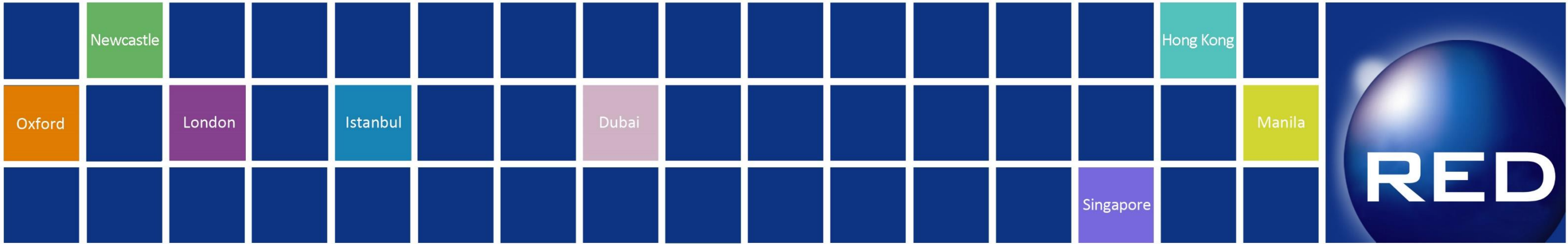



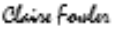
HOLIDAY INN EXPRESS
BICESTER GATEWAY
BREEAM Pre-Assessment




A company of **TRACTEBEL**
ENGIE

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Date 06 December 2017
File Ref R:\R3050 - BREEAM\R3050-25 - Holiday Inn Express\3 Assessments\Pre-assessments
Revision A

REVISION

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EXECUTIVE SUMMARY

Cherwell District Council has stipulated that the Holiday Inn Express, Bicester Gateway must achieve a BREEAM rating of ‘Very Good’.

The building will need to achieve a minimum total score of 55% as well as the minimum standards for the specific rating. This document outlines the strategy for achieving BREEAM Very Good at the certification stage, in order to fulfil this planning requirement.

In order to achieve the BREEAM Very Good rating at the certification stage, it is essential that all parties understand their respective roles in the process. Final certification is based on a quality assurance audit of the documentary evidence which is provided by the Project Team. It is important to note that any changes to the strategy or non-compliant evidence could result in a lower BREEAM rating.

The Pre-Assessment strategy includes the targeted credits under each of the BREEAM issues listed below. The client will need to commission the specialist studies, at the appropriate stages, in order to achieve the BREEAM Very Good rating:

- Hea 4 – Thermal Comfort: An *Accredited Energy Assessor* will produce a compliant report
- Hea 5 – Acoustic Performance: A *Suitably Qualified Acoustician (SQA)* will need to produce a report about the internal acoustics
- Ene 1 – Reduction of Energy Use and Carbon Emissions: The *Accredited Energy Assessor* will produce the Design Stage BRUKL Output document by end of Detailed Design
- Ene 4 – Low Carbon Design: The Energy Specialist will need to produce a Low/Zero Carbon Technology feasibility study
- Ene 6 – Energy efficient transportation systems: An analysis of the transportation demand and usage patterns will need to be produced.

- Land Use and Ecology category: the client will need to instruct the *Suitably Qualified Ecologist*, WYG, to update their report to include BREEAM requirements before the end of RIBA Stage 2.
- Pol 5 – Reduction of Noise Pollution: The SQA will need to provide a report.

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1. INTRODUCTION

This report is intended as a summary of the BREEAM pre-assessment review for the proposed Holiday Inn Express in Bicester. The scheme will be assessed using the BREEAM New Construction 2014 scheme. This development is targeting a Very Good certification, which requires a minimum score of 55%.

It should be noted that the pre-assessment scores have been based on assumptions and discussions with the Design Team during the planning stage. These credits will only be awarded once the assessment and the relevant documentary evidence have been audited by the Building Research Establishment (BRE) during the certification phase. It is considered best practice to target an additional 3%-5% over the threshold of the desired rating (i.e. 58% to 60% for BREEAM Very Good) in order to allow for changes over the duration of the project.

BREEAM Very Good is being targeted on the basis of a total score of **58.59%** including the minimum standards for the rating:

Scenario	Score	BREEAM Rating
Targeted credits	58.59%	Very Good

2. MINIMUM STANDARDS

In addition, performance against the minimum standards (required for the specified target rating) is summarised below:

Issue	Targeted credits meet minimum requirements?
Man 03 – Responsible construction practices	Yes
Man 04 – Commissioning and handover	Yes
Man 05 – Aftercare	Yes
Ene 01 – Reduction of Energy Use and Carbon Emissions	Yes
Ene 02 - Energy Monitoring	Yes
Wat 01 - Water Consumption	Yes
Wat 02 - Water Monitoring	Yes
Mat 03 - Responsible Sourcing of Materials	Yes
Wst 03 – Operational Waste	Yes
LE 03 - Minimising impact on existing site ecology	Yes

N.B. If the building does not meet the minimum requirements listed in the table above, the BREEAM Very Good rating will be at risk.

