



# POPLATRIA

BREEAM Assessment

ABERFELDY VILLAGE MASTERPLAN

# Greengage



# QΑ

# **Aberfeldy Village Masterplan - BREEAM Pre-Assessment**

Issue/Revision:	Draft	Final
Date:	September 2021	October 2021
Notes:	Draft Issue	Final Issue
Prepared by:	Ajjay Dhesi	Ajjay Dhesi
Signature:	tosi	tosi
Authorised by:	Liz Grove	Liz Grove
Signature:	Elizabeth Grove	Elizabeth Grove
File Reference: 551566eg17Sep21_BREEAM_P01		551566ad07Oct21_BREEAM_F01



### **CONTENTS**

1.0	INTRODUCTION	1
2.0	BREEAM	2
3.0	DEVELOPMENT PERFORMANCE	4
4.0	PROGRESS & NEXT STEPS	6
5.0	CONCLUSION	7
APPE	NDIX A - DETAILED CREDIT ASSUMPTIONS	8



### 1.0 INTRODUCTION

- 1.1 This BREEAM pre-assessment has been prepared by Greengage Environmental and is submitted in support of a hybrid planning application for the Aberfeldy Village Masterplan. The hybrid planning application is made in relation to the north of East India Dock Road (A13), east of the Blackwall Tunnel Northern Approach Road (A12) and to the south west of Abbot Road (the "Site") on behalf of The Aberfeldy New Village LLP' ("The Applicant"). The hybrid planning application is formed of detailed development proposals in respect of Phase A for which no matters are reserved ("Detailed Proposals"), and outline development proposals for the remainder of the Site, with all matters reserved ("Outline Proposals"). The Detailed Proposals and Outline Proposals together are referred to as the "Proposed Development".
- 1.2 The Proposed Development comprises the comprehensive redevelopment of the Site. The Proposed Development will provide new retail and workspace floorspace along with residential dwellings and the pedestrianisation of the A12 Abbott Road vehicular underpass to create a new east to west route. The Development will also provide significant, high quality public realm, including a new Town Square, a new High Street and a public park.
- 1.3 The purpose of the BREEAM pre-assessment is to assess the Proposed Development in terms of its achievement of the required BREEAM target.
- 1.4 The Proposed Development is targeting an 'Excellent' rating under the appropriate BREEAM scheme in line with Policy D.ES7 of the Tower Hamlets Local Plan 2031 (2020).
- 1.5 This BREEAM Pre-Assessment report presents a framework of credits to target scores of 73.32% and 72.44% for the retail and workspace units respectively, equating to a BREEAM 'Excellent' rating.
- 1.6 The assessment strategy is summarised within **Section 3.0** of this report and the full detail is provided within **Appendix A**.



### 2.0 BREEAM

- 2.1 The Building Research Establishment's Environmental Assessment Method (BREEAM) is a nationally recognised means of reviewing and improving the environmental performance of buildings.
- 2.2 The BREEAM UK New Construction 2018 scheme can be used to assess the environmental life cycle impacts of new non-domestic buildings at the design and construction stages. The proposed commercial units are classed as 'New Construction' as they are (part of) new standalone structures that will come into use for the first time upon completion of the works.
- 2.3 Used as a design tool, BREEAM will assess the environmental performance of new build buildings and refurbishments, providing a framework for improvement and an auditable demonstration of good design practice.

### **BREEAM CATEGORIES**

- 2.4 BREEAM considers key global and local environmental issues and the internal environment for building occupants under various categories, covering:
  - **Management** rewards good construction site practices, provision of information to building occupants and project management;
  - Health & Wellbeing promotes a healthy internal and external environment;
  - **Energy** rewards energy efficiency and renewable energy generation;
  - Transport encourages locations with good access to and improvement of sustainable transport options;
  - Water promotes water efficiency and water recycling;
  - Materials rewards the lifecycle consideration and responsible sourcing of materials;
  - Waste encourages good construction and operational waste management practices;
  - Land Use & Ecology encourages ecological enhancements; and
  - **Pollution** promotes measures to reduce air and water pollution.



### **BREEAM RATINGS**

2.5 BREEAM rating benchmarks, as set out below, enable comparison of building performance against typical sustainability standards.

Table 2.1 BREEAM Ratings and Percentage Score

Rating	Percentage Score
UNCLASSIFIED	<30%
PASS	≥30%
GOOD	≥45%
VERY GOOD	≥55%
EXCELLENT	≥70%
OUTSTANDING	≥85%

2.6 It is recommended that a score of around 2-4% above the minimum score is aimed for during the design stages and achieved at the final certification stage. This is to ensure that if a credit was lost or disputed and revoked during design progression or third party BRE certification, the target rating would still be robustly achieved.

### MINIMUM RATING REQUIREMENT CREDITS

- 2.7 Under certain categories, there are minimum credit requirements that must be achieved before a particular BREEAM rating can be awarded. All other credits are flexible.
- 2.8 The following minimum standards are required to reach the targeted 'Excellent' rating:

Table 2.2 BREEAM New Construction 2018 'Excellent' Minimum Standards

Credit	Minimum standard
Man 03: Responsible construction practices	One credit (responsible construction management)
Ene 01: Reduction of energy use and carbon emissions	Four credits (Energy performance or operational energy consumption)
Wat 02: Water monitoring	Criterion 1 only
Mat 03: Responsible sourcing of materials	Criterion 1 only
Wst 03: Operational waste	One credit



### 3.0 DEVELOPMENT PERFORMANCE

- 3.1 The commercial spaces have been assessed against the BREEAM New Construction 2018 shell only 'retail' use class methodology for the Phase A, B & D retail units and shell only 'office' use class for the Phase B-D workspace units.
- 3.2 The pre-assessment BREEAM scores that are targeted for the development are 73.32% for the retail units and 72.44% for the workspace units, which are both equivalent to a BREEAM rating of 'Excellent' and include all required minimum standards.
- 3.3 As shown in Table 2.1, the percentage score required for a BREEAM 'Excellent' rating is 70%. The scores of 73.32% and 72.44% are therefore above this threshold and incorporate the recommended 2-4% buffer. It is anticipated that further credits will be reviewed and targeted where feasible at the detailed design stages.
- 3.4 A summary of the current pre-assessment BREEAM strategies is shown Table 3.1 & 3.2. A detailed breakdown of the targeted BREEAM credits is presented in **Appendix A** of this report.

