

# **BREEAM PRE ASSESSMENT**

# Mixed use development 30a Highgate Road London

**Energy Solutions Environmental Consultants** 

Planet House Birchen Grove London NW9 8RY

T: 020 8200 4507 www.energysolutionsconsultancy.co.uk

Report prepared for:

**CHASSAY STUDIO LTD** 

### **Executive Summary**

A BREEAM Preliminary Assessment has been completed for the proposed mixed use development at 30a Highgate Road.

The new BREEAM 2011 New Construction pre assessment tool and 2011 Methodology have been used in the assessment.

The results of the Pre- Assessment indicate the development will achieve a BREEAM score of **60.33%** and thereby achieve a rating of **'Very Good'**. The pre assessment also indicates that all the minimum requirements under the various categories to a achieve a 'Very Good' rating will be achieved

In addition, the pre assessment indicates that the specific minimum BREEAM criteria for particular categories specified in Camden Council's policy document CSPG3 which are;

- Minimum of 60% unweighted credits in the Energy Category
- Minimum of 60% unweighted credits in the Water Category
- Minimum of 40% unweighted credits in the Materials Category

will also be achieved or exceeded. The proposed development therefore satisfies Camden Council's planning requirement for non-domestic developments >500m2 to achieve a minimum BREEAM rating of Very Good.

Whilst it is feasible the entire development could exceed its current rating of 'Very Good' significant additional investment over that currently proposed would be required.

#### Introduction

This report concerns the preliminary BREEAM assessment of the proposed mixed use development at 30a Highgate Road, Greater London.

This assessment follows preliminary design team meetings and subsequent design development for planning submission and the completion of predicted credit awards in the BREEAM Assessment tool.

It is stressed that at this stage many of the credits are subject to detailed confirmation. Therefore the credits awarded and the associated rating is predicted and not guaranteed.

The BREEAM 2011 New Construction Pre Assessment tool has been used for this pre assessment as registration of the site with BRE now would require that a full assessment was conducted using the new BREEAM 2011 New Construction method.

BREEAM (Building Research Establishment Environmental Assessment Method) is a tool that allows designers to review and improve the environmental performance of a building. It is a widely accepted and respected scheme that sets a benchmark for environmental performance and provides a wide range of benefits. It is independent and authoritative, being based on many years of construction and environmental research carried out at BRE together with the input and experience of the construction and property industries, Government and building regulators.

In accordance with the London Borough of Camden's Planning Guidance Policy document SPG3, non-domestic developments with a floor area >500m2 should achieve the following BREEAM criteria

Time Period	Minimum Rating	Minimum standard
		for categories (% of
		un-weighted credits)
2010 – 2012	'Very Good'	Energy 60%
		Water 60%
		Materials 40%

BREEAM awards an environmental label after assessing buildings against a range of environmental issues covering impacts on the environment at global, local and indoor levels. For each issue, there are a number of 'credits' available. Where buildings have attained or exceeded various benchmarks of performance, an appropriate number of credits are awarded.

The relative importance of the credits awarded under each issue is taken into account in the final score, which is interpreted in the form of an overall rating of:

Outstanding	(>85%)
Excellent	(70% to 85%)
Very Good	(55% to 70%)
Good	(40% to 55%)
Pass	(25% to 40%)

#### **Development Background**

BREEAM 2011 New Construction brings together previously separate BREEAM 'Schemes' (e.g. Offices, Schools, Hospitals etc) and enables them to assessed under a common methodology. However the process still requires the type of development to be selected which then determines the actual set of credits used to determine the overall score. In addition the inclusion of certain credits in the assessment is dependent on presence of various items within the design.

The exact usage of the non-domestic space being proposed in this development has not been determined however planning requires the non-domestic space to be Type B1 Offices and Workshop businesses. For the purpose of the pre – assessment the non-domestic space being assessed under BREEAM has been classified as 'Office'. It is further classified as a 'Shell Only' with the final fit out being determined by the future tenants of the building.

The following table details which design elements have been included/excluded from the assessment.

Facility	Inclusion/Exclusion
Lifts	Yes
Fume cupboards/cabinets	No
Commercial/industrial refrigeration and storage systems	No
Laboratory Function & containment areas	No
Vehicle wash systems	No
Internal or external soft landscaping/planting	No

#### **BREEAM Rating**

The table below summarises the target score for the development and the un weighted credit scores achieved in the energy, water and materials categories. The results are based upon design development to date and review of the development-specific information available. It can be seen that a score of 60.33% has been predicted. The development would achieve a 'Very Good' rating given this information, on the condition that the required supporting evidence is submitted by the project team demonstrating compliance upon formal assessment. The score of 60.33 is 5.33% over the minimum requirement of 55% required to achieve a 'Very Good' rating and hence gives a degree of flexibility during the further design, construction and completion stages where some credits may be lost or traded in other areas as the development process proceeds.

Category	Total Credits	Credits Achieved	% of Total
Energy	27	19	70
Water	9	7.5	83
Materials	12	9.5	79
Total Score	60.33%	Rating	Very Good

The following section provides the complete output from the BREEAM 2011 New Construction Pre assessment tool.



This assessment and indicative BREEAM rating is not a formal certified BREEAM assessment or rating and must not be communicated as such. The score presented is indicative of a buildings potential performance and is based on a simplified pre-formal BREEAM assessment and unverified commitments given at an early stage in the design process.