3. BREEAM PERFORMANCE SUMMARY

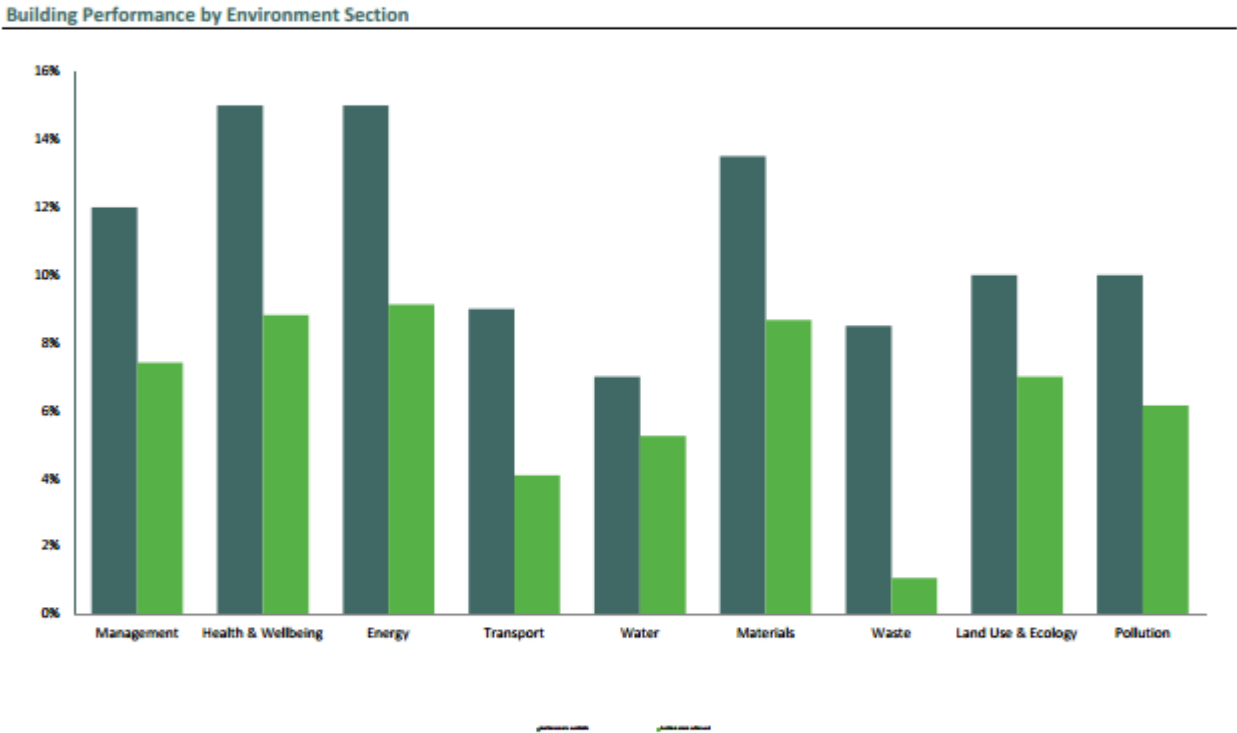
The table below summarises the total number of credits which have been targeted in each BREEAM Category and the contribution to the total score.

BREEAM UK New Construction 2014 Pre-Assessment Estimator: Indicative Rating & Building Performance

BREEAM[®]

BREEAM[®] UKI

Overall Building Performance	
Building name	Holiday Inn Express, Bicester Gateway
Indicative BREEAM rating	Very Good
Indicative Total Score	58.59%
Min. standards level achieved	Very Good level



Environmental Section	No. credits available	Indicative no. credits Achieved	% credits achieved	Section Weighting	Indicative Section Score
Management	21	13	61.90%	12.00%	7.42%
Health & Wellbeing	17	10	58.82%	15.00%	8.82%
Energy	23	14	60.87%	15.00%	9.13%
Transport	11	5	45.45%	9.00%	4.09%
Water	8	6	75.00%	7.00%	5.25%
Materials	14	9	64.29%	13.50%	8.67%
Waste	8	1	12.50%	8.50%	1.06%
Land Use & Ecology	10	7	70.00%	10.00%	7.00%
Pollution	13	8	61.54%	10.00%	6.15%
Innovation	10	1	10.00%	N/A	1

4. BREEAM PRE-ASSESSMENT

Issue Code	Issue Title	Available	Targeted	Responsibility
Man 01	Project Brief and Design	4	2	Client
Man 02	Life Cycle Cost and Service Life Planning	4	1	Client
Man 03	Responsible Construction Practices	6	5	Contractor
Man 04	Commissioning and Handover	4	3	Contractor
Man 05	Aftercare	3	2	Contractor, Client
Management Credit Totals:		21	13	
Management Section Scores:		12.00%	7.42%	
Hea 01	Visual Comfort	4	1	Architect, Electrical Engineer
Hea 02	Indoor Air Quality	5	2	Contractor, Mechanical Engineer
Hea 04	Thermal Comfort	3	3	Client, Mechanical Engineer
Hea 05	Acoustic performance	3	3	Contractor
Hea 06	Safety and Security	2	1	Architect
Health and Wellbeing Credit Totals:		17	10	
Health and Wellbeing Section Scores:		15.00%	8.82%	
Ene 01	Reduction of Energy Use and Carbon Emissions	12	5	Client
Ene 02	Energy Monitoring	2	2	Contractor, Electrical Engineer
Ene 03	External Lighting	1	1	Architect, Electrical Engineer
Ene 04	Low Carbon Design	3	1	Client, Energy Specialist
Ene 06	Energy Efficient Transportation System	3	3	Mechanical Engineer
Ene 08	Energy Efficient Equipment	2	2	Client
Energy Credit Totals:		23	14	
Energy Section Scores:		15.00%	9.13%	
Tra 01	Public Transport Accessibility	5	1	Assessor
Tra 02	Proximity to Amenities	1	1	Assessor
Tra 03	Cyclist Facilities	2	2	Contractor, Architect
Tra 04	Maximum Car Parking Capacity	2	0	Architect
Tra 05	Travel Plan	1	1	Client
Transport Credit Totals:		11	5	
Transport Section Scores:		9.00%	4.09%	

