasibility of certain renewable technologies. There is the potential for renewable technologies (photovoltaic panels) to be incorporated into the design of the units (or development as a whole). There are a number of existing decentralised energy networks in , with future networks being proposed.
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	The development should be designed to be potentially connected to a local district heating system or CHP in the future.
Transport Aim: To reduce the need to travel through appropriately located development.	
12. How has the design and layout incorporated measures to reduce the need to travel, especially by car, and promote alternative and sustainable modes of transport such as walking, cycling and the use of public transport?	The location of the development lends itself to excellent public transport links. There are two train stations in the vicinity of approximately 300m from the development, and bus links in the area with a bus stop on Blagrove St and a bus station approximately 125m. There are a number of council provided cycle stands located at the northern end of Blagrove street which are used by the public.
13. How have public transport networks been considered in terms of the location of the development and proximity to local amenities?	The site is a redevelopment and therefore location is fixed.
14. How have deliveries and the manoeuvring of delivery vehicles been considered?	The site is a redevelopment and therefore location is fixed.
Water Aim: To improve efficiency in the use of water, conserve water resources and minimise vulnerability to flooding.	

15. How will the development incorporate the use of water saving devices to achieve a maximum consumption of 5.5 cubic metres per year per person for office developments? (Or the most appropriate benchmark for other types of development).

Water efficient fixtures, fittings and appliances will be provided to ensure that internal water use targets are achieved better than building regulations (noting that Building Regulations Approved Document G requires internal water use to be at 125litres/person/day or less).

A water meter could be provided. During detailed design, consideration will be should be given to the provision of digital meters with connectivity to a central building management / billing system, rather than standard analogue meters.

16. Will the development and access to and from it such as roads and paths be located away from areas of potential flooding?

The development is located in flood risk zone one.

17. How will the development incorporate harvesting and re-use of rainwater?

A preliminary feasibility study of the potential to include rainwater harvesting should be carried out; to determine the nature of the development, and whether it is considered feasible to install a rainwater harvesting system. A 'Green Roof' could potentially be installed and this should be looked into

Materials

Aim: To retain local character and promote the use of materials with a low environmental impact.

18. How will the selected materials help retain local character, ensure long life and ensure a low environmental impact?	The materials used will need to keep in line with the existing character. Therefore the materials used for the external envelope will try and reflect this. The existing building and adjacent buildings has a combination of red and grey brick with a white render. The design will incorporate materials to reflect this in conjunction with using architectural moulding. Using a mixture of brick and render material will ensure a robust long lasting building. The elements for the walls, floor, roof, windows and upper floor will be upgraded to a Green Guide rating of A+ to D as confirmed by the BRE Green Guide to Specification. Where timber is installed it will be 100% legally sourced and FSC certified. It is intended that insulation materials will have an Ozone Depletion Potential (ODP) of zero, and a Global Warming Potential (GWP) of less than five. Where specified by the developer (e.g. low VOC paint), finishes and other materials will not contain or emit toxic substances.
19. What consideration has been given to reusing materials in-situ, responsibly sourcing materials and re-using existing structures?	Where possible the existing building materials will be retained. The front elevation masonry elements will be retained on the ground floor and the first floor bay window is to be retained and the damaged areas are to be repaired/replaced. The decorative arch and the pediment will be replicated at the fourth floor level of the proposed building. Behind the re-built pediment will be a small balcony area for each of the front top floor units which are accessed through double glazed 'french' doors in the man-made

	blue/black slate mansard roof. The proposed rear elevation consists of brickwork to match the existing building with curved solid arch detail over the window openings. Both the higher and lower rear blocks have flat roofs and brickwork parapets with dark grey single ply membrane a roof covering. The windows to the proposed rear and side elevations will be white PCVu double glazed, sash style casements with matching cills.
Waste Aim: To minimise the production of waste and maximise re-use and recycling.	
20. Has an audit of the materials present on the site been conducted with an assessment of the extent to which materials could be re-used?	An audit of the materials on site will be carried out before Riba Stage 2.
21. How will the development make the maximum use of construction, demolition waste and recycled materials?	A Site Waste Management Plan (SWMP) could be prepared and incorporate non hazardous waste, demolition and excavation waste if applicable. The use of the SWMP will help educate contractors on how to reduce waste and divert waste from landfill. There will be some demolition waste on site which will be crushed, cleaned and recycled. The BRE Smartwaste tool can be used as an easy tool by contractors.

Land Use and Ecology

Aim: To retain, protect and enhance wildlife habitats and natural features.

23. How have the wildlife habitats and natural features on and adjacent to the site been considered and how will they be retained, protected and enhanced?

The current building is land of low ecological value. There is the potential to enhance the ecological value of the land by including measures such as bird boxes and a green roof.

24. What consideration has been given to not using previously undeveloped land?

The land is being built on previously developed land

25. What consideration has been given to the removal of contamination from the land?

There is no land contamination. The proposed development is not proposing to include uses that would lead to land contamination.