Building name	30a highgate road
Indicative building score (%	60.33%
Indicative BREEAM rating	Pre-Assessment result indicates potential for BREEAM Very Good rating
Indicative minimum standards level achieved	Pre-Assessment result indicates the minimum standards for Very Good level

Environmental Section	Indicative % Score Available	Indicative % Score Achieved
Management	12.00%	3.55%
Health & Wellbeing	15.00%	9.11%
Energy	19.00%	13.37%
Transport	8.00%	7.11%
Water	6.00%	5.00%
Materials	12.50%	9.90%
Waste	7.50%	2.14%
Land Use and Ecology	10.00%	4.00%
Pollution	10.00%	6.15%
Innovation	10.00%	0.00%



an01 Sustainable Procurement	No. of BREEAM credits available					
	No. of BREEAM credits available					
		8		Available contribut	cion to overall score	4.36%
	No. of BREEAM innovation credits available	1		Minimum standards applicable		
e-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Core option?
	Will roles, responsibilities and a training schedule be defined in accorda	ance with BREEAM?	No	1	0	N/A
	Will a BREEAM AP be appointed at RIBA stage A/B and performance targets co	ntractually agreed?	No	1	0	N/A
	Will a BREEAM AP be appointed to monitor and report progress duri	ng RIBA stage B-E?	No	1	0	N/A
	Willa BREEAM AP be appointed to monitor and report progress du		No	1	0	N/A
	Will a thermographic survey be conducted and any defects un	_	Yes	1	1	N/A
	Will compliant commissioning of building servi	_	Yes	1	1	N/A
	Will compliant seasonal commissioning of building servi	-	Yes	1	1	N/A
	Will water/energy consumption data be recorded and aftercare support provide	_	Yes	1	1	N/A
	Will water/energy consumption be recorded/reported for 3 years	post construction?	No	1	0	N/A
	Total indicative BREEAM credits achieved	4				
	Total indicative contribution to overall building score	2.18%				
	Total indicative BREEAM innovation credits achieved	0				
	Indicative minimum standard(s) level	Pre-Assessment resul	t indicates the mir	imum standards for C	Outstanding level	
					-	
mments/notes:						



#### **BREEAM 2011 New Construction Pre-Assessment Estimator Man02** Responsible Construction Practices No. of BREEAM credits available Available contribution to overall score 1.09% No. of BREEAM innovation credits available Minimum standards applicable Yes Shell & Core Pre-Assessment question/criteria option? Which considerate construction scheme will be used or required to be used by the principal contractor? No scheme used on project For the required scheme, what will be the target performance level set for the site/contractor? N/A Total indicative BREEAM credits achieved 0 Total indicative contribution to overall building score 0.00% Total indicative BREEAM innovation credits achieved 0 Indicative minimum standard(s) level Pre-Assessment result indicates the minimum standards for Very Good level Comments/notes:



	No. of BREEAM credits available	5		Available contribut	2.73%	
	No. of BREEAM innovation credits available	0		Minimum standards applicable		No
					Indicative credits	Shell & Core
re-Assessment question/criteria			Response	Credits available	achieved	option?
	Will site energy consumption be me	etered/monitored?	No	1	0	N/A
	Will site water consumption be me	etered/monitored?	No	1	0	N/A
	Will the transport of construction materials and waste to/from site be mea	sured/monitored?	No	1	0	N/A
	Will timber be sourced in accordance with the Government's Timber Pr	ocurement Policy?	Yes	1	1	N/A
	Will/does the principal contractor operate a compliant Environmental Mar	nagement System?	No	1	0	N/A
	Will the principal contractor adopt best practice pollution prevention police	cies & procedures?	No	1	O	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	0.55%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				

Comments/notes:			



	No. of BREEAM credits available	4		Available contribut	tion to overall score	2.18%
	No. of BREEAM innovation credits available	0	Minimum standards applicable			Yes
			Indicative credits		Shell & Cor	
e-Assessment question/criteria			Response	Credits available	achieved	option?
	Will an appropriate level of consultation activi	ties be undertaken?	No	1	0	N/A
	Will an access statement be developed and appropriate building user	facilities provided?	Yes	1	1	N/A
	Will building user guides and relevant user inform		Yes	1	0.5	Option 2
	Will a post occupancy evaluation assessment be undertaken and information	ation disseminated?	No	1	0	
	- 11 11 11 12					
	Total indicative BREEAM credits achieved	1.5				
	Total indicative contribution to overall building score	0.82%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	Pre-Assessment resul	It indicates the min	imum standards for C	Outstanding level	
mments/notes:						



	No. of BREEAM credits available	3		Available contribut	1.64%	
	No. of BREEAM innovation credits available	0		Minimum standards applicable		No
					Indicative credits	Shell & Core
Pre-Assessment question/criteria			Response	Credits available	achieved	option?
	Will a feasibility stage Life Cycle Cost (LCC) analysis be commissione	ed and completed?	No	1	0	N/A
	Will a strategic and system level LCC be commissioned	ed and completed?	No	1	0	N/A
	Will a technical design LCC to be commissioned	ed and completed?	No	1	0	N/A
	Total indicative BREEAM credits achieved	0				
	Total indicative contribution to overall building score	0.00%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
Comments/notes:						



EALTH & WELLBEING	Section Weighting	15.00%	Indicative Section Score			9.11%
ea01 Visual Comfort						
	No. of DDFFAM avadito available	2		مريانيون والموازين	tion to avoid some	3.21%
	No. of BREEAM credits available  No. of BREEAM innovation credits available	1	Available contribution to overall score  Minimum standards applicable			3.21% Yes
	NO. OF BREEAIN HIHOVATION CIECUIS AVAILABLE	1	Minimum standards applicable			163
					Indicative credits	Shell & Core
e-Assessment question/criteria	3		Response	Credits available	achieved	option?
	Will all fluorescent lamps be fitted with high	frequency ballasts?	Yes	N/A	N/A	Option 3
	Will all relevant building areas be designed to achieve the appropriat	e daylight factor(s)?	Yes	1	1	N/A
	Will the design provide adequate glare control and view ou	t for building users?	Yes	1	1	Option 3
Will	$internal/external\ lighting\ be\ specified\ in\ accordance\ with\ the\ relevant\ CIBSE\ Guide$	s/British Standards?	Yes	1	1	N/A
			Г	1		
	Will all relevant building areas be designed to achieve exemplary lev	el daylight factor(s)?	No	1	0	N/A
	Total indicative BREEAM credits achieved	3				
	Total indicative contribution to overall building score	3.21%				
	Total indicative BREEAM innovation credits achieved	0				
	Indicative minimum standard(s) level	Pre-Assessment resu	It indicates the mir	nimum standards for C	Outstanding level	
omments/notes:						



Hea02	Indoor	Air C	)uality
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	No. of BREEAM credits available	4		Available contribut	tion to overall score	4.29%
	No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	No
Pre-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Core option?
	Will an air quality plan be produced and building designed to minimis	e air pollution?	Yes	1	1	N/A
	Will the relevant products be specified to meet the VOC testing and emission le	evels required?	Yes	1	0.5	Option 2
	Will formaldehyde and total VOC levels be measured pos	t construction?	Yes	1	0.5	Option 2
	Will the building be designed to, or have the potential to provide, natu	ral ventilation?	Yes	1	1	N/A