Issue Code	Issue Title	Available	Targeted	Responsibility
Wat 01:	Water Consumption	5	3	Architect
Wat 01:	Water Consumption	5	3	Architect
Wat 02:	Water Monitoring	1	1	Mechanical Engineer
Wat 03:	Water Leak Detection and Prevention	2	2	Mechanical Engineer
Water Credit Totals:		8	6	
Water Section Scores:		7.00%	5.25%	
Mat 01	Life Cycle Impacts	6	2	Architect, Contractor
Mat 02	Hard Landscaping and Boundary Protection	1	1	Architect, Contractor
Mat 03	Responsible Sourcing of Materials	4	3	Contractor
Mat 04	Insulation	1	1	Architect
Mat 05	Designing for Durability and Resilience	1	1	Architect, Contractor
Mat 06	Material Efficiency	1	1	Architect
Materials Credit Totals:		14	9	
Materials Section Scores:		13.50%	8.67%	
Wst 01	Construction Waste Management	4	1	Contractor
Wst 02	Recycled Aggregates	1	0	
Wst 03	Operational Waste	1	0	
Wst 05	Adaptation to Climate Change	1	0	
Wst 06	Functional Adaptability	1	0	
Waste Credit Totals:		8	1	
Waste Section Scores:		8.50%	1.06%	
LE 01	Site Selection	2	0	
LE 02	Ecological Value of Site and Protection of Ecological Features	2	1	Ecologist
LE 03	Mitigating Ecological Impact	2	2	Ecologist
LE 04	Enhancing Site Ecology	2	2	Contractor, Ecologist
LE 05	Long-Term Impact of Biodiversity	2	2	Contractor, Ecologist
Land use and Ecology Credit Totals:		10	7	
Land use and Ecology Section Scores:		10.00%	7.00%	
Pol 01	Impact of Refrigerants	3	1	Mechanical Engineer
Pol 02	NO _x Emissions	3	0	Mechanical Engineer
Pol 03	Surface Water Run-off	5	5	Client, Contractor, Architect
Pol 04	Reduction of Night Time Light Pollution	1	1	Mechanical Engineer
Pol 05	Noise Attenuation	1	1	Acoustician, Architect
Pollution Credit Totals:		13	8	
Pollution Section Scores:		10.00%	6.15%	

Issue Code	Issue Title	Available	Targeted	Responsibility
Man 03	Responsible Construction Practices	1	0	
Man 05	Aftercare	1	1	Client
Hea 01	Visual Comfort	1	0	
Hea 02	Indoor Air Quality	2	0	
Ene 01	Reduction of Energy Use and Carbon Emissions	5	0	
Wat 01	Water Consumption	1	0	
Mat 01	Life Cycle Impacts	3	0	
Mat 03	Responsible Sourcing of Materials	1	0	
Wst 01	Construction Waste Management	1	0	
Wst 02	Recycled Aggregates	1	0	
Wst 05	Adaptation to Climate Change	1	0	
AI	Approved Innovations	1	0	
Innovation Credit Totals:		10	1	
Innovation Section Scores:		10.00%	1.00%	
OVERALL TARGETED SCORE:			58.59%	

5. TIME-RESTRICTED ACTIONS

5.1 RIBA Stage 1

LE 04 – Enhancing Site Ecology

The Client will need to instruct the *Suitably Qualified Ecologist* to provide recommendations on enhancing the site's ecological value.

5.2 RIBA Stage 2

Man 01 – Project Brief and Design

The Project Team will need to:

- carry out the stakeholder consultation in line with the BREEAM requirements.
- Incorporate targeted BREEAM rating into the tender documentation.

Hea 05 – Acoustic Performance

The Client will need to appoint a *Suitably Qualified Acoustician* to evaluate the internal spaces.

Hea 06 – Safety and Security

The Design Team will need to consult the local *Suitably Qualified Security Specialist (SPSS)* e.g. Crime Prevention Design Advisor or Architectural Liaison Officer.

Ene 04 – Low Carbon Design

The Client will need to commission the Low/Zero Carbon Feasibility Study.

5.3 RIBA Stage 3

Hea 04 – Thermal Comfort

The Client will commission the thermal modelling report in order to achieve the three targeted credits.

Ene 01 – Energy Consumption

The Client will commission an *Accredited Energy Assessor* to produce the “As-Designed” Building Regulations Output Document (BRUKL)

Wat 01 – Water Consumption

The Design Team will need to complete the Water consumption proforma to ensure that the predicted consumption, measured in litres/person/day meets the requirements for 1 credit.

