GREEN EASY
SUSTAINABILITY MADE SIMPLE

Carnon Downs Garden Centre

BREEAM Pre-assessment Summary Report

Pre-assessment

15 Dec 2023

GREEN EASY

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Introduction

This report is intended as a summary of the BREEAM pre-assessment review for the following project:

Project Name	Carnon Downs Garden Centre
Version	BREEAM 2018 NC
Assessment stage	Pre Assessment
Lead Consultant	Tom Abbott
Target Rating	Very Good (55%)
Downloaded By	Tom Abbott
Download Date	15/12/23
Download Time	16:05:50 (GMT)

Site assumptions (Project Info details) that have been used to filter the credits in accordance with the scheme can be found in the Appendix at the end of this document.

Scoring scenarios

It should be noted that the pre-assessment scores have been based on the following scoring scenarios;

- Current - The number currently achieved
- Scenario 1 - Current, plus credits which can be easily gained
- Scenario 2 - Scenario 1, plus credits which can be won but not so easily

On this basis, the following scores are considered achievable under each scenario;

Scenario	Score	BREEAM Rating
Current	73.87%	Excellent
Scenario 1	0%	Unclassified
Scenario 2	0%	Unclassified

Minimum Standards

In addition performance against the minimum standards (required for the specified target rating) under each scenario is summarised below;

Issue	Current	Scenario 1	Scenario 2
Man 03 - Responsible construction practices	✓	✓	✓
Man 04 - Commissioning and handover	✓	✗	✗
Man 04 - Commissioning and handover	✓	✗	✗
Man 05 - Aftercare	✓	✓	✓
Ene 01 - Reduction of energy use and carbon emissions	✓	✓	✓
Ene 02 - Energy monitoring	✓	✗	✗
Wat 01 - Water consumption	✓	✗	✗
Wat 02 - Water monitoring	✓	✗	✗
Mat 03 - Responsible sourcing of construction products	✓	✗	✗
Wst 01 - Construction waste management	✓	✓	✓
Wst 03 - Operational waste	✓	✓	✓

If the required minimum standards are not met then the target rating will not be achieved regardless of overall score.

The following is a list of all credits available for this project, along with the following:

Current	The number currently achieved
Scenario 1	Current, plus credits which can be easily gained
Scenario 2	Scenario 1, plus credits which can be won but not so easily

Credit Progress Log

Management						
Man 01 - Project brief and design						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Project delivery planning	1	1	0	0	
2	Stakeholder consultation (interested parties)	1	1	0	0	
3	BREEAM AP (concept design)	1	1	0	0	
4	BREEAM AP (developed design)	1	1	0	0	
Man 02 - Life cycle cost and service planning						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Elemental LCC	2	0	0	0	
2	Component level LCC options appraisal	1	0	0	0	
3	Capital cost reporting	1	1	0	0	
Man 03 - Responsible construction practices						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req 1	Prerequisite - Legally harvested and traded timber		✔	✖	✖	
1	Environmental management	1	1	0	0	
2	BREEAM AP (site)	1	1	0	0	
3	Responsible construction management	2	2	0	0	

4	Monitoring of construction site impacts	2	2	0	0	
e1	Responsible construction management	1	0	0	0	
Man 04 - Commissioning and handover						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req	Prerequisite (Very Good to Outstanding)		✔	✖	✖	
1	Commissioning - testing schedule and responsibilities	1	1	0	0	
2	Commissioning - design and preparation	1	1	0	0	
3	Testing and inspecting building fabric	1	1	0	0	
4	Handover	1	1	0	0	
Man 05 - Aftercare						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Aftercare support	1	1	0	0	
2	Commissioning - implementation	1	1	0	0	
3	Post occupancy evaluation (POE)	1	1	0	0	
		21	18	0	0	**Standard Management Credit Total**
		1	0	0	0	**Exemplary Management Credit Total**
		11.92	9.36	0	0	**% Management Total (Standard + Exemplary)**
Health & Wellbeing						
Hea 01 - Visual comfort						

	Credit	Available	Current	Scenario 1	Scenario 2	Comments
1	Control of glare from sunlight	1	1	0	0	
2	Daylighting (building type dependent)	2	0	0	0	
3	View out	1	1	0	0	
4	Internal and external lighting levels, zoning and control	1	1	0	0	
e1	Daylighting (building type dependent)	1	0	0	0	
e2	Internal and external lighting levels, zoning and control	1	0	0	0	
Hea 02 - Indoor air quality						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req	Prerequisite - Indoor air quality (IAQ) plan		✔	✖	✖	
1	Ventilation	1	1	0	0	
2	Emissions from building products	2	2	0	0	
3	Post-construction indoor air quality measurement	1	1	0	0	
e1	Minimising sources of air pollution - Emissions from building products	1	0	0	0	
Hea 04 - Thermal comfort						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Thermal modelling	1	1	0	0	