Total indicative BREEAM credits achieved	3
Total indicative contribution to overall building score	3.21%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

	Comments/notes:		
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	No. of BREEAM credits available	2		Available contribu	tion to overall score	2.14%
	No. of BREEAM innovation credits available	No. of BREEAM innovation credits available 0		Minimum s	No	
					Indicative credits	Shell & Core
re-Assessment question/criteria			Response	Credits available	achieved	option?
	Will thermal modelling of the de	sign be carried out?	Yes	1	0.5	Option 2
	Will the modelling inform the development of a thermal zoning ar	nd control strategy?	Yes	1	0.5	Option 2
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	1.07%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



No. of BREEAM credits available	1	Available contribution to overall score			1.07%
No. of BREEAM innovation credits available	No. of BREEAM innovation credits available 0 Minimum standards applical			tandards applicable	Yes
				Indicative credits	Shell & Cor
Assessment question/criteria		Response	Credits available	achieved	option?
Will all water systems be designed to comply with the relevant HSE Approved Code of Practi	ce and Guidance?	Yes			Option 2
Where humidification is to be provided, will a failsafe humidification sys		N/A	1	0.5	Option 2
Will a wholesome supply of accessible, clean and fresh drinking water be supplied f	for building users?	Yes			Option 2
Total indicative BREEAM credits achieved	0.5				
Total indicative contribution to overall building score	0.54%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level Pr	re-Assessment resul	t indicates the mini	imum standards for C	Outstanding level	
ments/notes:					



	No. of BREEAM credits available	2		Available contribution to overall score		2.14%
Pre-Assessment question/criteria	No. of BREEAM innovation credits available	0		Minimum standards applicable		No
	Will/has a suitably qualified acoustician be appointed to provide appropriat	riate design advice?	Response <b>No</b>	Credits available	Indicative credits achieved	Shell & Cor option?
	Will the building meet the relevant acoustic performance standards and te			2		N/A
	Total indicative BREEAM credits achieved  Total indicative contribution to overall building score	0.00%				
	Total indicative EREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



	No. of BREEAM credits available	2		Available contribution to overall score		
	No. of BREEAM innovation credits available 0		Minimum standards applicable			No
-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Cor option?
	Where external site areas are present, will safe access be designed for pede	strians and cyclists?	Yes	1	1	N/A
\	Will a suitably qualified security consultant be appointed and security considerat	ions accounted for?	No	1	0	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	1.07%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
mments/notes:						



ENERGY	Section Weighting	19.00%	Indicative Section Score	13.37%
ne01 Reduction	of CO <sub>2</sub> Emissions			
_	No. of BREEAM credits available	15	Available contribution to overall score	10.56%
	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?	Enter building per	formance data into the EneO1 calculator	
	non do you mon to docest the number of prize monetate dumerou for this locate	ziitei zaiiaii.g pei	and the line line and and the line of the	
ne01 Calculator				
ne01 Calculator				
ne01 Calculator				Chall 9 Care
ne01 Calculator	FneΩ1 Calculator and Key Performance Indicators			
ne01 Calculator	EneO1 Calculator and Key Performance Indicators	590		option?
ne01 Calculator	Building floor area	580	m2	
ne01 Calculator	Building floor area  Notional building energy demand	241.04	MJ/m2/annum	
Ene01 Calculator	Building floor area  Notional building energy demand  Actual building energy demand	241.04 152.69	MJ/m2/annum MJ/m2/annum	option?
ne01 Calculator	Building floor area  Notional building energy demand  Actual building energy demand  Notional building energy consumption	241.04 152.69 40.46	MJ/m2/annum MJ/m2/annum kWh/m2/annum	option?
ne01 Calculator	Building floor area  Notional building energy demand  Actual building energy demand	241.04 152.69	MJ/m2/annum MJ/m2/annum kWh/m2/annum kWh/m2/annum	option?
ne01 Calculator	Building floor area  Notional building energy demand  Actual building energy demand  Notional building energy consumption  Actual building energy consumption	241.04 152.69 40.46 26.11	MJ/m2/annum MJ/m2/annum kWh/m2/annum	option?
ne01 Calculator	Building floor area  Notional building energy demand  Actual building energy demand  Notional building energy consumption  Actual building energy consumption  Target Emission Rate (TER)	241.04 152.69 40.46 26.11 13.52	MJ/m2/annum MJ/m2/annum kWh/m2/annum kWh/m2/annum kgCO2/m2/annum	option?
Ene01 Calculator	Building floor area  Notional building energy demand  Actual building energy demand  Notional building energy consumption  Actual building energy consumption  Target Emission Rate (TER)  Building Emission Rate (BER)	241.04 152.69 40.46 26.11 13.52 8.87	MJ/m2/annum MJ/m2/annum kWh/m2/annum kWh/m2/annum kgCO2/m2/annum	option?
Ene01 Calculator	Building floor area  Notional building energy demand  Actual building energy demand  Notional building energy consumption  Actual building energy consumption  Target Emission Rate (TER)  Building Emission Rate (BER)  Building improvement over TER	241.04 152.69 40.46 26.11 13.52 8.87 34.00%	MJ/m2/annum MJ/m2/annum kWh/m2/annum kWh/m2/annum kgCO2/m2/annum	option?
Ene01 Calculator	Building floor area Notional building energy demand Actual building energy demand Notional building energy consumption Actual building energy consumption Target Emission Rate (TER) Building Emission Rate (BER) Building improvement over TER Demand Energy Performance Ratio (EPR)	241.04 152.69 40.46 26.11 13.52 8.87 34.00% 0.258	MJ/m2/annum MJ/m2/annum kWh/m2/annum kWh/m2/annum kgCO2/m2/annum	option?

What is the equivalent % of the building's 'regulated' energy consumption that will be 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'?