Pol 03 – Surface Water Run Off

A Site-Specific Flood Risk report has already been provided by the Design Team.

5.4 RIBA Stage 4

Man 03 – Responsible Construction Practices

The Client will ensure that the Main Contractor will register the site with the Considerate Constructors Scheme.

LE 03/LE 04 – Land Use and Ecology

The SQE has carried out the Phase 1 Habitat Survey in November 2017, prior to commencement of work on site. The Client will need to ensure that the Main Contractor implements the ecological enhancements in line with the BREEAM Ecology Report.

5.5 RIBA Stage 5

Man 04 – Commissioning and Handover

The Main Contractor will appoint a *Specialist commissioning manager* to take responsibility for the commissioning of complex systems within the building.

5.6 RIBA Stage 6

Man 05 – Aftercare

The Main Contractor will need to:

- Introduce the aftercare team and deliver a copy of the Building User Guide to the Client prior to Handover.
- Provide Initial Aftercare for at least 4 weeks after building Handover
- Provide on-site training of the Facilities Management staff
- Provide Longer term aftercare for the first 12 months of occupancy.

GLOSSARY

Suitably Qualified Ecologist (SQE)

An individual achieving all the following items can be considered to be 'suitably qualified' for the purposes of compliance with BREEAM:

- 1. Holds a degree or equivalent qualification (e.g. N/SVQ level 5) in ecology or a related subject.
- 2. Is a practising ecologist, with a minimum of three years relevant experience (within the last five years). Such experience must clearly demonstrate a practical understanding of factors affecting ecology in relation to construction and the built environment including; acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures. Examples of relevant experience are: ecological impact assessments; Preliminary Ecological Appraisals (PEA); Phase 2 habitat and fauna surveys; and habitat creation.
- 3. Is covered by a professional code of conduct and subject to peer review. Full members of the following organisations, who meet the above criteria, are deemed Suitably Qualified Ecologists for the purposes of BREEAM:
 - a. Chartered Institution of Water and Environmental Management (CIWEM)
 - b. Chartered Institute of Ecology and Environmental Management (CIEEM)
 - c. Institute of Environmental Management and Assessment (IEMA)
 - d. Landscape Institute (LI)
 - e. The Institution of Environmental Sciences (IES).

Suitably Qualified Acoustician (SQA)

An individual achieving all the following items can be considered to be 'suitably qualified' for the purposes of a BREEAM assessment:

- 1. Holds a degree, PhD or equivalent qualification in acoustics/sound testing.
- 2. Has a minimum of three years relevant experience (within the last five years). Such experience must clearly demonstrate a practical understanding of factors affecting acoustics in relation to construction and the built environment; including, acting in an advisory capacity to provide recommendations for suitable acoustic performance levels and mitigation measures.
- 3. An individual who holds a recognised acoustic qualification and membership of an appropriate professional body. The primary professional body for acoustics in the UK is the Institute of Acoustics. Where a suitably qualified acoustician is verifying the acoustic measurements/calculations carried out by another acoustician who does not meet the SQA requirements, they must, as a minimum, have read and reviewed the report and confirm in writing that they have found it to:
 - a. Represent sound industry practice
 - b. Be appropriate given the building being assessed and scope of works proposed
 - c. Avoid invalid, biased and exaggerated recommendations. Additionally, written confirmation from the third-party verifier that they comply with the definition of a Suitably Qualified Acoustician is required.

Suitably Qualified Security Specialist (SQSS)

An individual achieving any of the following can be considered to be 'suitably qualified' for the purposes of compliance with BREEAM:

- 1. Crime Prevention Design Advisors (CPDA) or Architectural Liaison Officers (ALO), Counter Terrorism Security Advisor (CTSA); or
- 2. A specialist registered with a BREEAM-recognised third party accreditation scheme for security specialists.

- 3. A practising security consultant that meets the following requirements:
 - a. Minimum of three years relevant experience within the last five years. This experience must clearly demonstrate a practical understanding of factors affecting security in relation to construction and the built environment, relevant to the type and scale of the project being undertaken.
 - b. Hold a suitable qualification relevant to security.
 - c. Maintains (full) membership to a relevant professional body or accreditation scheme that meets the following:
 - i. Has a professional code of conduct, to which members must adhere; and
 - ii. Ongoing membership is subject to peer review.

When appointing the suitably qualified security specialist, consideration should be given to the appropriateness of the individual to carry out the security needs assessment, based on the size, scope and security needs of the development.

Organisations, associations or scheme operators who wish to have their membership recognised as a 'third party accreditation scheme for security specialist', should review their current status (and therefore their members) against the requirements above and, where they feel they are compliant, contact BRE Global with the relevant information/evidence.

Accredited Energy Assessor

A person registered with an accredited energy assessment scheme provider. The scheme provider will be licensed by the relevant government department to accredit competent persons in the energy assessment of non-domestic/domestic buildings for the purposes of demonstrating compliance with Building Regulations in the country of origin.