Pollution

Aim: To minimise damage to the environment through air, ground/surface water, land, noise or light pollution.

26. What measures have been incorporated to ensure that noise and light pollution plus pollution transported through surface water runoff will be minimised throughout the development?

Through redevelopment of the site there will be no increase in hard standing areas and no increase in the peak rates and volumes of surface water runoff

The proposed site is located within an existing residential area, with commercial and retail units in the vicinity. There are no known areas identified as having positive sound features or as being tranquil.

The Site is located in an area with a low level of background noise.

For the occupiers of the dwelling/s, the specification of the partition walls, floors and external walls will be designed to go beyond Document E of

the building regulations, to provide comfort for the occupiers and reduce noise from the surrounding area.

Noise attenuation measures will be incorporated on-site where required, to ensure that any noise generated by equipment or services will not generate a source of noise pollution or negatively impact the surrounding area.

27. What measures have been incorporated to ensure that light pollution will be minimised throughout the development?	All external lights will be automatically controlled for the prevention of operation during daylight hours and presence detection in areas of intermitted pedestrian traffic. The ILP Guidance for the reduction of obtrusive light, 2001 will be used to design the lighting strategy. All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00. If safety or security lighting is provided and will be used between 23:00 and 07:00, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 2 of the ILP's Guidance notes. Illuminated advertisements, where specified, must be designed in compliance with ILE Technical Report 5 – The Brightness of Illuminated Advertisements
28. What consideration has been given to reducing refrigerants and minimising nitrogen oxide emissions?	If the building has refrigerants it will reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems by having systems which have a Direct Effect Life Cycle CO₂ equivalent emissions (DELC CO₂e) of ≤ 100 kgCO₂e/kW cooling/heating capacity or the where air-conditioning or refrigeration systems are installed the refrigerants used have a Global Warming Potential (GWP) ≤ 10. The building will use a heating system which will have low NO_x emissions therefore adding less NO_x to green house gas emissions Where refrigeration systems containing ammonia are installed, the Institute of Refrigeration Ammonia Refrigeration Systems Code of Practice.
29. How has the development been sited to minimise the impact of flooding.	The development is in a flood risk zone 1.



30. How has the design considered the use of sustainable drainage systems (SUDS) and how will they be incorporated within the development?	It is not feasible to incorporate SUDs in this development due to the location and restricted size.
Innovation Aim: To recognise innovation in the field of sustainability.	
31. What consideration has been given to innovative sustainability measures in terms of a procurement strategy, design feature, management process or technological development?	Due to the building being a redevelopment it is restricted in its sustainability measures. The most feasible options to go beyond building regulations are for energy and water efficiency. The building will be highly insulated with high efficiency heating system and controls. The water fittings installed will have higher efficiency, with low flow rates. Management will play a key role in the building performance, with roles and responsibilities being assigned early on and construction site impacts being monitored.

5 Conclusion

The site is currently a commercial ground floor A3 cafe and top floor is a C2 bed and breakfast. There are proposals for the re-development of the existing cafe and guest house at 7 Blagrove Street into a redevelopment of the commercial premises is to expand the C2 use on the new upper floors to create additional Bed and Breakfast accommodation and also the expansion of the A3 ancillary facilities in the basement area. The site is located within an area which is comprised of retail units and some having residential flats above the units.

All planning applications across the area are to take into account the requirements of Policy CS1: Sustainable Construction and Design. In addition, the submission requires a BREEAM Pre Assessment report to be accompanied by a Sustainable Design and Construction Statement in line with Appendix 5. The above Sustainability Statement is based on Appendix 5 of the SCDS.

Given the scale and nature of the development, this constrains the development proposals in terms of the layout, positioning and orientation of the proposed dwelling. Subsequently, these constraints will impact on the feasibility of certain sustainability and energy efficient measures that can feasibly be incorporated into the development (as discussed in Section 4 of this report).

The above sustainability statement sets out what the requirements are of the planning policies and what can be achieved for the proposed development.

The main features of the site to meet the building environmental standards are:

- The energy efficiency measures of the building is to comply with Part L2a 2013, with some areas going beyond the requirements. The fabric elements of the building are to be designed to be highly insulated, with low u-values, good air tightness, high heating efficiency and to incorporate heat recovery systems, such as the shower heat recovery for waste water, and mechanical ventilation with heat recovery.
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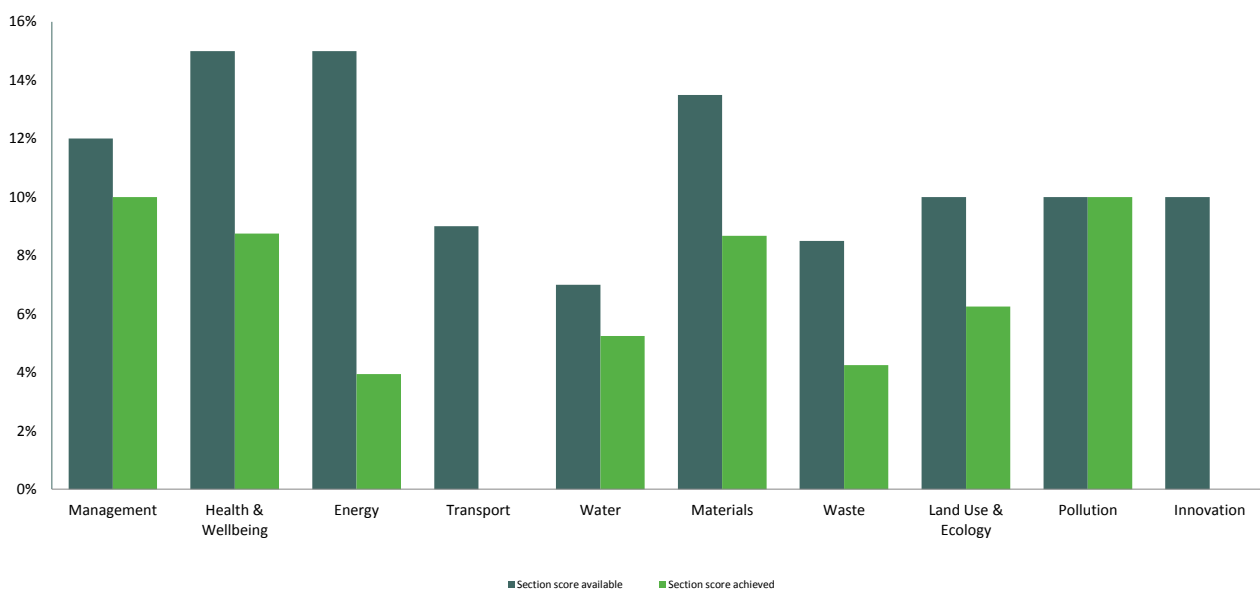
- Water efficiency is a big driver of sustainability and indoor fittings which will have water efficiency will be installed. These will help to go beyond Part G minimum standard of 125L/person/day.
- Materials to be used in the proposed development are to consist of having a high Green Guide rating, using the BRE Green Guide for reference. All timber used on site is to be sustainably sourced. Where possible recycled aggregates will be used.
- The contractor to be used for this development will need to monitor, record construction site impacts (energy, water and transport), having policies in place for reducing air and surface water pollution and be registered with the Considerate Constructors Scheme.
- The contractor will need to have a site waste management plan in place from the beginning of construction and use this throughout the construction period. Any demolition waste will be recycled.
- The location lends itself to excellent transport links.

BREEAM 2014 New Construction - Simple buildings Assessment Report: Rating & Key Performance Indicators

Overall Building Performance

Building name	Blagrove Street
BREEAM rating	Very Good
Total Score	57.13%
Min. standards level achieved	Very Good level

Building Performance by Environment Section



Environmental Section	No. credits available	No. credits Achieved	% credits achieved	Section Weighting	Section Score
Management	12	10	83.33%	12.0%	10.00%
Health & Wellbeing	12	7	58.33%	15.0%	8.75%
Energy	19	5	26.32%	15.0%	3.95%
Transport	See note	5	0.00%	9.0%	0.00%
Water	8	6	75.00%	7.0%	5.25%
Materials	14	9	64.29%	13.5%	8.68%
Waste	8	4	50.00%	8.5%	4.25%
Land Use & Ecology	8	5	62.50%	10.0%	6.25%
Pollution	9	9	100.00%	10.0%	10.00%
Innovation	10	0	0.00%	N/A	0

Building Performance by Key Environmental Performance Indicator

Energy (consumption/production)	Life cycle stage	Measurement	Intensity	Units	Total	Units
Building operation ^[1]	Use	Modelled	INA	kWh/m ² /yr	INA	kWh/yr
Energy production ^[2]	Use	Modelled	INA	kWh/m ² /yr	INA	kWh/yr
Construction process ^[3]	INA	INA	INA	INA	INA	INA
Transport ^[4]	INA	INA	INA	INA	INA	INA

Greenhouse Gas Emissions

Building operation ^[1]	Use	Modelled	INA	kgCO ₂ eq/m ² /yr	INA	kgCO ₂ eq/yr
Embodied ^[5]	Cradle-to-grave	Measured	INA	kgCO ₂ eq/m ²	INA	kgCO ₂ eq
Proportion of applicable main building elements that data reported covers						INA
Construction process ^[3]	INA	INA	INA	INA	INA	INA
Transport ^[4]	INA	INA	INA	INA	INA	INA

Emissions to outdoor air, soil and water

Nitrogen Oxides (NO _x) ^[7]	Use	Measured	40.00	mg/kWh	0.00	kg/yr
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Use of freshwater resource