Total indicative BREEAM credits achieved	13	
Total indicative contribution to overall building score	9.15%	
Total indicative BREEAM innovation credits achieved	0	
Indicative minimum standard(s) leve	I Pre-Assessment res	sult indicates the minimum standards for Excellent level



	No. of BREEAM credits available	2		Available contribution to overall score		1.41%
	No. of BREEAM innovation credits available		Minimum standards applicable			Yes
					Indicative credits	Shell & Core
re-Assessment question/criteria			Response	Credits available	achieved	option?
	Will a BMS or sub-meters be specified to monitor energy use from major buildir	ng services systems?	Yes	1	1	N/A
	Will a BMS or sub-meters be specified to monitor energy use by tenant/build	ding function areas?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	2				
	Total indicative contribution to overall building score	1.41%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	Pre-Assessment resu	ılt indicates the mir	nimum standards for C	Outstanding level	
omments/notes:						



	No. of BREEAM credits available	1		Available contribution to overall score		
	No. of BREEAM innovation credits available		Minimum standards appli		tandards applicable	e No
re-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Cor option?
	Will external light fittings and controls be specified in accordance with the	e BREEAM criteria?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	0.70%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



	No. of BREEAM credits available	5		Available contribu	tion to overall score	3.52%
	No. of BREEAM innovation credits available	1		Minimum s	tandards applicable	Yes
re-Assessment question/criteria	No compliant feasibility study or renewable end	ergy supply contract	Response <b>No</b>	Credits available	Indicative credits achieved	Shell & Core option?
	The complaint reasonable of the remainder of	e.B) supp., couct	110		<u> </u>	,,,
	Additional BREEAM credits not achievable for abo	ove option selection		2	0	N/A
	Free cooling - credit not a	chievable (see note)	No	1	0	N/A
	Total indicative BREEAM credits achieved	0				
	Total indicative contribution to overall building score	0.00%				
	Total indicative BREEAM innovation credits achieved	0				
	Indicative minimum standard(s) level	Pre-Assessment resu	It indicates the mir	nimum standards for \	ery Good level	
omments/notes:						
omments/notes.						



No. of BREEAM credits available	N/A		Available contribut	tion to overall score	N/A
No. of BREEAM innovation credits available	N/A		Minimum s	tandards applicable	N/A
				Indicative credits	Shell & Core
-Assessment question/criteria		Response	Credits available	achieved	option?
			_		
Total indicative BREEAM credits achieved	N/A				
Total indicative contribution to overall building score	N/A				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	N/A				
nments/notes:					



No. of BREEAM credits available	2		Available contribu	tion to overall score	1.41%
No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	N/A
				Indicative credits	Shell & Co
Assessment question/criteria		Response	Credits available	achieved	option
Will a transportation system analysis be carried out to determine the optimum numbe	r and size of lifts?	Yes	1	1	N/A
Will three energy-efficient features offering the greatest potential energy savings be pa	irt of the system?	Yes	1	1	N/A
Total indicative BREEAM credits achieved	2				
Total indicative contribution to overall building score	1.41%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	N/A				
nments/notes:					



Indicative credits Shell	No. of BREEAM credits available	N/A		Available contribu	tion to overall score	N/A
Will the laboratory meet BREEAM's Best Practice Energy Practices in Laboratories criteria (table 6-2)? Will the laboratory meet BREEAM's Best Practice Energy Practices in Laboratories criteria (table 6-2)? Will the laboratory criteria item b) of table 6-2: Fan power? Will the laboratory criteria item d) of table 6-2: Fume cupboard volume flow rates? Will the laboratory meet criteria item e) of table 6-2: Energy recovery - heat? Will the laboratory meet criteria item e) of table 6-2: Energy recovery - heat? Will the laboratory meet criteria item e) of table 6-2: Energy recovery - cooling? Will the laboratory meet criteria item e) of table 6-2: Energy recovery - cooling? Will the laboratory meet criteria item h) of table 6-2: Free cooling? Will the laboratory meet criteria item i) of table 6-2: Cleanrooms? Will the laboratory meet criteria item j) of table 6-2: Cleanrooms? Will the laboratory meet criteria item j) of table 6-2: Diversity? Will the laboratory meet criteria item j) of table 6-2: Diversity? Will the laboratory meet criteria item k) of table 6-2: Diversity? Will the laboratory meet criteria item k) of table 6-2: N/A Total indicative BREEAM credits achieved N/A Total indicative BREEAM innovation credits achieved N/A	No. of BREEAM innovation credits available	N/A		Minimum s	tandards applicable	N/A
Will the laboratory meet criteria item b) of table 6-2: Fan power?  Will the laboratory criteria item c) of table 6-2: Fume cupboard volume flow rates?  Will the lab meet criteria item d) of table 6-2: Grouping / isolation of high filtration/ventilation activities?  Will the laboratory meet criteria item e) of table 6-2: Energy recovery - heat?  Will the laboratory meet criteria item f) of table 6-2: Energy recovery - cooling?  Will the laboratory meet criteria item g) of table 6-2: Grouping of cooling loads?  Will the laboratory meet criteria item h) of table 6-2: Free cooling?  Will the laboratory meet criteria item j) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Diversity?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative BREEAM innovation credits achieved  N/A		evices be specified	Response	Credits available		Shell & Core option?
Will the laboratory meet criteria item b) of table 6-2: Fan power?  Will the laboratory criteria item c) of table 6-2: Fume cupboard volume flow rates?  Will the lab meet criteria item d) of table 6-2: Grouping / isolation of high filtration/ventilation activities?  Will the laboratory meet criteria item e) of table 6-2: Energy recovery - heat?  Will the laboratory meet criteria item f) of table 6-2: Energy recovery - cooling?  Will the laboratory meet criteria item g) of table 6-2: Grouping of cooling loads?  Will the laboratory meet criteria item h) of table 6-2: Free cooling?  Will the laboratory meet criteria item j) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item j) of table 6-2: Diversity?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative BREEAM innovation credits achieved  N/A	Will the laboratory most DDFFAM's Doct Dractice Fragra, Practices in Laboratories	critoria (table 6.2)3				
Will the laboratory criteria item c) of table 6-2: Fume cupboard volume flow rates?  Will the lab meet criteria item d) of table 6-2: Grouping / isolation of high filtration/ventilation activities?  Will the laboratory meet criteria item e) of table 6-2: Energy recovery - heat?  Will the laboratory meet criteria item f) of table 6-2: Energy recovery - cooling?  Will the laboratory meet criteria item g) of table 6-2: Grouping of cooling loads?  Will the laboratory meet criteria item h) of table 6-2: Free cooling?  Will the laboratory meet criteria item j) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative BREEAM innovation credits achieved  N/A		-				
Will the lab meet criteria item d) of table 6-2: Grouping / isolation of high filtration/ventilation activities?  Will the laboratory meet criteria item e) of table 6-2: Energy recovery - heat?  Will the laboratory meet criteria item f) of table 6-2: Energy recovery - cooling?  Will the laboratory meet criteria item g) of table 6-2: Grouping of cooling loads?  Will the laboratory meet criteria item h) of table 6-2: Free cooling?  Will the laboratory meet criteria item j) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative Contribution to overall building score  N/A		-				
Will the laboratory meet criteria item e) of table 6-2: Energy recovery - heat?  Will the laboratory meet criteria item f) of table 6-2: Energy recovery - cooling?  Will the laboratory meet criteria item g) of table 6-2: Grouping of cooling loads?  Will the laboratory meet criteria item h) of table 6-2: Free cooling?  Will the laboratory meet criteria item i) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative contribution to overall building score  N/A  Total indicative BREEAM innovation credits achieved  N/A						
Will the laboratory meet criteria item g) of table 6-2: Grouping of cooling loads?  Will the laboratory meet criteria item h) of table 6-2: Free cooling?  Will the laboratory meet criteria item i) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  N/A	, , , , , , , , , , , , , , , , , , , ,	-				
Will the laboratory meet criteria item h) of table 6-2: Free cooling?  Will the laboratory meet criteria item i) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative contribution to overall building score  N/A  Total indicative BREEAM innovation credits achieved  N/A	Will the laboratory meet criteria item f) of table 6-2: Energy	recovery - cooling?				
Will the laboratory meet criteria item i) of table 6-2: Load responsiveness?  Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative contribution to overall building score  N/A  Total indicative BREEAM innovation credits achieved  N/A	•	_				
Will the laboratory meet criteria item j) of table 6-2: Cleanrooms?  Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  N/A  Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  N/A		_				
Will the laboratory meet criteria item k) of table 6-2: Diversity?  Will the laboratory meet criteria item l) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved  Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  N/A	•	_		-		
Will the laboratory meet criteria item I) of table 6-2: Room air-change rates?  Total indicative BREEAM credits achieved N/A  Total indicative contribution to overall building score N/A  Total indicative BREEAM innovation credits achieved N/A				-		
Total indicative contribution to overall building score N/A  Total indicative BREEAM innovation credits achieved N/A						
Total indicative contribution to overall building score N/A  Total indicative BREEAM innovation credits achieved N/A	Total indicative BREEAM credits achieved	N/A				
Total indicative BREEAM innovation credits achieved N/A						
,						
	Indicative minimum standard(s) level	•				
mments/notes:	Indicative minimum standard(s) level					