Table 3.1 Summary of BREEAM Category Scores - Phase A, B & D retail units

BREEAM category	Credits available	Credits targeted	Weighting (%)	Category score (%)		
Management	15	11	12.00	8.80		
Health & Wellbeing	8	4	7.00	3.50		
Energy	13	7	9.50	5.12		
Transport	12	7	14.50	8.46		
Water	2	2	2.00	2.00		
Materials	14	13	22.00	20.43		
Waste	10	8	8.00	6.40		
Land Use & Ecology	13	10	19.00	14.62		
Pollution	6	4	6.00	4.00		
Innovation	10	0	10.00	0		
TOTAL	73.32%					
TARGETED RATING Excelle						



Table 3.2 Summary of BREEAM Category Scores - Phase B-D workspace units

BREEAM category	Credits available	Credits targeted	Weighting (%)	Category score (%)
Management	15	11	12.00	8.80
Health & Wellbeing	8	3	7.00	2.63
Energy	13	7	9.50	5.12
Transport	12	7	14.50	8.46
Water	2	2	2.00	2.00
Materials	14	13	22.00	20.43
Waste	10	8	8.00	6.40
Land Use & Ecology	13	10	19.00	14.62
Pollution	6	4	6.00	4.00
Innovation	10	0	10.00	0
TOTAL		72.44%		
TARGETED RATING		Excellent		



### 4.0 PROGRESS & NEXT STEPS

- 4.1 BREEAM pre-assessment workshops were held on 3<sup>rd</sup> December 2020 and 15<sup>th</sup> April 2021 with key members of the design team including the architect, M&E engineer, structural engineer and BREEAM AP. During the workshops key design principles and associated credit achievement were discussed as well as risks and opportunities for credit achievement.
- 4.2 The most significant risk at this stage is late action on early-stage credits that would prohibit a particular feature being included within the design if not considered at this stage.
- 4.3 The early-stage credits/items targeted are detailed within Table 4.1 below, which demonstrates the progress that has been made against each credit.

Table 4.1 BREEAM early-stage credit progress

Credit	Completion Stage	Progress		
Man 01 – Project brief and design	Concept design	Project delivery and stakeholder consultation has been undertaken throughout the design progression. Greengage appointed as BREEAM AP.		
Ene 04 – Low carbon design Concept design		Low zero carbon feasibility study will be completed as part of energy assessment		
Tra 01 – Transport assessment and travel plan	Concept design	Transport assessment undertaken as part of planning application.		
Mat 01 - Environmental impacts from construction products - Building life cycle assessment (LCA)	Prior to planning application	LCA modelling is to being produced by Greengage		
Mat 03 – Responsible sourcing of construction products	Concept design	In line with the BRE Green Guide to Specification, environmentally friendly and responsibly sourced materials will be specified where possible.  Final procurement plan will be produced by contractor.		
Wst 01 – Construction waste management Concept design		Pre-demolition audit will be done after planning submission.		



Wst 05 – Adaptation to climate change	Concept design	Evidence for this credit is being completed by each relevant member of the team for RIBA stages 1 and 2		
Wst 06 – Design for disassembly and adaptability	Concept design	The circular economy statement covers many of these areas.		
Mat 06 – Material efficiency	All RIBA stages	The circular economy statement covers many of these areas.		
LE02-LE05 – Land use and ecology	Preparation & brief	Greengage appointed as Suitably Qualified Ecologist. Survey has been completed and recommendations produced.		

4.4 During the next phases of design progression, the BREEAM strategy should be continually reviewed to ensure all target credits can still be achieved with the design or if any additional credits can be picked up as greater detail on certain building elements is established.

### 5.0 CONCLUSION

- This BREEAM Pre-Assessment report has set out a pathway to show how the proposed development could achieve the required 'Excellent' rating. The proposed strategy currently achieves scores of **73.32%** & **72.44%** for the retail and workspace units respectively, which represents an 'Excellent' rating and provides the required buffer over the scoring threshold.
- 5.2 Key actions required at the early project stages have been identified and appointments made where necessary to ensure the required credits can be achieved.
- 5.3 Following this Pre-Assessment report, a BREEAM Design Stage and eventually Post-Construction Stage Assessment would be required in order to gain full BREEAM certification.
- 5.4 Appendix A provides the detailed BREEAM credit assumptions for the Proposed Development.