2	Design for future thermal comfort	1	1	0	0	
3	Thermal zoning and controls	1	1	0	0	
Hea 05 - Acoustic performance						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Acoustic performance	3	0	0	0	
Hea 06 - Security						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Security of site and building	1	1	0	0	
e1	Security of site and building	1	0	0	0	
Hea 07 - Safe and healthy surroundings						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Safe access	1	1	0	0	
2	Outside space	1	1	0	0	
		18	13	0	0	**Standard Health & Wellbeing Credit Total**
		4	0	0	0	**Exemplary Health & Wellbeing Credit Total**
		18.04	10.14	0	0	**% Health & Wellbeing Total (Standard + Exemplary)**
Energy						
Ene 01 - Reduction of energy use and carbon emissions						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Energy performance	9	5	0	0	
2	Prediction of operational energy consumption	4	0	0	0	

e1	Beyond zero net regulated carbon	3	0	0	0	
e2	Post-occupancy stage - Exemplary level criteria	2	0	0	0	
Ene 02 - Energy monitoring						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Sub-metering of end use categories	1	1	0	0	
2	Sub-metering of high energy load and tenancy areas	1	1	0	0	
Ene 03 - External Lighting						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	External lighting	1	1	0	0	
Ene 04 - Low carbon design						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Passive design	2	0	0	0	
2	Low and zero carbon technologies	1	1	0	0	
		19	9	0	0	**Standard Energy Credit Total**
		5	0	0	0	**Exemplary Energy Credit Total**
		20.96	7.56	0	0	**% Energy Total (Standard + Exemplary)**
Transport						
Tra 01 - Transport assessment and travel plan						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Travel plan	2	2	0	0	
Tra 02 - Sustainable transport measures						

	Credit	Available	Current	Scenario 1	Scenario 2	Comments
Pre-req	Pre-requisite		✔	✖	✖	
1	Transport options implementation	10	7	0	0	
		12	9	0	0	**Standard Transport Credit Total**
		0	0	0	0	**Exemplary Transport Credit Total**
		9.96	7.47	0	0	**% Transport Total (Standard + Exemplary)**
Water						
Wat 01 - Water consumption						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Water consumption	5	2	0	0	
e1	Water consumption	1	0	0	0	
Wat 02 - Water monitoring						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req	Prerequisite (Good to Outstanding)		✔	✖	✖	
1	Water monitoring	1	1	0	0	
Wat 03 - Water leak detection						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Leak detection system	1	1	0	0	
2	Flow control devices	1	1	0	0	
Wat 04 - Water efficient equipment						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Water efficient equipment	1	1	0	0	
		9	6	0	0	**Standard Water Credit Total**

	1	0	0	0	**Exemplary Water Credit Total**
	8.02	4.68	0	0	**% Water Total (Standard + Exemplary)**

Materials

Mat 01 - Environmental impacts from construction products - Building life cycle assessment (LCA)

	Credit	Available	Current	Scenario 1	Scenario 2	Comments
1	Superstructure	6	4	0	0	
2	Substructure and hard landscaping options appraisal during Concept Design (all building types)	1	1	0	0	
e1	Core building services options appraisal during Concept Design (all building types)	1	0	0	0	
e2	LCA and LCC alignment (all building types)	1	0	0	0	
e3	Third party verification (all building types) - Exemplary level criteria	1	0	0	0	

Mat 02 - Mat 02 Environmental impacts from construction products - Environmental Product Declarations (EPD)

	Credit	Available	Current	Scenario 1	Scenario 2	Comments
1	Specification of products with a recognised environmental product declaration (EPD)	1	1	0	0	

Mat 03 - Responsible sourcing of construction products

	Credit	Available	Current	Scenario 1	Scenario 2	Comments
Pre-req	Prerequisite		✔	✖	✖	

1	Enabling sustainable procurement	1	1	0	0	
2	Measuring responsible sourcing	3	2	0	0	
e1	Measuring responsible sourcing	1	1	0	0	
Mat 05 - Designing for durability and resilience						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Protecting vulnerable parts of the building from damage/material degradation	1	1	0	0	
Mat 06 - Material efficiency						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Material efficiency	1	1	0	0	
		14	11	0	0	**Standard Materials Credit Total**
		4	1	0	0	**Exemplary Materials Credit Total**
		18.98	12.77	0	0	**% Materials Total (Standard + Exemplary)**
Waste						
Wst 01 - Construction waste management						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Pre-demolition audit	1	1	0	0	
2	Construction resource efficiency	3	3	0	0	
3	Diversion of resources from landfill	1	1	0	0	
e1	Construction resource efficiency/Diversion of resources from landfill	1	0	0	0	

Wst 02 - Use of recycled and sustainably sourced aggregates						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req	Prerequisite		✖	✖	✖	
1	Project Sustainable Aggregate points	1	0	0	0	
e1	Project Sustainable Aggregate points	1	0	0	0	
Wst 03 - Operational waste						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Operational waste	1	1	0	0	
Wst 05 - Adaptation to climate change						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Resilience of structure, fabric, building services and renewables installation	1	1	0	0	
e1	Responding to climate change	1	0	0	0	
Wst 06 - Design for disassembly and adaptability						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Design for disassembly and functional adaptability - recommendations	1	1	0	0	
2	Disassembly and functional adaptability – implementation	1	0	0	0	
		10	8	0	0	**Standard Waste Credit Total**
		3	0	0	0	**Exemplary Waste Credit Total**

		9	4.80	0	0	**% Waste Total (Standard + Exemplary)**
Land Use & Ecology						
LE 01 - Site selection						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Previously occupied land	1	1	0	0	
2	Contaminated land	1	0	0	0	
LE 02 - Ecological risks and opportunities						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req	Prerequisite - Statutory obligations		✖	✖	✖	
1	Survey and evaluation/Determining ecological outcomes	2	2	0	0	
e1	Wider site sustainability - Exemplary level criteria	1	0	0	0	
LE 03 - Managing impacts on ecology						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req	Prerequisite – Ecological risks and opportunities		✖	✖	✖	
1	Planning and measures on-site	1	1	0	0	
2	Managing negative impacts	2	2	0	0	
LE 04 - Ecological change and enhancement						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**

Pre-req	Prerequisite - Managing negative impacts on ecology		✖	✖	✖	
1	Change and enhancement of ecology / Ecological enhancement	1	1	0	0	
2	Change and enhancement of ecology	3	2	0	0	
e1	Change and enhancement of ecology - Exemplary level criteria	1	0	0	0	
LE 05 - Long term ecological management and maintenance						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
Pre-req	Prerequisite - Statutory obligations, planning and site implementation		✖	✖	✖	
1	Management and maintenance throughout the project / Landscape and ecology management plan	2	2	0	0	
		13	11	0	0	**Standard Land Use & Ecology Credit Total**
		2	0	0	0	**Exemplary Land Use & Ecology Credit Total**
		15	11	0	0	**% Land Use & Ecology Total (Standard + Exemplary)**
Pollution						
Pol 01 - Impact of refrigerants						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Impact of refrigerants	3	3	0	0	

Pol 02 - Local air quality						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Local air quality	2	0	0	0	
Pol 03 - Flood and surface water management						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Flood resilience	2	2	0	0	
2	Surface water run-off	2	2	0	0	
3	Minimising watercourse pollution	1	1	0	0	
Pol 04 - Reduction of night time light pollution						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Reduction of night time light pollution	1	1	0	0	
Pol 05 - Reduction of noise pollution						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
1	Reduction of noise pollution	1	0	0	0	
		12	9	0	0	**Standard Pollution Credit Total**
		0	0	0	0	**Exemplary Pollution Credit Total**
		8.04	6.03	0	0	**% Pollution Total (Standard + Exemplary)**
Innovation						
AI - Approved Innovation						
	Credit	**Available**	**Current**	**Scenario 1**	**Scenario 2**	**Comments**
e1	Approved innovations	1	0	0	0	
		0	0	0	0	**Standard Innovation Credit Total**
		1	0	0	0	**Exemplary Innovation Credit Total**

	1	0	0	0	**% Innovation Total (Standard + Exemplary)**

Appendix - Site assumptions (Project Info details)

Assessment Information	Selection
Building type (main description)	Retail
Building Type sub-group	Retail - Retail park/warehouse
Assessment stage	Design (Interim)
Technical manual issue number	Issue 3.0
Project scope	Fully Fitted
Building Net internal floor area m²	1588
Building Gross internal floor area m²	1588
Is the building designed to be untreated?	No
Building services - heating system type	Wet system
Building services - cooling system type	Air-conditioning
Are commercial or industrial-sized refrigeration and storage systems specified?	No
Are building user lifts present?	No
Are building user transportation systems (escalators or moving walkways) present?	No
Are laboratories present?	No
Fume cupboard(s) and/or other containment devices	No
Are there any water demands present other than those assessed in Wat 01?	Yes
Does the building have external areas within the boundary of the assessed development?	Yes
Are there statutory requirements, or other issues outside of the control of the project, that impact the ability to provide outdoor space?	No
Are the Post-occupancy stage credits targeted in Ene 01 issue?	No
Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development?	Yes
Are WC facilities only provided within the residential areas of a long-term residential accommodation?	N/A
Are there any systems specified that contribute to the unregulated energy load?	No
Is this a speculative development?	No

Is the project required to connect to a District Heating system, and it supplies all heating and hot water demands to the building?	No