No. of BREEAM credits available	2		Available contribu	tion to overall score	1.41%
No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	No
			Significant		
re-Assessment question/criteria			majority		
which of the following will be present and likely to be a/the major contributor to 'unregulated' energy use:	,	Present	contributor	•	
Small power/	olug in equipment?	Yes	Yes		
	Swimming pool?	No			
C	ommunal laundry?	No			
IT interests	Data centre?	No	V		
II-Intensiv	e operation areas? Residential areas?	Yes No	Yes		
	Healthcare?	No			
Kitchen and	catering facilities?	Yes	No		
	,		-41		
		Indicative		Indicative credits	Shell & Co
		compliance?	Credits available	achieved	option?
Will the significant majority contributor(s) to 'unregulated' energy use (above) meet the	BREEAM criteria?	Yes	2	1	Option 2
	1				
Total indicative BREEAM credits achieved	0.70%				
Total indicative BREEAM credits achieved  Total indicative contribution to overall building score					
Total indicative contribution to overall building score					
Total indicative contribution to overall building score Total indicative BREEAM innovation credits achieved	N/A				
Total indicative contribution to overall building score					
Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  Indicative minimum standard(s) level	N/A				
Total indicative contribution to overall building score Total indicative BREEAM innovation credits achieved	N/A				
Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  Indicative minimum standard(s) level	N/A				
Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  Indicative minimum standard(s) level	N/A				



	No. of BREEAM credits available	N/A		Available contribu	tion to overall score	N/A
	No. of BREEAM innovation credits available	N/A		Minimum s	tandards applicable	N/A
re-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Cor option?
	Total indicative BREEAM credits achieved	N/A				
	Total indicative contribution to overall building score	N/A				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
ammants/natas						
omments/notes:						



RANSPORT	Section Weighting	8.00%	Indicative Section Score	7.11%
ra01 Public Transport Accessibility				
	No. of BREEAM credits available	3	Available contribution to overall score	2.67%
	No. of BREEAM innovation credits available	0	Minimum standards applicable	No
re-Assessment question/criteria		t-		
	building type category (for the purpose of Tra01 issue assessment)?			
What is	s the degree of public transport provision for the building's location?		of public transport, i.e. large urban/metropolitan city centre	
	Building's indicative Accessibility Index	18		
	Does the building have a dedicated bus service?			
	Total indicative BREEAM credits achieved	2		
		3		
	Total indicative contribution to overall building score	2.67%		
	Total indicative BREEAM innovation credits achieved	N/A		
	Indicative minimum standard(s) level	N/A		
Comments/notes:				
omments, notes.				



	No. of BREEAM credits available	1		Available contribut	tion to overall score	0.89%
	No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	No
re-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Core option?
	Will the building be in close proximity of and accessible to app	licable amenities?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	0.89%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