### **APPENDIX A - DETAILED CREDIT ASSUMPTIONS**

Project Name	Aberfeldy Village, London
Project Number	551566
Date	15/10/2021

Project Notes:

BREEAM 2018 New Construction
COMMERCIAL
SHELL ONLY



Date		15/10/2021		SHELL ONLY			Greengage	
Targeted B	REEAM Rating	EXCELLENT	73.32%				o Creerigage	
Category	Credit ID	Credit Name	Credit(s) Available	Proposed Scenario	Responsibility	Time critical	Credit Issue	
			1	1	Architect/Project Manager	Concept Design	Project Delivery Consultation A meeting(s) undertaken between key project delivery stakeholders/project team, identifying roles, responsibilities and contributions for key phases of project delivery.	
			1	1	Project manager / Planning Consultant	Concept Design - Technical Design	Stakeholder Consultation (third parties) - All relevant interested parties (building users, existing community, partnerships and networks) have been consulted by the design team Stakeholder contributions and consultation outcomes have influenced Initial Project Brief and Concept Design Consultation feedback has been given to, and received by, all relevant parties prior to completion of detailed design.	
	Man 01	Project Brief and Design	1	1	Client / BREEAM AP	Concept Design	BREEAM AP (Concept Design) Pre-requisite: Project team, including client, formally agree strategic performance targets early in design process.  AP appointed to work with team to maximise project's performance against BREEAM throughout Concept Design, monitor progress against targets, identify risks & opportunities, provide feedback, monitor/coordinate evidence generation.	
			1	1	Client / BREEAM AP	Concept Design & Developed Design	BREEAM AP (Developed Design) Pre-requisite: Project team, including client, formally agree strategic performance targets early in design process. BREEAM AP (Concept Design) credit must be achieved first. AP is appointed to work with team to maximise project's performance against BREEAM throughout Developed Design, monitor progress against targets, identify risks & opportunities, provide feedback, monitor/coordinate evidence generation.	
			2	0		Concept Design	Elemental Life Cycle Cost (LCC) Outline entire asset elemental life cycle cost plan carried out.	
Management	Man 02	Life cycle cost and service life planning	1	0	Cost Consultants/ Client	Technical Design	Component level life cycle costing (LCC) In line with PD 156865:2008 & includes (where present): - Envelope, e.g. cladding, windows, and/or roofing - Services, e.g. heat source cooling source, and/or controls - Finishes, e.g. walls, floors and/or ceilings - External spaces, e.g. alternative hard landscaping, boundary protection.  Examples of how the LCC has influenced the design must be given.	
= <u>=</u>			1	1			Capital Cost Reporting Report capital cost in £/sqm GIFA. (Predicted cost at design stage and confirmation at PC) Capital cost includes construction (inc. prep, materials, equipment, labour); site management; construction financing; insurance & taxes; inspection & testing	
			✓	<b>√</b>			Pre-requisite - All timber and timber-based products used during construction are 'legal and sustainable timber'.	
			1	1			Environmental Management All parties who control the site site (principal contractor, demo-contractor) operate EMS (ISO14001 or equivalent) for all main operations and best practice pollution prevention in accordance with Pollution Prevention Guidelines PPG6.	

**BREEAM New Construction (2018) Pre-assessment Summary Tracker** Project Notes: **Project Name** Aberfeldy Village, London Greengage BREEAM 2018 New Construction **Project Number** 551566 COMMERCIAL SHELL ONLY Date 15/10/2021 **Targeted BREEAM Rating EXCELLENT** 73.32% BREEAM AP (site) Pre-requisite: Client and contractor formally agree performance targets. BREEAM AP is appointed to assist with maximising performance, go beyond design intent, monitor Construction progress against targets, identify risks/opportunities, provide feedback, coordinate generation of Responsible construction practices Contractor evidence. Responsible construction management One credit - achieve applicable items in responsible construction management table Two credits - achieve the above plus six additional items 2 2 Table items include: vehicle movement, pollution management, tidiness, health & wellbeing, security, training and reporting. CCS will cover majority of the above **Monitoring of Construction Site Impacts** 2 2 Individual appointed to record the utility consumption (energy & water) and transport of construction materials & waste to/from site. Targets must be set and monitored. Testing and inspecting building fabric Thermographic survey and airtightness testing. Commissioning and handover 0 Contractor / M&E **Total Cred** 15 0.80% 11 **Per Credit** 12.00% 8.80% 2 2% daylight factor across 80% NIFA. Calculations required to confirm feasibility. 1 95% of floor area in 95% of spaces is within 8m of an external wall with window providing Visual Comfort Architect/ M&E adequate view out and window/opening must be ≥ 20% of the surrounding wall area. Internal and External lighting levels, Zoning and Controls (External lighting only for shell External lighting to required illuminance levels (where applicable) including SLL Code for Lighting, CIBSE Lighting Guide 5 & 7 and BS EN 12464. **Indoor Ambient Noise** The building meets the appropriate acoustic performance standards and testing requirements for Health and Wellbeing 0 Acoustic performance Acoustician the building type. Indoor ambient noise in line with Section 7 of BS 8233:2014 Security of Site and Building Suitably qualified security specialist (SQSS) conducts an evidence-based Security Needs 1 0 Architect Security Concept Design Assessment (SNA) including visual audit and the recommendations implemented. Safe access Dedicated cycle paths Dedicated/safe footpaths Pedestrian drop off areas providing direct access to footpaths Architect Delivery areas not accessed through general parking areas. Dedicated parking/waiting area for goods vehicles separate to manoeuvring area Safe and healthy surroundings Parking/turning designed for simple manoeuvring.

0

Architect

1

0.88%

Providing building users with external amenity area - outdoor, landscaped, appropriate seating,

non-smoking, avoids noise disturbance.