For a full list of approved accreditation schemes/organisations for energy assessors and links to registers of accredited energy assessor's visit:

- 1. England and Wales: www.communities.gov.uk/www.ndepcregister.com (non domestic) /www.epcregister.com (domestic)
- 2. Scotland: www.scotland.gov.uk
- 3. Northern Ireland: www.dfpni.gov.uk/www.epbniregisternd.com (non domestic) www.epbniregister.com (domestic)

Specialist Commissioning Managers

The Specialist Commissioning Manager is a specialist contractor rather than a general sub-contractor.

APPENDIX

BREEAM UK New Construction 2014 Pre-Assessment Estimator: Assessment Issue Scoring



Building name	Holiday Inn Express, Bicester Gateway
Building score (%)	58.59%
Building rating	Very Good
Minimum standards level achieved	Very Good level

MANAGEMENT

Man 01 Project brief and design

No. of BREEAM credits available	4	Available contribution to overall score	2.29%
No. of BREEAM innovation credits available	0	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?		1	0
Will a sustainability champion (monitoring progress) be assigned?		1	0

Total BREEAM credits achieved	2
Total contribution to overall building score	1.14%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Comments/notes:

Man 02 Life cycle cost and service life planning

No. of BREEAM credits available	4	Available contribution to overall score	2.29%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will an elemental life cycle cost (LCC) analyses be carried out?	No	2	0
Will a component level LCC plan be developed?	No	1	0
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	0.57%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Man 03 Responsible construction practices

No. of BREEAM credits available	6	Available contribution to overall score	3.43%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Assessment Criteria	Compliant?	Credits available	Credits achieved
Is all site timber used in the project 'legally harvested and traded timber'?	Yes		
Will/does the principal contractor operate a compliant Environmental Management System?	Yes	1	1
Will a construction stage sustainability champion be assigned?		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.)	2	2	2
Will construction site impacts be metered/monitored?	Yes		
Will site utility consumption be metered/monitored?	Yes	1	1
Will transport of construction materials and waste be metered/monitored?	Yes	1	1
Will exemplary level criteria be met?		1	0

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes		Information not available at design stage
Energy consumption (intensity) - site processes		Information not available at design stage
Distance (total) - materials transport to site		Information not available at design stage
Distance (total) -waste transport from site		Information not available at design stage
Energy consumption (total) - materials transport to site		Information not available at design stage
Energy consumption (total) - waste transport from site		Information not available at design stage
Energy consumption (intensity) - materials transport to site		Information not available at design stage
Energy consumption (intensity) - waste transport from site		Information not available at design stage

Key Performance Indicators: Construction site greenhouse gas emissions

Process greenhouse gas emissions (total) - site processes		Information not available at design stage
Greenhouse gas emissions (intensity) - site processes		Information not available at design stage
Greenhouse gas emissions (total) - materials transport to site		Information not available at design stage
Greenhouse gas emissions (total) - waste transport from site		Information not available at design stage
Greenhouse gas emissions (intensity) - materials transport to site		Information not available at design stage
Greenhouse gas emissions (intensity) - waste transport from site		Information not available at design stage

Key Performance Indicators: Construction site use of freshwater resources

Use of freshwater resource (total) - site processes		Information not available at design stage
Use of freshwater resource (intensity) - site processes		Information not available at design stage

Total BREEAM credits achieved	5
Total contribution to overall building score	2.86%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Comments/notes:

Man 04 Commissioning and handover

No. of BREEAM credits available	4	Available contribution to overall score	2.29%
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 commissioning manager be appointed?	Yes	1	1
Will the building fabric be commissioned?	No	1	0
Will a building user guide be developed prior to handover?	Yes	1	1
Will a training schedule be prepared for building occupiers/managers?	Yes	1	1
Total BREEAM credits achieved	3		
Total contribution to overall building score	1.71%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	Outstanding level		

Comments/notes:

Man 05 Aftercare

No. of BREEAM credits available	3	Available contribution to overall score	1.71%
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 12months once substantially occupied?	No	1	0
Will a post occupancy evaluation be carried out 1 year after occupation?	Yes	1	1
Will exemplary level criteria be met?	Yes	1	1
Total BREEAM credits achieved	2		
Total contribution to overall building score	1.14%		
Total BREEAM innovation credits achieved	1		
Minimum standard(s) level	Very Good level		

Comments/notes:

POE potential
Seasonal comm. Pot.

HEALTH & WELLBEING

Hea 01 Visual Comfort

No. of BREEAM credits available	4	Available contribution to overall score	3.53%
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?	No	1	0
How many credits will be targeted for the daylighting criteria?		1	0
Will the design provide adequate view out for building users?		1	0
Will internal/external lighting levels, zoning and controls be specified in accordance with the relevant CIBSE Guides/British Standards?	Yes	1	1
Will exemplary level criteria be met?		1	0
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.88%		
Total BREEAM innovation credits achieved	0		
Minimum standard(s) level	N/A		

Comments/notes:

Hea 02 Indoor Air Quality

No. of BREEAM credits available	5	Available contribution to overall score	4.41%
No. of BREEAM innovation credits available	2	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will an indoor air quality (IAQ) plan be produced and building designed to minimise air pollution?	Yes	1	1
Will the building be designed to minimise the concentration and recirculation of pollutants in the building?	No	1	0
Will the relevant products be specified to meet the VOC testing and emission levels required?	Yes	1	1
Will formaldehyde and total VOC levels be measured post construction?	No	1	0
Will the building be designed to, or have the potential to provide, natural ventilation?	No	1	0
Will exemplary level criteria be met?		2	0