Building operation ^[8]	INA	INA	INA	INA	INA	INA
Construction process ^[9]	INA	INA	INA	INA	INA	INA

Construction waste and recovery

Construction waste ^[10]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Construction waste diverted from landfill ^[10]	Construction	Target	INA	%	INA	tonnes
Demolition waste diverted from landfill ^[11]	Construction	Target	INA	%	INA	INA
Demolition waste to disposal ^[11]	Construction	Target	INA	%	INA	INA
Material for re-use ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Material for recycling ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Material for energy recovery ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Hazardous waste to disposal ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes

Sourcing of materials

Materials responsibly sourced ^[13]	Construction	Measured	0.00%	%	-	-
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Thermal comfort

Predicted Mean Vote (PMV)	Use	Modelled	INA	Index	-	-
Predicted Percentage Dissatisfied (PPD)	Use	Modelled	INA	%	-	-

Indoor Air Quality

Formaldehyde concentration level ^[14]	INA	INA	INA	INA	INA	INA
Total volatile organic compound concentration ^[14]	INA	INA	INA	INA	INA	INA

Notes

- Modelled using approved software compliant with the UK's National Calculation Method which in turn is compliant with Article 3 of The Energy Performance of Buildings Directive (EPBD) 2002/91/EC. Modelling includes building energy consumption resulting from the specification of a 'controlled', 'fixed building service' (as defined in the relevant Approved Document or Guidance produced for each UK territory).
- The reported impact includes technologies that produce energy (on-site and/or near-site) as defined by Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.
- The reported impact includes energy consumption from construction plant, equipment and site accommodation. This KPI is not assessed/reported at the design stage of assessment/certification.
- The reported impact covers transport of the construction materials that make-up the main building elements and ground works and landscaping materials (from the factory gate to the site) and construction waste (from the construction gate to waste disposal processing / recovery centre gate). Main building elements are defined in the BREEAM UK New Construction 2014 Technical Guide (SD5076). This KPI is not assessed/reported at the design stage of assessment/certification.
- The reported impact covers the construction materials that make-up the main building elements (over a 60 year study period). Main building elements are defined in the BREEAM UK New Construction 2014 Technical Guide (SD5076). The data is quantified using BRE's Environmental Profiles Methodology. The Environmental Profiles Methodology has been peer reviewed to comply with BS ISO 14040 and represents the Product Category Rules for BRE Global's environmental labelling scheme (EPD - ISO 14025, Type III) for construction products and elements.
- The reported impact is for a 10 year study period. The calculation of the Direct Effect Life Cycle CO₂eq emissions used by BREEAM is based on the Total Equivalent Warming Impact (TEWI) calculation method for new stationary refrigeration and air conditioning systems, as described in Annex B of BS EN 378-1:2008.
- The reported impact covers emissions from either one or a combination of space heating, cooling and hot water heating (refer to Pol02 Assessment Issue for scope of emissions)
- The reported impact includes net water consumption from the micro-components utilised by building occupants for sanitary purposes. The impact accounts for water recycling/rainwater collection, where used for permissible non-potable water demands (For further detail refer to BREEAM UK New Construction 2014 Technical Guide (SD5076)).
- The reported impact is net water consumption i.e. accounts for any water recycling/rainwater collection used to off-set a potable site demand. This KPI is not assessed/reported at the design stage of assessment/certification.
- The reported impact covers non-hazardous waste from new construction materials, it therefore excludes hazardous and demolition and excavation waste. Where assessed and reported at the design stage of assessment this KPI is based on a target as reported in a compliant Site Waste Management Plan.
- The reported impact covers non-hazardous waste from site demolition. Where assessed and reported at the design stage at the design stage of assessment this KPI is based on the target demolition waste diverted from landfill, as reported in a compliant Site Waste Management Plan. If no demolition taking place on site this KPI is not applicable.
- Where assessed and reported at the design stage of assessment this KPI is based on a target as reported in a compliant Site Waste Management Plan.
- The reported impact covers the proportion of the key building elements present and assessed by BREEAM that are responsibly sourced. Responsibly sourced and key building elements are defined in the BREEAM UK New Construction 2014 Technical Guide (SD5076).
- The total volatile organic compound (TVOC) concentration is measured post construction (but pre-occupancy) over 8 hours. Formaldehyde concentration level is measured post construction (but pre-occupancy) averaged over 30 minutes. Both KPI's are measured in accordance with European and/or ISO standards (refer to the BREEAM New Construction Technical Manual for relevant standard numbers. At the design stage of assessment no data is available for this KPI as they are both measured once the building has been constructed (but pre-occupancy) for the purpose of post construction assessment.

"INA" = Indicator Not Assessed. This will be the case where either the data required for the KPI is not gathered/measured by the building's project team or not assessed/quantified in BREEAM for a particular building type or assessment stage e.g. energy consumption for construction process at the design stage of assessment.

"-" = KPI not applicable to building being assessed.