	What is the building type category (for the purpose of Tra03 issue assessment)?  Business - offices, Industrial  Indicative credits Sh  essment question/criteria  Will cycle storage spaces be provided?  Yes  2 1		tandards applicable			0	No. of BREEAM innovation credits available	
P-Assessment question/criteria  Will cycle storage spaces be provided? Will cyclist facilities be provided? Will cyclist facilities be provided? No  Total indicative BREEAM credits achieved Total indicative contribution to overall building score Total indicative BREEAM innovation credits achieved N/A	Indicative credits Shessment question/criteria Response Credits available achieved  Will cycle storage spaces be provided? Yes 2 1	edits Shell & Co		Industrial				
P-Assessment question/criteria  Will cycle storage spaces be provided? Will cyclist facilities be provided? Will cyclist facilities be provided? No  Total indicative BREEAM credits achieved Total indicative contribution to overall building score Total indicative BREEAM innovation credits achieved N/A	Indicative credits Shessment question/criteria Response Credits available achieved  Will cycle storage spaces be provided? Yes 2 1	edits Shell & Co		Industrial				
P-Assessment question/criteria  Will cycle storage spaces be provided? Will cyclist facilities be provided? Will cyclist facilities be provided? No  Total indicative BREEAM credits achieved Total indicative contribution to overall building score Total indicative BREEAM innovation credits achieved N/A	essment question/criteria  Response Credits available achieved  Will cycle storage spaces be provided?  Yes  1	redits Shell & Co			Business - offices, I	ssue assessment)?	What is the building type category (for the purpose of Tra03 i	
Will cycle storage spaces be provided?  Will cyclist facilities be provided?  Total indicative BREEAM credits achieved Total indicative contribution to overall building score Total indicative BREEAM innovation credits achieved  N/A	Will cycle storage spaces be provided? Yes 2 1		Indicative credits					
Will cyclist facilities be provided?  No  Total indicative BREEAM credits achieved 1 Total indicative contribution to overall building score Total indicative BREEAM innovation credits achieved N/A		d option?	achieved	Credits available	Response			e-Assessment question/criteria
Will cyclist facilities be provided?  Total indicative BREEAM credits achieved  Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  N/A	Will cyclist facilities be provided? No		1	2	Yes			
Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved  N/A		N/A	-		No	ities be provided?	Will cyclist faci	
Total indicative BREEAM innovation credits achieved N/A	Total indicative BREEAM credits achieved 1					1	Total indicative BREEAM credits achieved	
	Total indicative contribution to overall building score 0.89%					0.89%	Total indicative contribution to overall building score	
Indicative minimum standard(s) level N/A	Total indicative BREEAM innovation credits achieved N/A					N/A	Total indicative BREEAM innovation credits achieved	
	Indicative minimum standard(s) level N/A					N/A	Indicative minimum standard(s) level	
	nts/notes:							
	nts/notes:							
nments/notes:								Comments/notes:



N	o. of BREEAM credits available	2		Available contribut	tion to overall score	1.78%
No. of BREEA	M innovation credits available	0		Minimum s	tandards applicable	No
Built	ding type category (for the purp	ose of Tra04 issue)?	Business - offices, Ir	ndustrial		
	cative Accessibility Index (source		18			
					Indicative anadit-	Chall 0 C-
Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Co option?
Will the building meet BREEAM's maximum parking capaci	ity criteria for this building type/	'Accessibility Index?		2	2	N/A
	ative BREEAM credits achieved	2				
	oution to overall building score	1.78%				
	M innovation credits achieved	N/A				
Indicat	ive minimum standard(s) level	N/A				
ments/notes:						



	No. of BREEAM credits available	1		Available contribut	tion to overall score	0.89%
	No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	No
re-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Cor option?
	Will a transport plan based on site specific travel survey/assessm	ent be developed?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	0.89%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						
ymmenta, notesi						



WATER	Section Weighting	6.00%	Indicative Section Score	5.00%
Wat01 Water Consumption				
	No. of BREEAM credits available	5	Available contribution to overall score	3.33%
	No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes
				Shell & Core option?
	Select the level that corresponds closely to the target or likely water compo	onent specification?	Level 4 - Four credits	N/A
	Total indicative BREEAM credits achieved	4		
	Total indicative contribution to overall building score	2.67%		
	Total indicative BREEAM innovation credits achieved	0		
	Indicative minimum standard(s) level	Pre-Assessment res	ult indicates the minimum standards for Outstanding level	
Comments/notes:				
Commence; notes.				



No. of BREEAM credits available	1	Available contribution to overall score		0.67%	
No. of BREEAM innovation credits available	0		Minimum standards applicable		Yes
Assessment question/criteria		Response	Credits available	Indicative credits achieved	Shell & Core option?
Will there be a water meter on the mains water supply		Yes	1	1	N/A
Will metering/monitoring equipment be specified on the water supply to any relevant pl		Yes	-		
Will all specified water meters ha		Yes	4		
If the site/building has an existing BMS connection, will all pulsed meters be con	nected to the BIVIS?	Yes			
Total indicative BREEAM credits achieved	1				
Total indicative contribution to overall building score	0.67%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	Pre-Assessment resul	It indicates the mir	nimum standards for C	Outstanding level	
nments/notes:					



Wat03 Water Leak Detection and Prevention

	No. of BREEAM credits available	2		Available contribution to overall score		1.33%
	No. of BREEAM innovation credits available			Minimum standards applicable		No
					Indicative credits	Shell & Core
e-Assessment question/criteria			Response	Credits available	achieved	option?
	Will a mains water leak detection system be installed on the building's n	nains water supply?	Yes	1	1	N/A
	Will flow control devices be installed in each sa	nitary area/facility?	Yes	1	0.5	Option 2
	Total indicative BREEAM credits achieved	1.5				
	Total indicative contribution to overall building score	1.00%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						
·						



	No. of BREEAM credits available	1	Available contribution to overall		tion to overall score	e 0.67%
	No. of BREEAM innovation credits available	No	Minimum standards applicable			No
e-Assessment question/criteria		-	Response	Credits available	Indicative credits achieved	Shell & Co option?
	Will water efficient irrigation methods and/or vehicle wash systems (if rele	vant) be installed?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	0.67%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



MATERIALS	Section Weighting	12.50%		Indicative Section Score	9.90%
Wat01 Life Cycle Impacts					
mator the cycle impacts					
	No. of BREEAM credits available	5		Available contribution to overall score	5.21%
	No. of BREEAM innovation credits available	1		Minimum standards applicable	No
Pre-Assessment question/criteria					
	How do you wish to assess the number of BREEAM credits achi	ieved for this issue?	Define a target nun	nber of BREEAM credits to be achieved	
	Select the number of BREEAM credits being targeted	for the Mat01 issue	3	BREEAM Innovation credits	
	Total indicative BREEAM credits achieved	3			
	Total indicative contribution to overall building score	3.13%			
	Total indicative BREEAM innovation credits achieved	0			
	Indicative minimum standard(s) level	N/A			
Comments/notes:					
,					