Key Performance Indicators: Indoor air quality

Concentration levels of formaldehyde	INA	Information not available at design stage
Total volatile organic compound (TVOC) concentration	INA	Information not available at design stage

Total BREEAM credits achieved	2
Total contribution to overall building score	1.76%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Comments/notes:

Hea 03 Safe containment in laboratories

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 an objective risk assessment of proposed laboratory facilities' design be completed?			
Will the manufacture & installation of fume cupboards and containment devices meet best practice standards?			
Will containment level 2 & 3 labs meet best practice safety & performance criteria?			
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		

Comments/notes:

Hea 04 Thermal comfort

No. of BREEAM credits available	3	Available contribution to overall score	2.65%
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 services system 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

Key Performance Indicators: Thermal comfort

Predicted Mean Vote (PMV)	
Predicted Percentage Dissatisfied (PPD)	

Total BREEAM credits achieved	3
Total contribution to overall building score	2.65%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Hea 05 Acoustic Performance

No. of BREEAM credits available	3	Available contribution to overall score	2.65%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Credits	Credits available	Credits achieved
Will the building meet the appropriate acoustic performance standards and testing requirements for: a. Sound insulation b. Indoor ambient noise level c. Reverberation times?	3	3	3
Total BREEAM credits achieved	3		
Total contribution to overall building score	2.65%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Comments/notes:

Potential

Hea 06 Safety and Security

No. of BREEAM credits available	2	Available contribution to overall score	1.76%
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?		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	0.88%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Architect to get in touch

ENERGY

Ene 01 Reduction of energy use and carbon emissions

No. of BREEAM credits available	12	Available contribution to overall score	7.83%
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:		5	

Ene 01 Calculator

Country of the UK where the building is located		Confirm building regulation and version to be used:	
---	--	---	--

New Construction (Fully fitted)

Building floor area		m2
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 _{td})		
Primary consumption energy performance ratio (EPR _{pc})		
CO ₂ Energy performance ratio (EPR _{co2})		
Overall building energy performance ratio (EPR _{oc})		

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	5
Total contribution to overall building score	3.26%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Excellent level

Comments/notes:

Ene 02 Energy monitoring

No. of BREEAM credits available	2	Available contribution to overall score	1.30%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment criteria

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?	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	1.30%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Comments/notes:

Ene 03 External lighting

No. of BREEAM credits available	1	Available contribution to overall score	0.65%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment criteria

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	0.65%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Ene 04 Low carbon design

No. of BREEAM credits available	3	Available contribution to overall score	1.96%
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 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)?	Yes	1	1

KPI - Low and/or zero carbon energy generation

Total on-site and/or near-site LZC energy generation kWh/yr

Total BREEAM credits achieved	1
Total contribution to overall building score	0.65%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Ene 05 Energy efficient cold storage

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 the refrigeration system be designed, installed & commissioned in accordance with BREEAM criteria?		N/A	N/A
Will the refrigeration system demonstrate a saving in indirect greenhouse gas emissions?		N/A	N/A

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

Comments/notes:

Ene 06 Energy efficient transportation systems

No. of BREEAM credits available	3	Available contribution to overall score	1.96%
No. of BREEAM innovation credits available	0	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?	Yes	1	1
Will the relevant energy-efficient features criteria be met?	Yes	2	2

Total BREEAM credits achieved	3
Total contribution to overall building score	1.96%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Ene 07 Energy efficient laboratory systems

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
Pre-requisite: Criterion 1 of Hea 03 - risk assessment of laboratory facilities			
Have the occupants' laboratory requirements & performance criteria been confirmed during the preparation of the initial project brief to minimise energy demand?			

Best Practice Energy Practices in Laboratories (table 27)			
Will the laboratory meet criteria item b) Fan power?			
Will the laboratory criteria item c) Fume cupboard volume flow rates?			
Will the lab meet item d) Grouping / isolation of high filtration/ventilation activities?			
Will the laboratory meet criteria item e) Energy recovery - heat?			
Will the laboratory meet criteria item f) Energy recovery - cooling?			
Will the laboratory meet criteria item g) Grouping of cooling loads?			
Will the laboratory meet criteria item h) Free cooling?			
Will the laboratory meet criteria item i) Load responsiveness?			
Will the laboratory meet criteria item j) Cleanrooms?			
Will the laboratory meet criteria item k) Diversity?			
Will the laboratory meet criteria item l) Room air-change rates?			

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

Comments/notes:

Ene 08 Energy efficient equipment

No. of BREEAM credits available	2	Available contribution to overall score	1.30%
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?	No	No
Ref C Communal laundry?	No	
Ref D Data centre?	No	
Ref E IT-intensive operation areas?	Yes	
Ref F Residential areas?	No	
Ref G Healthcare?	No	
Ref H Kitchen and catering facilities?	Yes	No

	Compliant	Credits available	Credits achieved
Will the significant majority contributor(s) to 'unregulated' energy use above meet the BREEAM criteria?	Yes	2	2

Total BREEAM credits achieved	2
Total contribution to overall building score	1.30%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

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
Is there a risk of ligature for residents?			
Will internal/external drying space and fixings be provided?			