Building name	Blagrove Street
Building score (%)	57.13%
Building rating	Very Good
Minimum standards level achieved	Very Good level

MANAGEMENT**Man 01 Project brief and design**

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	2	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will stakeholder consultation (project delivery) take place?	Yes	1	1
Will stakeholder consultation (third party) take place?	Yes	1	1
Will a sustainability champion (design) be assigned?	No	1	0
Will a sustainability champion (monitoring progress) be assigned?	No	1	0
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.00%		
Total BREEAM innovation credits achieved	0		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Man 02 Life cycle cost and service life planning

No. of BREEAM credits available	1	Available contribution to overall score	1.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will the predicted capital cost be reported?	Yes	1	1
Expected capital cost of the project (if available)		£/m ²	
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.00%		
Total BREEAM innovation credits achieved	0		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Man 03 Responsible construction practices

No. of BREEAM credits available	4	Available contribution to overall score	4.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will all site timber and timber based products be 'legally harvested and traded timber'?	Yes		
Will/does the principal contractor operate a compliant Environmental Management System?	No	1	0
Will a considerate construction scheme be used by the principal contractor? (One credit where 'compliance' has been achieved. Two credits where 'compliance' is significantly exceeded.)	1	2	1
Will site utility consumption be metered/monitored?	Yes	1	1
Will exemplary level performance be met?	No	1	0

Total BREEAM credits achieved	2
Total contribution to overall building score	2.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Excellent level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Man 04 Commissioning and handover

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will commissioning schedule and responsibilities be developed & accounted for?	Yes	1	1
Will a building user guide be developed prior to handover?	Yes	1	1
Will a training schedule for building occupiers/managers at Handover?	Yes		
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.00%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	Outstanding level		

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Man 05 Aftercare

No. of BREEAM credits available	3	Available contribution to overall score	3.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will aftercare support be provided to building occupiers?	Yes	1	1
Will seasonal commissioning occur over 12 months once substantially occupied?	Yes	1	1
Will a post occupancy evaluation be carried out 1 year after occupation?	Yes	1	1
Will exemplary level criteria be met?	No	1	0

Total BREEAM credits achieved	3
Total contribution to overall building score	3.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

HEALTH & WELLBEING

Hea 01 Visual comfort

No. of BREEAM credits available	4	Available contribution to overall score	5.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will the design provide adequate glare control for building users?	Yes	1	1
How many credits will be targeted for daylight factor(s)?	0	1	0
Will the design provide adequate view out for building users?	No	1	0
Will internal/external lighting levels, zoning and controls be specified in accordance with the relevant	Yes	1	1
Will exemplary level criteria be met?	No	1	0

Total BREEAM credits achieved	2
Total contribution to overall building score	2.50%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Hea 02 Indoor air quality

No. of BREEAM credits available	3	Available contribution to overall score	3.75%
No. of BREEAM innovation credits available	2	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will building be designed to minimise the concentration and recirculation of pollutants in the building?			
Will the relevant products be specified to meet the VOC testing and emission levels required?		1	0
Will the building be designed to, or have the potential to provide, natural ventilation?	Yes	1	1
Will exemplary level criteria be met?	0	2	0

Total BREEAM credits achieved	1
Total contribution to overall building score	1.25%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Assumed the building will be naturally ventilated

Hea 04 Thermal comfort

No. of BREEAM credits available	3	Available contribution to overall score	3.75%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will thermal modelling of the design be carried out?	Yes	1	1
Will the building design be adapted for a projected climate change scenario?	Yes	1	1
Will the modelling inform the development of a thermal zoning and control strategy?	Yes	1	1

Total BREEAM credits achieved	3
Total contribution to overall building score	3.75%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Thermal model assessment to be carried out

Hea 06 Safety and security

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Where external site areas are present, will safe access be designed for pedestrians and cyclists?	No	1	0
Will a suitably qualified security consultant be appointed and security considerations accounted for?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.25%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Credit assumed for security consultant and to be confirmed at design stage.

ENERGY

Ene 01 Reduction of energy use and carbon emissions

No. of BREEAM credits available	12	Available contribution to overall score	9.47%
No. of BREEAM innovation credits available	5	Minimum standards applicable	Yes

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits achieved		
Select the target number of BREEAM credits for the Ene01 issue:	2	BREEAM Ene01 Innovation credits:	

Ene 01 Calculator

Country of the UK where the building is located		Confirm building regulation and version used:	
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Building floor area		m2
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Notional building heating and cooling energy demand		MJ/m2yr
Actual building heating and cooling energy demand		MJ/m2yr
Notional building primary energy consumption		kWh/m2yr
Actual building primary energy consumption		kWh/m2yr
Target Emission Rate (TER)		kgCO2/m2yr
Building Emission Rate (BER)		kgCO2/m2yr
Building Emission Rate improvement over TER		
Heating & cooling demand Energy Performance Ratio (EPR _{ED})		
Primary consumption Energy Performance Ratio (EPR _{PC})		
CO ₂ Energy Performance Ratio (EPR)		
CO2 Energy Performance Ratio (EPR _{CO2})		

Where specified, please confirm the energy production from onsite or near site energy generation technologies	
Equivalent % of the building's 'regulated' energy consumption generated by carbon neutral sources and used to meet energy demand from 'unregulated' building systems or processes?	
Is the building designed to be 'carbon negative' ?	
If the building is defined as 'carbon negative' what is the total (modelled) renewable/carbon neutral energy generated and exported	

Total BREEAM credits achieved	2
Total contribution to overall building score	1.58%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Very Good level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage by carrying out an SBEM calculation.

Ene 02 Energy monitoring

No. of BREEAM credits available	1	Available contribution to overall score	0.79%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will a BMS or sub-meters be specified to monitor energy use from major building services systems?	Yes	1	1
Will a BMS or sub-meters be specified to monitor energy use by tenant/building function areas?		N/A	N/A

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Ene 03 External lighting

No. of BREEAM credits available	1	Available contribution to overall score	0.79%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will external light fittings and controls be specified in accordance with the BREEAM criteria?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.79%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Ene 04 Low carbon design

No. of BREEAM credits available	3	Available contribution to overall score	2.37%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will passive design measures be used in line with an analysis be carried out during concept design stage (RIBA stage 2 or equivalent)?	No	1	0
Will free cooling measures be implemented in the whole building in line with the passive design analysis?	No	1	0
Will a LZC technology be specified in line with a feasibility study carried out by the completion of the Concept Design stage (RIBA Stage 2 or equivalent)?	No	1	0

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Ene 06 Energy efficient transportation systems

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Will a transportation system analysis be carried out to determine and specify the optimum number, size and type of lifts that is most energy efficient?			
Will the relevant energy-efficient features criteria be met?			

Total BREEAM credits achieved	N/A
Total contribution to overall building score	N/A
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Ene 08 Energy efficient equipment

No. of BREEAM credits available	2	Available contribution to overall score	1.58%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Which of the following will be present and likely to be a/the major contributor to 'unregulated' energy use?	Present?	Major impact?
Ref A Small power and plug in equipment	Yes	Yes
Ref B Swimming pool		
Ref C Communal laundry		
Ref D Data centre		
Ref E IT-intensive operation areas		
Ref F Residential areas		
Ref G Healthcare		
Ref H Kitchen and catering facilities		

Will the significant majority contributor(s) to 'unregulated' energy use above meet the BREEAM criteria?	Compliant	Credits available	Credits achieved
	Yes	2	2
Total BREEAM credits achieved	2		
Total contribution to overall building score	1.58%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Ene 09 Drying space

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Total BREEAM credits achieved	N/A		
Total contribution to overall building score	N/A		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

TRANSPORT

Tra 01 Public transport accessibility

No. of BREEAM credits available	See instruction	Available contribution to overall score	See instruction
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for purpose of Tra01 issue assessment)	Please select
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Assessment Criteria	Compliant	Credits available	Credits achieved
Indicative public transport accessibility index (AI):	8.00	See instruction	3
Will the building have a dedicated bus service?			N/A

AI	Indicative Accessibility Index for pre-assessment
0	Poor or no public transport provision
1	A single BREEAM compliant public transport node available
2	Some BREEAM compliant public transport nodes/services available
4	A selection of BREEAM compliant public transport nodes/services available
8	Good provision of public transport i.e. small urban centre / suburban area
10	Very Good provision of public transport i.e. small/medium urban centre
12	Excellent provision of public transport, i.e. medium urban centre
18	Excellent provision of public transport, i.e. large urban/metropolitan city centre

Total BREEAM credits achieved	3
Total contribution to overall building score	See instruction
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Tra 02 Proximity to amenities

No. of BREEAM credits available	1	Available contribution to overall score	See instruction
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will the building be in close proximity of and accessible to applicable amenities?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	See instruction
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Tra 03 Cyclist facilities

No. of BREEAM credits available	2	Available contribution to overall score	See instruction
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for purpose of Tra03 issue assessment)	Other Building - transport type 1
How many compliant cycle storage spaces will be provided?	3
What cyclist facilities will be provided?	No compliant facilities

Assessment Criteria	Compliant?	Credits available	Credits achieved
Cycle storage spaces	Yes	2	1
Cyclist facilities	No		
Total BREEAM credits achieved	1		
Total contribution to overall building score	See instruction		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Assumed 3 compliant cycle spaces, but no cycle facilities

WATER

Wat 01 Water consumption

No. of BREEAM credits available	5	Available contribution to overall score	4.38%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

How do you wish to assess the number of BREEAM credits to be achieved for this issue?	Define a target % improvement over baseline sanitary fittings
What is the target for % reduction in potable water consumption for sanitary use in the building?	40% - three credits

Please select the calculation procedure used	
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Standard approach data

Water Consumption from building micro-components	
Water demand met via greywater/rainwater sources	
Total net water consumption	
Improvement on baseline performance	

Key Performance Indicator - use of freshwater resource

Total net Water Consumption	
Default building occupancy	

Alternative approach data

Overall microcomponent performance level achieved	

Total BREEAM credits achieved	3
Total contribution to overall building score	2.63%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Wat 02 Water monitoring

No. of BREEAM credits available	1	Available contribution to overall score	0.88%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will there be a water meter on the mains water supply to the building(s)?	Yes	1	1
Will metering/monitoring equipment be specified on the water supply to any relevant plant/building areas?	N/A		
Will all specified water meters have a pulsed output?	Yes		
If the site/building has an existing BMS connection, will all pulsed meters be connected to the BMS?	N/A		
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.88%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	Outstanding level		

Assessor comments/notes:

Credit assumed, to be confirmed at design stage.

Wat 03 Water leak detection and prevention

No. of BREEAM credits available	2	Available contribution to overall score	1.75%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will a mains water leak detection system be installed on the building's mains water supply?	Yes	1	1
Will flow control devices be installed in each sanitary area/facility?	Yes	1	1
Total BREEAM credits achieved	2		
Total contribution to overall building score	1.75%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

MATERIALS**Mat 01 Life cycle impacts**

No. of BREEAM credits available	6	Available contribution to overall score	5.79%
No. of BREEAM innovation credits available	3	Minimum standards applicable	No

How do you wish to assess the number of BREEAM credits to be achieved for this issue?	Define the number of Mat 01 credits achieved
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Assessment Criteria

Predicted total Mat01 credits achieved	4
Green Guide exemplary level compliant?	
Has IMPACT compliant software been used?	
Total BREEAM credits achieved	4
Total contribution to overall building score	3.86%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Mat 02 Hard landscaping and boundary protection

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will ≥80% of all external hard landscaping and boundary protection achieve a Green Guide A or A+ rating?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.96%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Credit assumed, to be confirmed at design stage.

Mat 03 Responsible sourcing

No. of BREEAM credits available	4	Available contribution to overall score	3.86%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Assessment Criteria

Assessment Criteria	Compliant	Credits available	Credits achieved
All timber/timber based products are 'legally harvested and traded timber'	Yes		
Is there a documented sustainable procurement plan?	Yes	1	1
Percentage of available responsible sourcing points achieved	0.00%	3	0

Please confirm the route used to assess Mat03:	Please select
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Total BREEAM credits achieved	1
Total contribution to overall building score	0.96%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Credit assumed, to be confirmed at design stage.

Mat 04 insulation

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
What is the building's targeted insulating index?	2.50	1	1
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.96%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Credit assumed, to be confirmed at design stage.

Mat 05 Designing for durability and resilience

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will suitable durability/protection measures be specified and installed to vulnerable areas of the building?	Yes	1	1
Will suitable durability/protection measures be specified and installed to exposed parts of the building?	Yes		
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.96%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Mat 06 Material Efficiency

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will material efficiency measures be identified & implemented during the relevant RIBA stages?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.96%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

WASTE

Wst 01 Construction waste management

No. of BREEAM credits available	4	Available contribution to overall score	4.25%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

How do you wish to assess the number of BREEAM credits to be achieved for this issue?	Define a target number of BREEAM credits
Select the number of BREEAM credits being targeted for issue Wst 01:	2
BREEAM Wst01 Innovation credits:	

Assessment Criteria

Construction resource efficiency (criteria 9 only)	
Construction resource efficiency (criteria 10 and 11)	
Diversion from landfill (criteria 4 and 5)	
Exemplary level credit (criteria 12-14)	

Key Performance Indicators - Construction Waste

Measure/units for the data being reported	
Non-hazardous construction waste (excluding demolition/excavation)	
Total non-hazardous construction waste generated	
Non-hazardous non-demolition const. waste diverted from landfill	
Total non-hazardous non-demolition const. waste diverted from landfill	
Total non-hazardous demolition waste generated	
Non-hazardous demolition waste diverted from landfill	
Total non-hazardous demolition waste to disposal	
Material for reuse	
Material for recycling	
Material for energy recovery	
Hazardous waste to disposal	

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Total BREEAM credits achieved	2
Total contribution to overall building score	2.13%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Wst 02 Recycled aggregates

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria

Total

What is the target total % of high-grade aggregate that will be recycled/secondary aggregate?	1%
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% of high-grade aggregate that is recycled/secondary aggregate - by application

Structural frame	
Bitumen/hydraulically bound base, binder and surface courses for paved areas and roads	
Building foundations	
Concrete road surfaces	
Pipe bedding	
Granular fill and capping	

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Wst 03 Operational waste

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria

Compliant?

Credits available

Credits achieved

Will operational recyclable waste volumes be segregated and stored?	Yes	1	1
Will static waste compactor(s) or baler(s) be specified where appropriate?	Yes		
Will vessel(s) for composting suitable organic waste where appropriate?	Yes		

Total BREEAM credits achieved	1
Total contribution to overall building score	1.06%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Wst 04 Speculative floor and ceiling finishes

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Please select			

Total BREEAM credits achieved	N/A
Total contribution to overall building score	N/A
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Wst 05 Adaptation to climate change

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will a climate change adaptation strategy appraisal for structural and fabric resilience be conducted by the end of Concept Design (RIBA Stage 2 or equivalent)?	No	1	0
Will exemplary level criteria, Responding to adaptation to climate change, be met?	No	1	0

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Wst 06 Functional adaptability

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will a building specific functional adaptation strategy appraisal be conducted by Concept Design (RIBA Stage 2 or equivalent) and will functional adaptation measures be implemented?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.06%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Assumed the issue will be carried out

LAND USE & ECOLOGY

LE 01 Site selection

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will at least 75% of the proposed development's footprint be located on previously occupied land?	Yes	2	0
Is the site deemed to be significantly contaminated and will remediation be carried out in accordance with contaminated land specialist's recommendations?	No		

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

LE 02 Ecological value of site and protection of ecological features

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Can the land within the construction zone be defined as 'land of low ecological value'?	Yes	1	1
Will all features of ecological value surrounding the construction zone/site boundary be protected?	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	2.50%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

LE 03 Minimising impact on existing site ecology

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria

What is the likely change in ecological value as a result of the sites development?	≥0 species (i.e. no negative change)	Plant species rich
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Total BREEAM credits achieved	2
Total contribution to overall building score	2.50%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

LE 04 Enhancing site ecology

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will local expertise and guidance be used? (criterion 7)	No		
Suitably Qualified Ecologists appointment (SQE)	Yes	2	1
Ecologist's report and recommendations (criteria 1-3)	Yes		
Increase in ecological value (criteria 4-6)	<6 species (small positive change) Plant species rich		
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.25%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

An ecologist will be consulted before construction starts to provide recommendations

POLLUTION

Pol 02 NO_x emissions

No. of BREEAM credits available	3	Available contribution to overall score	3.33%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

NOx emission level - space heating and, if applicable, hot water	40.00	mg/kWh
NOx emission level - cooling (where applicable)	0.00	mg/kWh
Does this building meet BREEAM's definition of a highly insulated building?	N/A	
Energy consumption: heating and hot water	0.00	kWh/m ² yr

Total BREEAM credits achieved	3
Total contribution to overall building score	3.33%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

Pol 03 Surface water run-off

No. of BREEAM credits available	5	Available contribution to overall score	5.56%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
What is the actual/likely annual probability of flooding for the assessed site?	Low	2	2
Will a Flood Risk Assessment be undertaken?	Yes		
SWRO: decreased impermeable area (A) or source control (B) (criterion 23)	A	2	2
SWRO: no increase impermeable area (A) or increase in impermeable area (B) (criterion 24)			
Minimising watercourse pollution (criteria 15-22)	Yes	1	1
Exemplary level (Criteria 4 to 14)	No	1	0
Total BREEAM credits achieved		5	
Total contribution to overall building score		5.56%	
Total BREEAM innovation credits achieved		0	
Minimum standard(s) level		N/A	

Assessor comments/notes:

Pol 04 Reduction of night time light pollution

No. of BREEAM credits available	1	Available contribution to overall score	1.11%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
External lighting specification	Yes	1	1
Total BREEAM credits achieved		1	
Total contribution to overall building score		1.11%	
Total BREEAM innovation credits achieved		N/A	
Minimum standard(s) level		N/A	

Assessor comments/notes:

Credits assumed, to be confirmed at design stage.

INNOVATION

Inn 01 Innovation

No. of BREEAM innovation credits available	10	Available contribution to overall score	10.00%
		Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Man 01 Project brief and design	No	2	0
Man 03 Responsible construction practices	No	1	0
Man 05 Aftercare	No	1	0
Hea 01 Visual comfort	No	1	0
Hea 02 Indoor air quality	No	2	0
Ene 01 Reduction of energy use and carbon emissions	No	5	0
Wat 01 Water consumption	No	1	0
Mat 01 Life cycle impacts	No	1	0
Mat 03 Responsible sourcing	No	4	0
Wst 01 Construction waste management	No	1	0
Wst 02 Recycled aggregates	No	1	0
Wst 05 Adaptation to climate change	No	1	0
Pol 03 Surface water run-off	No	1	0

Number of 'approved' innovation credits achieved?	
Total BREEAM innovation credits achieved	0
Total contribution to overall building score	0.00%
Minimum standard(s) level	N/A

Assessor comments/notes:



Sustainability Consultancy

Energy Statements

SAP and SBEM Calculations; EPCs; BREEAM Code for Sustainable Homes;

Flood Risk Assessments; Surface Water Reports; Daylight Calculation; Sustainability Reports; Water Calculation

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