Project Name	Aberfeldy Village, London		
Project Number	551566		BR CC
Date	15/10/2021		SH

Project Notes:

BREEAM 2018 New Construction
COMMERCIAL
SHELL ONLY



Date		15/10/2021		U CIECILIZA E			
Targeted BREEAM Rating		EXCELLENT	73.32%				o Greenigage
	Per Credit	Section Score	7.00%	3.50%			
	Ene 01	Reduction of Energy Use and Carbon Emissions	9	5	M&E		Energy Performance Based on energy performance BRUKL document Minimum 4 credits for Excellent
	Ene 03	External Lighting	1	1	M&E		External Lighting Average initial luminous efficacy of external light fittings is not less than 70 luminaire lumens per circuit Watt. External light fittings automatically controlled for prevention of operation during daylight hours and presence detection in areas of intermittent pedestrian traffic.
Energy			1	0		Concept Design	Passive Design Analysis Thermal modelling credit under Hea 04 has been achieved. Identify opportunities for passive design solutions by Concept Design stage Implement passive design measures and quantify reduced total energy demand and CO2 emissions
	Ene 04	Low Carbon Design	1	0	M&E	Concept Design	Free Cooling Analysis of free cooling and implementation opportunities within passive design analysis
			1	1		Concept Design	Low Zero Carbon Feasibility Study LZC study by energy specialist. LZC technology specified in line with feasibility study. Quantify reduced regulated CO2 emissions.
	0.73%	Total Credit	13	7			
	Per Credit	Section Score	9.50%	5.12%			
	Tra 01	Transport assessment and travel plan	2	2	Transport consultant		Travel Plan Developing a travel plan, based upon the findings set out within a travel assessment/statement, incorporating the sustainable measures into the design.
Transport	Tra 02	Sustainable transport measures	10	5	Transport consultant / Architect		Transport options implementation Tra 01 is pre-requisite Identify sustainable transport options, award credits based on AI and number of options. Measures include - improvement to pedestrian routes, cycle storage, cycle facilities, existing amenities
	1.21%	Total Credit	12	7			
	Per Credit	Section Score	14.50%	8.46%			
W	Wat 02	Water Monitoring	1	1	M&E		Specification of water meter on mains - Sub-meters connected to BMS - Pulsed water meter. OR infrastructure to provide the above if capped services are provided.
Water	Wat 03	Water Leak Detection	1	1	M&E		Leak Detection System Leak detection system capable of detecting major leak on mains.
	1.00%	Total Credit	2	2			
	Per Credit	Section Score	2.00%	2.00%			
	Mat 01	Environmental impacts from construction products - Building life cycle assessment (LCA)	6	6	Architect	Prior to planning application	Superstructure Building LCA options appraisal of 2-4 significantly different superstructure design options & comparison to benchmark at Concept Design, submit pror to planning application Building LCA options appraisal of 2-3 significantly different superstructure design options & comparison to benchmark at Technical Design.

Project Name		/		Project Notes:  BREEAM 2018 New Construction						
Project	Number	551566		BREEAM 2018 New Construction  COMMERCIAL						
Da	ate	15/10/2021		SHELL ONLY			( ) ( reendade			
Targeted BR	EEAM Rating	EXCELLENT	73.32%				Greengage			
		`	1	1	Architect	Prior to planning application	Substructure and hard landscaping options appraisal during Concept Design LCA options appraisal on a combination of at least 6 different substructure or hard landscaping design options (at least 2 of each). Submit prior to planning application.			
	Mat 02	Environmental impacts from construction products - Environmental Product Declarations (EPD)	1	0	Architect		Specification of products with a recognised environmental product declaration (EPD)  Total EPD points score of at least 20			
			✓	<b>✓</b>			Mandatory - Pre-requisite - All timber used must be 'legal' and 'sustainable' as per UK Government Timber Procurement Policy"			
_	Mat U3	Responsible sourcing of construction	1	1	Architect/ Contractor	Concept Design	Enabling Sustainable Procurement Contractor sources materials in accordance with a Sustainable Procurement Plan (SPP).			
Materials		products	3	3	Contractor		Responsible Sourcing of Materials One credit - Superstructure & >10% of points Two/three credits - internal finishes and substructure & hard landscaping & >20% or >30%			
	Mat 05	Designing for Durability and Resilience	1	1	Architect		Protecting Vulnerable Parts of the Building from Damage.  Design and specification measures to limit material degradation due to accidental/malicious damage.  Protecting exposed parts of the building from material degradation  Exposed building elements designed to limit degradation due to environmental factors through appropriate quality standard or a detailed assessment of the element's resilience.  Convenient access to roof and facade for cleaning/repair and design roof to prevent water damage/ingress.			
	Mat 06	Material Efficiency	1	1	Architect/ Contractor	All design stages from Preparation & Brief	Material Efficiency Opportunities and measures to optimise the use of materials in building design, procurement, construction, maintenance and end of life have been identified.  Measures must be implemented and targets/actual material efficiencies achieved reported.			
	1.57%	Total Credit	14	13						
	Per Credit	Section Score	22.00%	20.43%	Demolition contractor / Architect	Concept Design	Pre-demolition audit Pre-demo audit carried out at Concept Design and referred to in RMP.			
	Wst 01	Construction Waste Management	3	2			Construction Resource Efficiency - Construction Resource Management Plan (CRMP) ≤7.5m3 (≤6.5 tonnes) per 100 sqm GIFA of non-hazardous construction waste generated.			
			1	1	Contractor		Diversion of Waste from Landfill Non-Demo - 70% Volume / 80% Tonnage Demolition - 80% Volume / 90% Tonnage			
	Wst 02	Use of recycled and sustainably sourced aggregates	1	1	Contractor / Structural Engineer		Project sustainable aggregate points Pre-requisite - pre-demo audit if applicable. Identify all aggregates including quantity, source, distance travelled.			
Waste	Wst 03	Operational Waste	1	1	Architect		Operational waste  Dedicated space to cater for segregation and storage of operational recyclable waste volumes generated. Space is clearly labelled, accessible, of appropriate capacity			

	, ,	2	
Project Name	Aberfeldy Village, London		Project Notes:
Project Number	551566	BREEAM 2018 New Construction  COMMERCIAL	
Date	15/10/2021	SHELL ONLY	
Targeted BREFAM Rating	FXCFLIENT	73 32%	



Project Number				COMMERCIAL			
Da	ate	15/10/2021	SHELL ONLY				
Targeted BR	REEAM Rating	EXCELLENT	73.32%				Greengage
	Wst 05	Adaptation to Climate Change	1	1	Architect / M&E / Structural Engineer	Concept Design & Technical Design	Resilience of structure, fabric, building services and renewables installation Climate change adaptation strategy appraisal Develop recommendations based on appraisal Provide update during technical design on implementation of recommendations
			1	1	Architect / Structural Engineer	Concept Design	Design for disassembly and functional adaptability - recommendations - Study to explore ease of disassembly and functional adaptation potential of different designs - Develop recommendations and solutions by end of Concept Design
	Wst 06	Design for disassembly and adaptability	1	0	Architect / Structural Engineer	Concept Design	Disassembly and fuunctional adaptability - implementation Update during Technical Design on implementation of recommendations or solutions and any changes. Produce building adaptability and disassembly guide for prospective tenants.
	0.80%	Total Credit	10	8			
	Per Credit	Section Score	8.00%	6.40%			
	LE 01	Site Selection	1	1	Architect		Previously occupied land At least 75% of the proposed development's footprint on an area of land which has previously been developed.
	LL 01		1	0	Contaminated Land Specialist		Contaminated Land Land deemed to be contaminated and subsequently remediated
	LE 02	Ecological risks and opportunities	2	2	Ecologist	Preparation & Brief	Survey and evaluation Pre-requisite - assessment route determined using GN34. Compliance against legislation monitored. Survey & evaluation by ecologist to determine baseline and ecological outcomes.
L	LE 03	Managing impacts on ecology	1	1	Ecologist	Concept Design	Planning and measures on-site Roles & responsibilities defined. Site preparation to optimise benefits. Collaboration with stakeholders, solutions implemented.
Land Use a	LL 03		2	2	Ecologist	Concept Design	Managing negative impacts  Negative impacts from construction managed according to hierarchy (2 credits = no overall loss of ecological value).
and Ecology	LE 04	Ecological change and enhancement	1	1	Ecologist /	Concept Design	Ecological enhancement Stakeholder liaison solutions and measures implemented in a way that enhances ecological value on site as priority. Data provided to local environmental records centre
У	LE 04		3	1	Contractor	Concept Design	Change and enhancement of ecology Calculate change in ecological value to award credits
	LE 05	Long term ecology management and maintenance	1	1	Ecologist / Contractor		Management and maintenance throughout the project Parts of LE04 are pre-requisite. Monitoring and reporting on project outcomes. Section on ecology in tenant/building owner information
		ппаппенапсе	1	1	Ecologist		Landscape and ecology management plan Plan developed in accordance with BS 42020:2013 covering first five years after completion.
	1 46%	Total Credit	13	10	11		

Project Name	Aberfeldy Village, London	
Project Number	551566	
Date	15/10/2021	

Project Notes:

BREEAM 2018 New Construction
COMMERCIAL
SHELL ONLY



Date		13/10/2021	Ulterigage					
Targeted BF	REEAM Rating	EXCELLENT	73.32%			<u> </u>		
	Per Credit	Section Score	19.00%	14.62%				
	Pol 03	Flood and surface water management	2	2		Pre-requisite - appropriate consultant appointed Flood Resilience 2 Credits for low flood risk or 1 Credit for medium / high flood risk		
Pol			2	0	Flood / Drainage Consultant	Surface water run-off Pre-requisite- bespoke surface water run-off design solutions - Peak rate of run-off has 30% improvement for developed site compared to pre-developed for 1 and 100 yr return events. Include climate change allowance. (1 credit) - Flooding of property will not occur in the event of local drainage system failure and use of SuDS to ensure post development runoff volume no greater than pre-development. (1 credit)		
Pollution			1	1		Minimising Water Course Pollution  No discharge from site for rainfall up to 5mm.  Appropriate level of pollution prevention using SuDS.  Oil separators.		
	Pol 04	Reduction of Night Time Light Pollution	1	1	M&E	Night Time Light Pollution  External lighting strategy designed in compliance with ILP Guidance Notes for the Reduction of Obtrusive Light, 2011.  All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00.		
	1.00%	Total Credit	6	4				
	Per Credit	Section Score	6.00%	4.00%				
	Man 03	Responsible Construction Practices	1	0	Contractor			
	Hea 01	Visual comfort	2	0	M&E			
	Hea 02	Indoor air quality	1	0				
	Hea 06	Security	1	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				
nn	Wst 01	Construction Site Waste Management	1	0				
ova	Wst 02	Recycled Aggregates	1	0				
Innovation	Wst 05	Adaptation to Climate Change	1	0	Energy Modeller / M&E / Architect / Structures			
	LE 02	Identifying and understanding the risks and opportunities for the project	1	0	Ecologist / Landscape Architect / Structures			
	LE 04	Change & enhancement of ecological value	1	0	Ecologist / Landscape Architect			
	1.00%	Total Credit	10	0				
	Per Credit	Section Score	10.00%	0.00%				
		Overall Credits	103.00	66.00				
		Final BREEAM Score	110.00%	73.32%				
		BREEAM Rating	-	EXCELLENT				

Project Name	Aberfeldy Village, London
Project Number	551566
Date	15/10/2021

Project Notes:

BREEAM 2018 New Construction
WORKSPACE UNITS
SHELL ONLY



Date		15/10/2021		SHELL ONLY			Greengage	
Targeted E	BREEAM Rating	EXCELLENT	72.44%				o Creerigage	
Category	Credit ID	Credit Name	Credit(s) Available	Proposed Scenario	Responsibility	Time critical	Credit Issue	
			1	1	Architect/Project Manager	Concept Design	Project Delivery Consultation A meeting(s) undertaken between key project delivery stakeholders/project team, identifying roles, responsibilities and contributions for key phases of project delivery.	
			1	1	Project manager / Planning Consultant	Concept Design - Technical Design	Stakeholder Consultation (third parties) - All relevant interested parties (building users, existing community, partnerships and networks) have been consulted by the design team Stakeholder contributions and consultation outcomes have influenced Initial Project Brief and Concept Design Consultation feedback has been given to, and received by, all relevant parties prior to completion of detailed design.	
	Man 01	Project Brief and Design	1	1	Client / BREEAM AP	Concept Design	BREEAM AP (Concept Design) Pre-requisite: Project team, including client, formally agree strategic performance targets early in design process. AP appointed to work with team to maximise project's performance against BREEAM throughout Concept Design, monitor progress against targets, identify risks & opportunities, provide feedback, monitor/coordinate evidence generation.	
			1	1	Client / BREEAM AP	Concept Design & Developed Design	BREEAM AP (Developed Design) Pre-requisite: Project team, including client, formally agree strategic performance targets early in design process. BREEAM AP (Concept Design) credit must be achieved first. AP is appointed to work with team to maximise project's performance against BREEAM throughout Developed Design, monitor progress against targets, identify risks & opportunities, provide feedback, monitor/coordinate evidence generation.	
		Life cycle cost and service life planning	2	0		Concept Design	Elemental Life Cycle Cost (LCC) Outline entire asset elemental life cycle cost plan carried out.	
Management	Man 02		1	0	Cost Consultants/ Client	Technical Design	Component level life cycle costing (LCC) In line with PD 156865:2008 & includes (where present): - Envelope, e.g. cladding, windows, and/or roofing - Services, e.g. heat source cooling source, and/or controls - Finishes, e.g. walls, floors and/or ceilings - External spaces, e.g. alternative hard landscaping, boundary protection.  Examples of how the LCC has influenced the design must be given.	
ent			1	1			Capital Cost Reporting Report capital cost in £/sqm GIFA. (Predicted cost at design stage and confirmation at PC) Capital cost includes construction (inc. prep, materials, equipment, labour); site management; construction financing; insurance & taxes; inspection & testing	
			<b>√</b>	✓			Pre-requisite - All timber and timber-based products used during construction are 'legal and sustainable timber'.	
			1	1			Environmental Management All parties who control the site site (principal contractor, demo-contractor) operate EMS (ISO14001 or equivalent) for all main operations and best practice pollution prevention in accordance with Pollution Prevention Guidelines PPG6.	

### BREEAM New Construction (2018) Pre-assessment Summary Tracker Project Name Aberfeldy Village, London

Project Notes: BREEAM 2018 New Construction



Project Number		551566	BREEAM 2018 New Construction WORKSPACE UNITS				
D	ate	15/10/2021		SHELL ONLY			• Greengage
Targeted BREEAM Rating		EXCELLENT	72.44%				Greenigage
	Man 03	Responsible construction practices	1	1	Contractor	Construction	BREEAM AP (site) Pre-requisite: Client and contractor formally agree performance targets. BREEAM AP is appointed to assist with maximising performance, go beyond design intent, monitor progress against targets, identify risks/opportunities, provide feedback, coordinate generation of evidence.
			2	2			Responsible construction management  One credit - achieve applicable items in responsible construction management table Two credits - achieve the above plus six additional items Table items include: vehicle movement, pollution management, tidiness, health & wellbeing, security, training and reporting.  CCS will cover majority of the above
			2	2			Monitoring of Construction Site Impacts Individual appointed to record the utility consumption (energy & water) and transport of construction materials & waste to/from site. Targets must be set and monitored.
	Man 04	Commissioning and handover	1	0	Contractor / M&E		Testing and inspecting building fabric Thermographic survey and airtightness testing.
	0.80%	Total Credit	15	11			
	Per Credit	Section Score	12.00%	8.80%			
			2	0			Daylighting 2% daylight factor across 80% NIFA. Calculations required to confirm feasibility.
	Hea 01	Visual Comfort	1	0	Architect/ M&E		View Out 95% of floor area in 95% of spaces is within 8m of an external wall with window providing adequate view out and window/opening must be ≥ 20% of the surrounding wall area.
			1	1			Internal and External lighting levels, Zoning and Controls (External lighting only for shell only) -External lighting to required illuminance levels (where applicable) including SLL Code for Lighting, CIBSE Lighting Guide 5 & 7 and BS EN 12464.
Health :	Hea 05	Acoustic performance	1	0	Acoustician		Indoor Ambient Noise The building meets the appropriate acoustic performance standards and testing requirements for the building type. Indoor ambient noise in line with Section 7 of BS 8233:2014
Health and Wellbeing	Hea 06	Security	1	0	Architect	Concept Design	Security of Site and Building - Suitably qualified security specialist (SQSS) conducts an evidence-based Security Needs Assessment (SNA) including visual audit and the recommendations implemented.
eing	Hea 07	Safe and healthy surroundings	1	1	Architect		Safe access  Dedicated cycle paths Dedicated/safe footpaths Pedestrian drop off areas providing direct access to footpaths Delivery areas not accessed through general parking areas. Dedicated parking/waiting area for goods vehicles separate to manoeuvring area Parking/turning designed for simple manoeuvring.
			1	1	Architect		Outside space Providing building users with external amenity area - outdoor, landscaped, appropriate seating, non-smoking, avoids noise disturbance.
	0.88%	Total Credit	8	3			

Project Name	Aberfeldy Village, London					
Project Number	551566					
Date	15/10/2021					

Project Notes:

BREEAM 2018 New Construction
WORKSPACE UNITS
SHELL ONLY



Targeted BREEAM Rating EXCELLENT  Per Credit Section Score  Ene 01 Reduction of Energy Use and Carbon Emissions	<b>72.44% 7.00%</b> 9	<b>2.63%</b> 5			Greengage
Reduction of Energy Use and Carbon					
	9	5			
			M&E		Energy Performance Based on energy performance BRUKL document Minimum 4 credits for Excellent
Ene 03 External Lighting	1	1	M&E		External Lighting Average initial luminous efficacy of external light fittings is not less than 70 luminaire lumens per circuit Watt. External light fittings automatically controlled for prevention of operation during daylight hours and presence detection in areas of intermittent pedestrian traffic.
Energy	1	0		Concept Design	Passive Design Analysis Thermal modelling credit under Hea 04 has been achieved. Identify opportunities for passive design solutions by Concept Design stage Implement passive design measures and quantify reduced total energy demand and CO2 emissions
Ene 04 Low Carbon Design	1	0	M&E	Concept Design	Free Cooling Analysis of free cooling and implementation opportunities within passive design analysis
	1	1		Concept Design	Low Zero Carbon Feasibility Study LZC study by energy specialist. LZC technology specified in line with feasibility study. Quantify reduced regulated CO2 emissions.
0.73% Total Credit	13	7			
Per Credit Section Score	9.50%	5.12%			
Tra 01 Transport assessment and travel plan	2	2	Transport consultant		Travel Plan Developing a travel plan, based upon the findings set out within a travel assessment/statement, incorporating the sustainable measures into the design.
Tra 02 Sustainable transport measures	10	5	Transport consultant / Architect		Transport options implementation Tra 01 is pre-requisite Identify sustainable transport options, award credits based on AI and number of options. Measures include - improvement to pedestrian routes, cycle storage, cycle facilities, existing amenities
1.21% Total Credit	12	7			
Per Credit Section Score	14.50%	8.46%			
Wat 02 Water Monitoring	1	1	M&E		Mandatory Criterion 1 Criterion 1- specification of water meter on mains - Areas of 10% + of water consumption fitted with sub-meters - Sub-meters connected to BMS - Pulsed water meter.
Wat 03 Water Leak Detection	1	1	M&E		Leak Detection System Leak detection system capable of detecting major leak on mains.
1.00% Total Credit	2	2			
Per Credit Section Score	2.00%	2.00%			
Environmental impacts from construction products - Building life cycle assessment (LCA)	6	6	Architect	Prior to planning application	Superstructure Building LCA options appraisal of 2-4 significantly different superstructure design options & comparison to benchmark at Concept Design, submit pror to planning application Building LCA options appraisal of 2-3 significantly different superstructure design options & comparison to benchmark at Technical Design.

Project Name		, 15 c c. 16 f		Project Notes:  BREEAM 2018 New Construction					
Project	Number	551566		WORKSPACE UNITS	WORKSPACE UNITS				
Da	ate	15/10/2021		SHELL ONLY			( ) ( ireenoage		
Targeted BR	EEAM Rating	EXCELLENT	72.44%				Greengage		
			1	1	Architect	Prior to planning application	Substructure and hard landscaping options appraisal during Concept Design LCA options appraisal on a combination of at least 6 different substructure or hard landscaping design options (at least 2 of each). Submit prior to planning application.		
	Mat 02	Environmental impacts from construction products - Environmental Product Declarations (EPD)	1	0	Architect		Specification of products with a recognised environmental product declaration (EPD)  Total EPD points score of at least 20		
			<b>√</b>	<b>✓</b>			Mandatory - Pre-requisite - All timber used must be 'legal' and 'sustainable' as per UK Government Timber Procurement Policy"		
V	Mat 03	Responsible sourcing of construction products	1	1	Architect/ Contractor	Concept Design	Enabling Sustainable Procurement Contractor sources materials in accordance with a Sustainable Procurement Plan (SPP).		
Materials		products	3	3			Responsible Sourcing of Materials One credit - Superstructure & >10% of points Two/three credits - internal finishes and substructure & hard landscaping & >20% or >30%		
	Mat 05	Designing for Durability and Resilience	1	1	Architect		Protecting Vulnerable Parts of the Building from Damage.  Design and specification measures to limit material degradation due to accidental/malicious damage.  Protecting exposed parts of the building from material degradation  Exposed building elements designed to limit degradation due to environmental factors through appropriate quality standard or a detailed assessment of the element's resilience.  Convenient access to roof and facade for cleaning/repair and design roof to prevent water damage/ingress.		
	Mat 06	Material Efficiency	1	1	Architect/ Contractor	All design stages from Preparation & Brief	Material Efficiency Opportunities and measures to optimise the use of materials in building design, procurement, construction, maintenance and end of life have been identified.  Measures must be implemented and targets/actual material efficiencies achieved reported.		
	1.57%	Total Credit	14	13					
	Per Credit	Section Score	22.00%	20.43%					
			1	1	Demolition contractor / Architect	Concept Design	Pre-demolition audit Pre-demo audit carried out at Concept Design and referred to in RMP.		
	Wst 01	Construction Waste Management	3	2	0		Construction Resource Efficiency - Construction Resource Management Plan (CRMP) ≤7.5m3 (≤6.5 tonnes) per 100 sqm GIFA of non-hazardous construction waste generated.		
			1	1	Contractor		Diversion of Waste from Landfill Non-Demo - 70% Volume / 80% Tonnage Demolition - 80% Volume / 90% Tonnage		
		Use of recycled and sustainably sourced aggregates	1	1	Contractor / Structural Engineer		Project sustainable aggregate points Pre-requisite - pre-demo audit if applicable. Identify all aggregates including quantity, source, distance travelled.		
Waste	Wst 03	Operational Waste	1	1	Architect		Operational waste Dedicated space to cater for segregation and storage of operational recyclable waste volumes generated. Space is clearly labelled, accessible, of appropriate capacity		

Project Name		Aberfeldy Village, London	Project Notes:						
Project	Number	551566			BREEAM 2018 New Construction WORKSPACE UNITS				
Di	ate	15/10/2021	SHELL ONLY ( ) ( ) ( ) ( ) ( ) ( )						
	EEAM Rating	EXCELLENT	72.44%				• Greengage		
	Wst 05	Adaptation to Climate Change	1	1	Architect / M&E / Structural Engineer	Concept Design & Technical Design	Resilience of structure, fabric, building services and renewables installation Climate change adaptation strategy appraisal Develop recommendations based on appraisal Provide update during technical design on implementation of recommendations		
			1	1	Architect / Structural Engineer	Concept Design	Design for disassembly and functional adaptability - recommendations - Study to explore ease of disassembly and functional adaptation potential of different designs - Develop recommendations and solutions by end of Concept Design		
	Wst 06	Design for disassembly and adaptability	1	0	Architect / Structural Engineer	Concept Design	Disassembly and fuunctional adaptability - implementation Update during Technical Design on implementation of recommendations or solutions and any changes. Produce building adaptability and disassembly guide for prospective tenants.		
	0.80%	Total Credit	10	8					
	Per Credit	Section Score	8.00% 1	6.40%	Architect		Previously occupied land At least 75% of the proposed development's footprint on an area of land which has previously		
	LE 01	Site Selection	'		Contaminated Land		been developed.  Contaminated Land		
			1	0	Specialist		Land deemed to be contaminated and subsequently remediated  Survey and evaluation		
	LE 02	Ecological risks and opportunities	2	2	Ecologist	Preparation & Brief	Pre-requisite - assessment route determined using GN34. Compliance against legislation monitored. Survey & evaluation by ecologist to determine baseline and ecological outcomes.		
La	LE 03	Managing impacts on ecology	1	1	Ecologist	Concept Design	Planning and measures on-site Roles & responsibilities defined. Site preparation to optimise benefits. Collaboration with stakeholders, solutions implemented.		
Land Use a			2	2	Ecologist	Concept Design	Managing negative impacts  Negative impacts from construction managed according to hierarchy (2 credits = no overall loss of ecological value).		
Use and Ecology	LE 04	Ecological change and enhancement	1	1	Ecologist /	Concept Design	Ecological enhancement Stakeholder liaison solutions and measures implemented in a way that enhances ecological value on site as priority.  Data provided to local environmental records centre		
V	LL 04	Ecological change and enhancement	3	1	Contractor	Concept Design	Change and enhancement of ecology Calculate change in ecological value to award credits		
	LE 05	Long term ecology management and	1	1	Ecologist / Contractor		Management and maintenance throughout the project Parts of LE04 are pre-requisite. Monitoring and reporting on project outcomes. Section on ecology in tenant/building owner information		
		maintenance	1	1	Ecologist		Landscape and ecology management plan Plan developed in accordance with BS 42020:2013 covering first five years after completion.		
	1.46%	Total Credit	13	10					
	Per Credit	Section Score	19.00%	14.62%					

Project Name	Aberfeldy Village, London		Project Notes:	
Project Number	t Number 551566		BREEAM 2018 New Construction WORKSPACE UNITS	
Date	15/10/2021		SHELL ONLY	



Date		15/10/2021		SHELL ONLY		Greengage
Targeted BREEAM Rating		EXCELLENT	72.44%			<u> </u>
Pollution	Pol 03	Flood and surface water management	2	2		Pre-requisite - appropriate consultant appointed Flood Resilience 2 Credits for low flood risk or 1 Credit for medium / high flood risk
			2	0	Flood / Drainage Consultant	Surface water run-off Pre-requisite- bespoke surface water run-off design solutions - Peak rate of run-off has 30% improvement for developed site compared to pre-developed for 1 and 100 yr return events. Include climate change allowance. (1 credit) - Flooding of property will not occur in the event of local drainage system failure and use of SuDS to ensure post development runoff volume no greater than pre-development. (1 credit)
			1	1		Minimising Water Course Pollution  No discharge from site for rainfall up to 5mm.  Appropriate level of pollution prevention using SuDS.  Oil separators.
	Pol 04	Reduction of Night Time Light Pollution	1	1	M&E	Night Time Light Pollution  External lighting strategy designed in compliance with ILP Guidance Notes for the Reduction of Obtrusive Light, 2011.  All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00.
	1.00%	Total Credit	6	4		
	Per Credit	Section Score	6.00%	4.00%		
	Man 03	Responsible Construction Practices	1	0	Contractor	
	Hea 01	Visual comfort	1	0	M&E	
	Hea 02	Indoor air quality	0	0		
	Hea 06	Security	1	0		
	Ene 01	Reduction of energy use and carbon emissions	0	0		
	Wat 01	Water consumption	0	0		
	Mat 01	Life Cycle Impacts	2	0		
Innovation	Mat 03	Responsible Sourcing of Materials	1	0		
104	Wst 01	Construction Site Waste Management	1	0		
atic	Wst 02	Recycled Aggregates	1	0		
on	Wst 05	Adaptation to Climate Change	0	0	Energy Modeller / M&E / Architect / Structures	
	LE 02	Identifying and understanding the risks and opportunities for the project	1	0	,	
	LE 04	Change & enhancement of ecological value	1	0	Ecologist / Landscape Architect	
	1.00%	Total Credit	10	0		
	Per Credit	Section Score	10.00%	0.00%		
	Overall Credits 103.00			65.00		
	Final BREEAM Score 110.00%			72.44%		
		BREEAM Rating	-	EXCELLENT		



ECOWORLD

LONDON

CREATING TOMORROW & BEYOND

HARCA