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

Comments/notes:

TRANSPORT

Tra 01 Public Transport Accessibility

No. of BREEAM credits available	5	Available contribution to overall score	4.09%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for purpose of Tra01 issue assessment) Other Building Type 2

Assessment Criteria

Assessment Criteria	Compliant	Credits available	Credits achieved
Indicative public transport accessibility index (AI):	3.00	5	1
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	1
Total contribution to overall building score	0.82%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Tra 02 Proximity to Amenities

No. of BREEAM credits available	1	Available contribution to overall score	0.82%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

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	0.82%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Tra 03 Cyclist facilities

No. of BREEAM credits available	2	Available contribution to overall score	1.64%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for purpose of Tra03 issue assessment)	Other Building - transport type 2
How many compliant cycle storage spaces will be provided?	25
What cyclist facilities will be provided?	Showers and changing facilities and lockers

Assessment Criteria	Compliant?	Credits available	Credits achieved
Cycle storage spaces	Yes	2	2
Cyclist facilities	Yes		
Total BREEAM credits achieved		2	
Total contribution to overall building score		1.64%	
Total BREEAM innovation credits achieved		N/A	
Minimum standard(s) level		N/A	

Comments/notes:

Tra 04 Maximum Car Parking Capacity

No. of BREEAM credits available	2	Available contribution to overall score	1.64%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for purpose of Tra04 issue)	Other Building - transport type 2
Building's indicative Accessibility Index (sourced from issue Tra01)	3

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will BREEAM's maximum parking capacity criteria for the building type/Accessibility Index be met?	Yes	2	→ ←
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	

Comments/notes:

Tra 05 Travel Plan

No. of BREEAM credits available	1	Available contribution to overall score	0.82%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will a transport plan based on site specific travel survey/assessment be developed?	Yes	1	1
Total BREEAM credits achieved		1	
Total contribution to overall building score		0.82%	
Total BREEAM innovation credits achieved		N/A	
Minimum standard(s) level		N/A	

Comments/notes:

Stated that a travel plan will have to be produced as part of pre-occupation compliance

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 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

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

Comments/notes:

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

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?	Yes		
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?	Yes		

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

Comments/notes:

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

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

Comments/notes:

Wat 04 Water Efficient Equipment

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
Has a meaningful reduction in unregulated water demand been 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

Comments/notes:

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

Predicted total Mat01 credits achieved	2
Number of building elements/elements	
Green Guide exemplary level compliant?	
Has IMPACT compliant software been used?	

Key Performance Indicator - embodied green house gas emissions by element	Total area of element m ²	Total impact kgCO ₂ eq.	Area of element impact data relevant to m ²
External walls			
Windows			
Roof			
Upper floor construction			
Internal wall			
Floor finishes/coverings			

Key Performance Indicator - embodied green house gas emissions for building (assessed elements only)

Total embodied green house gas emissions for building (by assessed elements)	Missing data	kgCO ₂ eq.		kgCO ₂ eq./m ²
Proportion of applicable building elements that data reported covers				

Total BREEAM credits achieved	2
Total contribution to overall building score	1.93%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Comments/notes:

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

Comments/notes:

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 and timber based products are 'legally harvested and trader timber'	Yes		
Is there a documented sustainable procurement plan?	Yes	1	1
Percentage of available responsible sourcing of materials points achieved	36.00%	3	2

Please confirm the route used to assess Mat03	Please select
---	---------------

Total BREEAM credits achieved	3
Total contribution to overall building score	2.89%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Comments/notes:

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

Assessment Criteria		Credits available	Credits achieved
What is the building's targeted insulating index?	2.50	1	1

Note: An insulatio

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

Comments/notes:

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	N/A

Assessment Criteria

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

Comments/notes:

Mat 06 Material efficiency

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 material efficiency measures be identified & implemented during all 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

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: 1 BREEAM Wst01 Innovation credits: 0

Assessment Criteria	Compliant?
Construction resource management plan	
Demolition Taking Place on Site?	
Compliant Pre-demolition audit	
Does the excavation waste meet the exemplary level requirements?	

Key Performance Indicators - Construction Waste		
Measure/units for the data being reported		Please Select Unit
Non-hazardous construction waste (excluding demolition/excavation)		Please Select Unit
Total non-hazardous construction waste generated	INA	Please Select Unit Note: At the pre-assessment stage this
Non-hazardous non-demolition const. waste diverted from landfill		% Note: At this stage this will be a target t
Total non-hazardous non-demolition const. waste diverted from landfill	INA	Please Select Unit Note: At the pre-assessment stage this
Total non-hazardous demolition waste generated		Please Select Unit Note: At this stage this will be a target t
Non-hazardous demolition waste diverted from landfill		% Note: At this stage this will be a target t
Total non-hazardous demolition waste to disposal	INA	Please Select Unit Note: At the pre-assessment stage this
Material for reuse		Please Select Unit Note: At this stage this will be a target t
Material for recycling		Please Select Unit Note: At this stage this will be a target t
Material for energy recovery		Please Select Unit Note: At this stage this will be a target t
Hazardous waste to disposal		Please Select Unit Note: At this stage this will be a target t

Total BREEAM credits achieved	1
Total contribution to overall building score	1.06%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Comments/notes:

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?	0%

% of high-grade aggregate that is recycled/secondary aggregate - by application

Structural frame	
Bitumen/hydraulically bound base, binder and surface courses	
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

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?	No	1	0
Will static waste compactor(s) or baler(s) be specified where appropriate?			
Will vessel(s) for composting suitable organic waste where appropriate?			