No. of BREEAM credits available  No. of BREEAM innovation credits available	0	Available contribution to overall score  Minimum standards applicable			1.04% No
-Assessment question/criteria		Response	Credits available	Indicative credits achieved	Shell & Cor option?
Will ≥80% of all external hard landscaping and boundary protection achieve a Green Gui	de A or A+ rating?	Yes	1	1	N/A
Total indicative BREEAM credits achieved	1				
Total indicative contribution to overall building score	1.04%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	N/A				
mmonts/notes:					
mments/notes:					



# **BREEAM 2011 New Construction Pre-Assessment Estimator Mat03 Responsible Sourcing** No. of BREEAM credits available Available contribution to overall score 3.13% No. of BREEAM innovation credits available Minimum standards applicable Yes Pre-Assessment question/criteria How do you wish to assess the number of BREEAM credits achieved for this issue? Define a target number of BREEAM credits Select the number of BREEAM credits being targeted for the Mat03 issue 3 **BREEAM Innovation credits** Will all timber used on the project be sourced in accordance with the UK Govt's Timber Procurement Policy? Yes Total indicative BREEAM credits achieved 3 Total indicative contribution to overall building score 3.13% Total indicative BREEAM innovation credits achieved Indicative minimum standard(s) level Pre-Assessment result indicates the minimum standards for Outstanding level Comments/notes:



	No. of BREEAM credits available	2		Available contribut	tion to overall score	2.08%
	No. of BREEAM innovation credits available		Minimum standards applicable			No
					Indicative credits	Shell & Cor
Assessment question/criteria			Response	Credits available	achieved	option?
	Is the building targeting an insulating	index of 2 or more?	Yes	1	1	N/A
	Will the building's insulating materials be re	esponsibly sourced?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	2				
	Total indicative contribution to overall building score	2.08%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
ments/notes:						
e.resj riocesi						



No. of BREEAM credits available	available 1		Available contribution to overall score		1.04%
No. of BREEAM innovation credits available	0		Minimum standards applicable		N/A
				Indicative credits	Shell & Co
Assessment question/criteria		Response	Credits available	achieved	option?
Will suitable durability/protection measures be specified and installed to vulnerable area	s of the building?	Yes	1	0.5	Option 2
Total indicative BREEAM credits achieved	0.5				
Total indicative contribution to overall building score	0.52%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	N/A				
ments/notes:					



### **BREEAM 2011 New Construction Pre-Assessment Estimator** WASTE Section Weighting 7.50% **Indicative Section Score** 2.14% **Wst01 Construction Waste Management** No. of BREEAM credits available Available contribution to overall score 4.29% No. of BREEAM innovation credits available Minimum standards applicable Yes Pre-Assessment question/criteria How do you wish to assess the number of BREEAM credits achieved for this issue? Define a target number of BREEAM credits to be achieved Select the number of BREEAM credits being targeted for the Wst01 issue 0 **BREEAM Innovation credits** Total indicative BREEAM credits achieved 0 Total indicative contribution to overall building score 0.00% Total indicative BREEAM innovation credits achieved 0 Indicative minimum standard(s) level Pre-Assessment result indicates the minimum standards for Excellent level Comments/notes:



# **BREEAM 2011 New Construction Pre-Assessment Estimator** Wst02 Recycled Aggregates No. of BREEAM credits available Available contribution to overall score 1.04% No. of BREEAM innovation credits available Minimum standards applicable No Pre-Assessment question/criteria How do you wish to assess the number of BREEAM credits achieved for this issue? Define a target number of BREEAM credits to be achieved Select the number of BREEAM credits being targeted for the Wst02 issue **BREEAM Innovation credits** Total indicative BREEAM credits achieved 0 Total indicative contribution to overall building score 0.00% Total indicative BREEAM innovation credits achieved 0 Indicative minimum standard(s) level N/A Comments/notes:



	No. of BREEAM credits available	1		Available contribut	tion to overall score	1.04%
	No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	Yes
re-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Cor option?
	Will appropriate facilities for the storage of operational recyclable waste vo	lumes be provided?	Yes	1	1	N/A
	If relevant, will a static waste compactor(s) or baler(s) be		N/A			N/A
	If relevant, will a vessel for composting suitable organic waste be	specified/installed?	N/A			N/A
	Total indicative BREEAM credits achieved  Total indicative contribution to overall building score  Total indicative BREEAM innovation credits achieved	1 1.04% N/A				
	Indicative minimum standard(s) level	Pre-Assessment resu	t indicates the mini	mum standards for C	Outstanding level	
omments/notes:						



No. of BREEAM credits available	1	Available o		tion to overall score	1.07%
No. of BREEAM innovation credits available	0	Minimum standards applicable			No
				Indicative credits	Shell & Cor
ssessment question/criteria		Response	Credits available	achieved	option?
peculative floor or ceiling finishes are specified in the building		Yes	1	1	N/A
Total indicative BREEAM credits achieved	1				
Total indicative contribution to overall building score	1.07%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	N/A				
ments/notes:					
nents/notes.					



AND USE & ECOLOGY	Section Weighting	10.00%		Indicat	ive Section Score	4.00%
E01 Site Selection						
	No. of BREEAM credits available	2		Available contribut	ion to overall score	2.00%
	No. of BREEAM innovation credits available	No. of BREEAM innovation credits available 0	0		Minimum standards applicable	
					Indicative credits	Shell & Core
re-Assessment question/criteria		_	Response	Credits available	achieved	option?
Will at least 75% of t	he proposed development's footprint be located on previously bee		Yes	1	1	N/A
	Is the site deemed to be significan	tly contaminated?	No	1	0	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	1.00%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



	No. of BREEAM credits available	1		Available contribut	tion to overall score	1.00%
	No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	No
					Indicative credits	Shell & Cor
re-Assessment question/criteria			Response	Credits available	achieved	option?
	Can the land within the construction zone be defined as 'land of low		Yes	1	1	N/A
	Will all features of ecological value surrounding the construction zone/site bound	ary be protected?	Yes	-	_	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	1.00%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



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

#### Pre-Assessment question/criteria

What is the likely change in ecological value (plant species richness) as a result of the	sites development?	No negative change or improvement in plant species richness
Total indicative BREEAM credits achieved	2	
Total indicative contribution to overall building score	2.00%	
Total indicative BREEAM innovation credits achieved	N/A	
Indicative minimum standard(s) level	Pre-Assessment resu	ult indicates the minimum standards for Outstanding level

#### Comments/notes:



No. of BREEAM innovation credits availa e-Assessment question/criteria	able 0		Minimum s	tandards applicable	Nia
e-Assessment question/criteria				tandards applicable	No
e-Assessment question/criteria				Indicative credits	Shell & Cor
		Response	Credits available	achieved	option?
Will a suitably qualified ecologist be appointed to report on enhancing and	d protecting site ecology?	No	3	0	N/A
Will the suitably qualified ecologists general recommend	dations be implemented?				
What is the targeted/intended improvement in ecological value as a result of	of enhancement actions?				
Total indicative BREEAM credits achie	eved 0				
Total indicative contribution to overall building so					
Total indicative BREEAM innovation credits achie	eved N/A				
Indicative minimum standard(s) le	evel N/A				
mments/notes:					
mments/notes:					



No. of BREEAM credits available	2		Available contribut	tion to overall score	2.00%
No. of BREEAM innovation credits available	0		Minimum s	tandards applicable	No
			0 10 111	Indicative credits	Shell & Core
sessment question/criteria	1: 2255444: 2	Response	Credits available	achieved	option?
Will the building meet BREEAM's mandatory criteria for t Will a Biodiversity Champion be appointed to monitor/minimise impacts of site activiti		No	2	0	N/A
Will the contractor provide training for the site workforce on how to protect ecology of	,		†		
Will the contractor record actions to protect biodiversity and monitor their effectiveness du	ŭ , ,		1		
Will a new ecologically valuable habitat, appropriate to the loca	I area, be created?		]		
Where flora/fauna habitats exist on site, will the contractor programme site works to min	imise disturbance?		]		
Total indicative BREEAM credits achieved	0				
rotal maloutive Brizzi in oreales domeved					
Total indicative contribution to overall building score	0.00%				

Comments/notes:			

Indicative minimum standard(s) level

N/A



	No. of BREEAM credits available	3		Available contribut	cion to overall score	2.31%
	No. of BREEAM innovation credits available	0			tandards applicable	No
re-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Core option?
	Will refrigerant containing systems be installed in the	assessed building?	Yes	2	2	N/A
	Is the Global Warming Potential of the specified refrigerant(s) like	y to be 10 or less?	Yes			
	What is the target range Direct Effect Life Cycle CO₂eq. emissio	ns for the system?		kgCO2eq/kW coolth	capacity	
	Will a refrigerant leak detection and containment system be s	pecified/installed?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	3				
	Total indicative contribution to overall building score	2.31%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



### **BREEAM 2011 New Construction Pre-Assessment Estimator** Pol02 NO<sub>x</sub> Emissions No. of BREEAM credits available Available contribution to overall score 2.31% No. of BREEAM innovation credits available Minimum standards applicable No Shell & Core Pre-Assessment question/criteria option? Response Please enter the target/maximum NO<sub>x</sub> emission level for space heating/cooling system 44.00 mg/kWh N/A Total indicative BREEAM credits achieved 2 Total indicative contribution to overall building score 1.54% Total indicative BREEAM innovation credits achieved N/A N/A Indicative minimum standard(s) level Comments/notes:



No. of BREEAM credits available	5		Available contribut	ion to overall score	3.85%
No. of BREEAM innovation credits available	0	Minimum standards applicable			No
Pre-Assessment question/criteria		Response	Credits available	Indicative credits achieved	Shell & Core option?
What is the actual/likely annual probability of flooding fo	r the assessed site?	Low	2	2	N/A
Will a compliant Flood Risk Assessm	ent be undertaken?	Yes	2		N/A
Will the site meet the BREEAM criteria for peak rate su		No	1	0	N/A
Will the site meet the criteria for surface water run off volume, attenuation and/or		No	1	0	N/A
Will the site be designed to minimise watercourse pollution in accordance with the	e BREEAM criteria?	No	1	0	N/A
Total indicative BREEAM credits achieved  Total indicative contribution to overall building score	2 1.54%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	N/A				
Comments/notes:					



	No. of BREEAM credits available	1		Available contribu	tion to overall score	0.77%
	No. of BREEAM innovation credits available	0		Minimum standards applicable		No
re-Assessment question/criteria			Response	Credits available	Indicative credits achieved	Shell & Cor option?
	Will the external lighting be designed to redu	ice light pollution?	Yes	1	1	N/A
	Total indicative BREEAM credits achieved	1				
	Total indicative contribution to overall building score	0.77%				
	Total indicative BREEAM innovation credits achieved	N/A				
	Indicative minimum standard(s) level	N/A				
omments/notes:						



No. of BREEAM credits available	1		Available contribution to overall score		0.77%
No. of BREEAM innovation credits available	0	Minimum standards applicat		tandards applicable	No
				Indicative credits	Shell & Core
e-Assessment question/criteria		Response	Credits available	achieved	option?
Will there be, or is there noise-sensitive areas/buildings within 800m radius of	the development?	Yes	1	0	
Will a noise impact assessment be completed and, if applicable, noise attenuation m	neasures specified?	No			N/A
Total indicative BREEAM credits achieved	0				
Total indicative contribution to overall building score	0.00%				
Total indicative BREEAM innovation credits achieved	N/A				
Indicative minimum standard(s) level	N/A				
mments/notes:					
millents/notes.					



	No. of BREEAM innovation credits available	10		Available contribut	ion to overall score	10.00%
		20			tandards applicable	No
			Exemplary level		Indicative credits	
re-Assessment question/criteria			achieved	Credits available	achieved	
	Man01 Sustaina	able Procurement		1	0	
	Man02 Responsible Cons		No	1	0	
	Head	01 Visual Comfort	No	1	0	
		of CO2 Emissions	No	5	0	
	Ene04 Low and Zero Ca	O,	No	1	0	
	Ene05 Energy Effic		N/A	N/A	N/A	
		ater Consumption	No	1	0	
		Life Cycle Impacts	No	1	0	
	Mat03 Responsible Sou		No	1	0	
	Wst01 Construction Wa	_	No	1	0	
	Wst02 Rec	cycled Aggregates	No	1	0	
	Total indicative BREEAM credits achieved	0				
	Total indicative contribution to overall building score	0.00%				
	Indicative minimum standard(s) level	N/A				