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

Comments/notes:

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	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		

Comments/notes:

Wst 05 Adaption 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	N/A

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

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	0	Minimum standards applicable	N/A

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?	No	1	0

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

Comments/notes:

LAND USE & ECOLOGY

LE 01 Site Selection

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

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will at least 75% of the proposed development's footprint be located on previously occupied land?	No	1	0
Is the site deemed to be significantly contaminated?	No	1	0

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

Comments/notes:

Geotechnical survey does not show any contamination.

LE 02 Ecological Value of Site and Protection of Ecological Features

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

Ecological value of the land defined using	A Suitably Qualified Ecologist
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Assessment Criteria	Compliant?	Credits available	Credits achieved
Can the land within the construction zone be defined as 'land of low ecological value'?	No	1	0
Will all features of ecological value surrounding the construction zone/site boundary be protected?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.00%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

LE 03 Mitigating Ecological Impact

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

Data sourced for calculating the change in ecological value from	Suitably Qualified Ecologist site survey of plant species
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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

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

Comments/notes:

LE 04 Enhancing Site Ecology

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

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will a suitably qualified ecologist be appointed to report on enhancing and protecting site ecology?	Yes	2	2
Will the suitably qualified ecologist's general recommendations be implemented?	Yes		
What is the targeted/intended improvement in ecological value as a result of enhancement actions?	≥6 species (large positive change) Plant species rich		
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.00%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Comments/notes:

LE 05 Long Term Impact on Biodiversity

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

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will a Suitably Qualified Ecologist be appointed to monitor/minimise impacts of site activities on biodiversity?	Yes	2	2
Will a landscape and habitat management plan be produced covering at least the first five years after project completion in accordance with British Standards?	Yes		
Number of applicable measures to improve biodiversity confirmed by SQE:	4		
Number of applicable measures implemented:	4		
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.00%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Comments/notes:

POLLUTION

Pol 01 Impact of Refrigerants

No. of BREEAM credits available	3	Available contribution to overall score	2.31%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Credits available	Credits achieved
Refrigerant containing systems installed in the assessed building?	Yes	2
Do all systems (with electric compressors) comply with the requirements of BS EN 378:2008 (parts 2 & 3) & where refrigeration systems containing ammonia are installed, the IoR Ammonia Refrigeration Systems Code of Practice?	Yes	0
Global Warming Potential of the specified refrigerant(s) 10 or less?	No	
What is the target range Direct Effect Life Cycle CO2eq. emissions for the system?		kgCO2eq/kW coolth capacity
Cooling/Heating capacity of the system		kW
Will a refrigerant leak detection and containment system be specified/installed?	Yes	1
Total BREEAM credits achieved	1	
Total contribution to overall building score	0.77%	
Total BREEAM innovation credits achieved	N/A	
Minimum standard(s) level	N/A	

Comments/notes:

Pol 02 NO_x Emissions

No. of BREEAM credits available	3	Available contribution to overall score	2.31%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

NO _x emission level - space heating		mg/kWh
NO _x emission level - cooling		mg/kWh
NO _x emission level - water heating		mg/kWh
Does this building meet BREEAM's definition of a highly insulated building?		
Energy consumption: heating and hot water		kWh/m ² yr
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	

Comments/notes:

Pol 03 Surface Water Run off

No. of BREEAM credits available	5	Available contribution to overall score	3.85%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

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		
Will the site meet the BREEAM criteria for peak rate surface water run off?	Yes	1	1
Will the site meet the criteria for surface water run off volume, attenuation and/or limiting discharge?	Yes	1	1
Will the site be designed to minimise watercourse pollution in accordance with the BREEAM criteria?	Yes	1	1

Total BREEAM credits achieved	5
Total contribution to overall building score	3.85%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Pol 04 Reduction of Night Time Light Pollution

No. of BREEAM credits available	1	Available contribution to overall score	0.77%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Will the external lighting specification be designed to reduce light pollution?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.77%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

Pol 05 Noise Attenuation

No. of BREEAM credits available	1	Available contribution to overall score	0.77%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant	Credits available	Credits achieved
Will there be noise-sensitive areas/buildings within 800m radius of the development?	Yes	1	1
Will a noise impact assessment be carried out and, if applicable, noise attenuation measures specified?	Yes		

Total BREEAM credits achieved	1
Total contribution to overall building score	0.77%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Comments/notes:

INNOVATION

Inn 01 Innovation

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

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Man 03 Responsible construction practices	No	1	0
Man 05 Aftercare	Yes	1	1
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
Mat01 Life Cycle Impacts	No	3	0
Mat03 Responsible Sourcing of Materials	No	1	0
Wst01 Construction Waste Management	No	1	0
Wst02 Recycled Aggregates	No	1	0
Wst 05 Adaption to climate change	No	1	0

Number of 'approved' innovation credits achieved?	
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Total BREEAM innovation credits achieved	1
Total contribution to overall building score	1.00%
Minimum standard(s) level	N/A

Comments/notes: