SUSTAINABILITY STATEMENT

ROYAL FREE LONDON – NEW HYBRID THEATRES

VERSION 01

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Company Registration No: 10354408

CLIENT:

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PROJECT NAME: RFL New Hybrid Theatres

PROJECT REFERENCE: X237

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1 INTRODUCTION

XDA Consulting Ltd has been appointed by Royal Free London NHS Foundation Trust to undertake the BREEAM Assessment of the proposed New Hybrid Theatres. The design proposals are for a proposed extension to hospital at second and third storey level (above ground) with undercroft area beneath to deliver extension to hybrid theatres alongside rooflevel plant and enclosure and associated works.

Camden Local Plan encourages developers to deliver schemes to meet performance standards set out in BREEAM. The proposed New Hybrid Theatres is being assessed against BREEAM New Construction v6.1: Healthcare criteria. The BREEAM Assessor/AP was appointed at concept design stage to assist the design team to embed the BREEAM requirements within the scheme.

This Sustainability Statement provides an overview of the credits targeted to achieve the BREEAM Excellent rating.

2 PLANNING POLICY

2.1 NATIONAL POLICY – THE NPPF

The National Planning Policy Framework (NPPF), updated December 2023, sets out the government's planning policies for England and how these are expected to be applied and states that:

The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways:

Economic
 Social
 Environmental

So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development.

2.2 LOCAL POLICY

2.2.1 <u>Camden Local Plan</u>

The Camden Local Plan, adopted in May 2017, sets out the Council's planning policies and replaces the Core Strategy and Development Policies planning documents. It ensures that Camden continues to have robust, effective and upto-date planning policies that respond to changing circumstances and the borough's unique characteristics and contribute to delivering the Camden Plan and other local priorities. The Local Plan will cover the period from 2016-2031.



The Council's vision for the borough is set out in the Camden Plan. The overall vision of the Camden Plan also acts as the vision for this Local Plan:

We want to make Camden a better borough — a place where everyone has a chance to succeed and where nobody gets left behind. A place that works for everyone.

Policy CC2 Adapting to climate change

The Council will require development to be resilient to climate change.

All development should adopt appropriate climate change adaptation measures such as:

- a. the protection of existing green spaces and promoting new appropriate green infrastructure;
- b. not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;
- c. incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and
- d. measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

Any development involving 5 or more residential units or 500 sqm or more of any additional floorspace is required to demonstrate the above in a Sustainability Statement.

Sustainable design and construction measures

The Council will promote and measure sustainable design and construction by:

- a. ensuring development schemes demonstrate how adaptation measures and sustainable development principles have been incorporated into the design and proposed implementation;
- b. encourage new build residential development to use the Home Quality Mark and Passivhaus design standards;
- c. encouraging conversions and extensions of 500 sqm of residential floorspace or above or five or more dwellings to achieve "excellent" in BREEAM domestic refurbishment; and
- d. expecting non-domestic developments of 500 sqm of floorspace or above to achieve "excellent" in BREEAM assessments and encouraging zero carbon in new development from 2019.



3 BREEAM OVERVIEW

BREEAM is a performance-based assessment and certification scheme that assesses, encourages and rewards environmental, social and economic sustainability throughout the built environment.

BREEAM measures sustainable value in a series of categories, ranging from energy to ecology. Each of these categories addresses the most influential factors, including low impact design and carbon emissions reduction; design durability and resilience; adaption to climate change; and ecological value and biodiversity protection.

Each category is sub-divided into a range of assessment issues, each with its own aim, target and benchmarks. When a target or benchmark is reached, as determined by the BREEAM assessor, the development or asset score points, called credits. The category score is then calculated according to the number of credits achieved and its category weighting. Once a development has been fully assessed, the final performance rating is determined by the sum of the weighted category scores.

BREEAM rating	% Score	Performance equivalent to:
Outstanding	≥85	Less than the top 1% of UK new non-domestic buildings (innovator)
Excellent	≥70	Top 10% of UK new non-domestic buildings (best practice)
Very Good	≥55	Top 25% of UK new non-domestic buildings (advanced good)
Good	≥45	Top 50% of UK new non-domestic buildings (intermediate good practice)
Pass	≥30	Top 75% of UK new non-domestic buildings (standard good practice)
Unclassified	<30	

BREEAM rating benchmarks for projects are presented in Table 3.1.

Table 3.1 BREEAM rating benchmarks

A BREEAM assessment assess the performance of a development across a number of categories, and each has a defined weighting, see **Error! Not a valid bookmark self-reference**.. This weighting system defines and ranks the relative impact of environmental issues and is used to determine the overall BREEAM score.



	Weighting %								
Environmental Section	Fully fitted out	Simple building	Shell & Core	Shell only					
Management	11	7.5	11	12					
Health & Wellbeing	14	16.5	8	7					
Energy	16	11.5	14	9.5					
Transport	10	11.5	11.5	14.5					
Water	7	7.5	7.5	2					
Materials	15	17.5	17.5	22					
Waste	6	7	7	8					
Land Use & Ecology	13	15	15	19					
Pollution	8	6	9	6					
Total	100	100	100	100					
Innovation (additional)	10	10	10	10					

Table 3.2 BREEAM section weightings

4 ASSESSMENT SUMMARY

The scheme is being assessed against BREEAM New Construction v6.1: Healthcare criteria. The BREEAM Assessor/AP has been working with the design team from Concept Design stage to advise the team on the requirements of BREEAM Excellent and ensure they are embedded within the scheme. The RFL Hybrid scheme is being assessed as a 'fully fitted out' assessment.

The design team have identified the credits that can be readily included in the scheme, referred to as 'targeted credits' and those which are considerably more complex which have been identified as 'potential credits'. These potential credits provide options for the team to include to further bolster the assessment score.

Table 4.1 shows the number of credits targeted in each BREEAM section with a graphical representation in Figure 4.1.



Project:	X237 - RFL New Hybrid Theatres
Report:	Design Stage
Design Target:	Excellent - 71.65%
Potential Rating:	Excellent – 75.02%

Section	Available		Tar	geted	Potential		
Section	Credits	Percent	Credits	Percent	Credits	Percent	
Management	21	11%	21	11%	0	0%	
Health and Wellbeing	18	14%	13	10.11%	1	0.78%	
Energy	21	16%	13	9.9%	2	1.52%	
Transport	12	10%	6	5%	0	0%	
Water	8	7%	5	4.38%	0	0%	
Materials	14	15%	13	13.93%	1	1.07%	
Waste	9	6%	7	4.67%	0	0%	
Land Use and Ecology	13	13%	4	4%	0	0%	
Pollution	12	8%	10	6.67%	0	0%	
Innovation	10	10%	2	2%	0	0%	
Total	138	110.00%	94	71.65%	4	3.37%	

Table 4.1 BREEAM assessment summary scoring - RFL New Hybrid Theatres



Performance by Section

Figure 4.1 BREEAM performance by section - RFL New Hybrid Theatres

The following sections summarise the design measures being undertaken to achieve the BREEAM credits and the options being considered to enhance the score.

5 MANAGEMENT

The project stakeholders have met to identify and define the roles, responsibilities and contributions for each key phase of project delivery. Consultation has been undertaken with all key stakeholders to inform the project brief and develop the design. BREEAM Accredited Professional has been advising on the implementation of BREEAM criteria from concept design stage, ensuring key BREEAM time sensitive elements are undertaken and the BREEAM strategies embedded in the design development.

Life cycle cost analysis of the scheme is being developed to enable design choices that deliver the lowest life cycle cost for the scheme.

The Contractor appointed for the scheme will be required to have ISO14001 accreditation and must register with the Considerate Constructors Scheme and achieve Performance Beyond Compliance certification. They shall be required to legally and responsibly source all their site timber and monitor all of their site impacts. This shall include setting targets, monitoring & recording data for:

- site energy consumption in kWh (and where relevant, litres of fuel used) as a result of the use of construction plant, equipment (mobile and fixed) and site accommodation
- potable water consumption (m³) arising from the use of construction plant, equipment (mobile and fixed) and site accommodation
- transportation movements and impacts resulting from delivery of the majority of construction materials to site and construction waste from site

The Contractor shall be required to appoint a BREEAM Advisory Professional (AP) to assist them in achieving the agreed performance targets throughout the Construction, Handover and Close Out stages. They shall monitor construction progress against the performance target, proactively identify risks and opportunities related to the procurement and construction process, provide feedback to support them in taking corrective actions and achieving their agreed performance targets and monitor and, where relevant, coordinate the generation of appropriate evidence by the project team and the provision to the assessor.

A full schedule of commissioning of all installed services will be undertaken in line with Building Regulations, BSRIA and CIBSE guidelines. The principal contractor shall account for the commissioning and testing programme, responsibilities and criteria within their budget and the main programme of works, allowing the required time to complete all commissioning and testing activities prior to handover.

In addition to the building services, the building shall also be commissioned. The Contractor is required to undertake both air pressure testing and a thermographic survey to ensure there are no air leakage paths and no thermal bridges. This would reduce the heat loss from the building and reduce energy consumption during operation.

Prior to handover the Contractor shall produce two building user guides, a non-technical guide for the building user and a more technical guide for the facilities manager. In addition, training schedules will be written and implemented to ensure building owners/users are introduced to installed systems, know who the aftercare team is and given an overview of the building user guide(s).



An independent 3rd party shall be appointed to undertake a Post Occupancy Evaluation (POE) which gains comprehensive in-use performance feedback and identifies gaps between design intent and in-use performance. The aim of this is to highlight any improvements or interventions that need to be made and can inform operational processes and future developments due to the lessons learned. This is a valuable resource for the NHS Trust to reduce the performance gap on this building and any future developments.

6 HEALTH AND WELLBEING

To ensure visual comfort, all of the occupied spaces shall be provided with user operated blinds to provide glare control.

Internal lighting will be LED, minimising the energy associated with internal lighting. The lighting will be zoned with appropriate controls ensuring lighting is only switched on in areas where it is needed. In the academic areas the lighting shall be controlled be absence detection and have daylight dimming in zones adjacent to the windows. The circulation areas throughout the whole building and WCs on the ground floor shall have PIR control. This shall further reduce energy consumption and CO_2 emissions due to the lighting.

The external lighting shall be designed to be energy efficient and only be on when is needed for safety and security purposes.

Dynamic thermal modelling is being undertaken to assess thermal comfort and identify any potential risk of overheating for both the current and future climate change scenarios. This will enable the design to be optimised and ensure the most energy efficient building services are specified to overcome any risks of overheating.

An Indoor Air Quality Plan has been commissioned to inform the design, specification and installation decisions and actions that minimise indoor air pollution during occupation of the building. All of the products specified shall meet the European standards on VOC emissions from products to maintain indoor air quality for future occupants. The Contractor shall be required to undertake post-construction (pre-occupation) indoor air quality testing to ensure the total volatile organic compound and formaldehyde levels are within the required limits.

An acoustician has reviewed the scheme and provided design input to enhance the acoustic performance standards beyond the minimums required for HTM 08-01: Acoustic design requirements, 2013. The Contractor shall be required to undertake pre-completion acoustic testing to ensure the required acoustic standards are achieved in construction.

Within the Trust's security team is a BREEAM suitably qualified security specialist that is undertaking a Security Needs Assessment for the scheme to inform the security measures to be included within the design.

The landscaping strategy enables the safe and healthy surroundings credits to be achieved as pedestrians can access the site and building safely.



7 ENERGY

The RFL New Hybrid Theatres are being designed to be as energy efficient as possible, with highly insulated building fabric and energy efficient building services. Lighting shall be LED lighting which shall reduce energy consumption and also produces less heat gains into the spaces. Low and zero carbon technologies have been included in the scheme with air source heat pumps providing low temperature hot water to the to the air handling units and plate heat exchangers. Photovoltaics shall also be installed to provide renewable electricity.

The team are undertaking an energy workshop with the client and design team to determine accurate usage of the building and the energy specialist can undertake predictive energy modelling to identify areas the design can be improved to reduce energy consumption.

The buildings energy consumption shall be sub-metered to enable the different energy usages to be accurately monitored. This shall assist with targeting energy reductions in the relevant areas and identifying the impacts of any changes.

8 TRANSPORT

The site is well positioned with good access to public transport provided by Transport for London, resulting in an Accessibility Index of 22.32. The hospital has good access to a range of amenities including food shops, access to cash and outdoor open space.

A Transport Assessment for the site has been undertaken and a Travel Plan being developed. It is expected at least 4 credits could also be achieved for the public transport links, provision of cycle storage and cyclist facilities.

9 WATER

The water demand in the new building will be reduced as far as practicable by fitting low water consuming sanitaryware. The water consumption shall be easily monitored using pulsed output water meters fitted onto the incoming water supply in the plant room.

The toilet areas within the adjacent hospital building that shall be used by users of the RFL Hybrid Theatre shall be fitted with sanitary supply shut-off which shall prevent water flow when the areas are not in use. This can limit wasted potable water due to taps being left on, faulty cisterns or dripping taps.

A leak detection system shall also be specified that will identify if the water flow increases beyond acceptable limits indicating a potential leak. It will sound an alarm enabling the facilities team to investigate. This system shall enable leaks to be identified early and reduce the potential for wasted water.



10 MATERIALS

The building materials proposed for the scheme are being reviewed using Life Cycle Analysis to identify the options with the lowest environmental impact. This shall be continually reviewed throughout design development to minimise the impact of scheme. Furthermore HMY shall specify materials with Environmental Product Declaration certificates (EPDs) to demonstrate products have been manufactured in a sustainable manner.

The contractor is required to responsibly source all construction materials, procuring materials from suppliers with BES6001, FSC or ISO14001 accreditation.

HMY are developing a durability and resilience report for the scheme, identifying how any areas at risk of damage from personnel and environmental factors have been identified and the materials specified are resilient. This shall reduce the likelihood of materials needing to be frequently replaced due to wear and tear.

11 WASTE

The Contractor shall be required to prepare a Resource Management Plan with construction waste resource efficiency of ≤ 6.5 tonnes waste per 100m² gross internal floor area and that more than 90% of waste generated is diverted from landfill.

The bin store has been designed to include a dedicated space for the segregation and storage of operational recyclable waste generated by the building. It shall be clearly labelled, to assist with segregation, storage and collection of the recyclable waste streams.

The building is being designed to be easily adapted according to climate change and any future changes in use for the building. For example, wall panels and windows being easily removed to provide opportunities to amendments to varying spaces. The scheme is being designed for disassembly ensuring a truly sustainable design solution considering both the current and future requirements and impacts of the building.

12 LAND USE & ECOLOGY

The opportunities to increase the ecological value of the development site are being explored. The development site is currently buildings and hardstanding and therefore has little to no ecological value.

13 POLLUTION

The proposed building services shall include refrigerants therefore refrigerant leak detection shall be specified to ensure low risk of refrigerants escaping and polluting the atmosphere.

A flood risk assessment has been produced by Wareham and Associates which considers the risk of flooding from all sources and confirms there is low risk from:

1. Fluvial (rivers)



- 2. Tidal
- 3. Surface water: sheet run-off from adjacent land (urban or rural)
- 4. Groundwater: most common in low-lying areas underlain by permeable rock (aquifers)
- 5. Sewers: combined, foul or surface water sewers
- 6. Reservoirs, canals and other artificial sources

The risk of light and noise pollution will be eliminated from the scheme. The external lighting will be compliant with Institute of Lighting Professionals (ILP) Guidance notes for the reduction of obtrusive light, 2011. This will limit the upward light ratio from the external lighting. The lighting shall also be controlled via timeclocks and daylight sensors so lighting is only on when required, and in evenings the lighting will be automatically controlled with presence detection for pedestrian walkways.

An environmental noise survey will be undertaken by an Acoustician to determine the current noise levels from the site. The acoustician will provide design input to review the noise impact of the proposed building services. This shall ensure the mechanical services design shall enable the noise to remain 5dBA below the background noise levels at night to provide no disturbance to the adjacent hospital wards.

14 CONCLUSIONS

The design proposals for the Royal Free London (RFL) New Hybrid Theatres has embedded sustainable design measures within the scheme to enable a BREEAM Excellent rating to be achievable for the New Construction assessment.

Therefore, the Camden Local Plan can be met by this scheme.



15 APPENDIX 1

The BREEAM New Construction v6.1: Healthcare pre-assessment is presented below.

Criteria Summary

Project:	X237 - RFL New Hybrid Theatres
Report:	Design Stage
Design Target:	Excellent - 71.65%
Potential Rating:	Excellent - 75.02%

Managament	Available		Targeted		Potential	
Management	Credits	Percent	Credits	Percent	Credits	Percent
Man 01: Project brief and design > 1. Project delivery planning	1	0.52%	1	0.52%	0	0%
Man 01: Project brief and design > 2. Stakeholder consultation	1	0.52%	1	0.52%	0	0%
Man 01: Project brief and design > 3. BREEAM Advisory Professional : BREEAM AP (Concept Design)	1	0.52%	1	0.52%	0	0%
Man 01: Project brief and design > 3. BREEAM Advisory Professional : BREEAM AP (Developed Design)	1	0.52%	1	0.52%	0	0%
Man 02: Life cycle cost and service life planning > 1. Elemental life cycle cost (LCC)	2	1.05%	2	1.05%	0	0%
Man 02: Life cycle cost and service life planning > 2. Component level life options appraisal	1	0.52%	1	0.52%	0	0%
Man 02: Life cycle cost and service life planning > 3. Capital cost reporting	1	0.52%	1	0.52%	0	0%
Man 03: Responsible construction practices > 1. Pre-requisite - Legal and sustainable timber	0	0%	0	0%	0	0%
Man 03: Responsible construction practices > 2. Pre-requisite - For Healthcare NHS buildings only	0	0%	0	0%	0	0%
Man 03: Responsible construction practices > 3. Environmental management	1	0.52%	1	0.52%	0	0%
Man 03: Responsible construction practices > 4. BREEAM Advisory Professional (Site)	1	0.52%	1	0.52%	0	0%
Man 03: Responsible construction practices > 5. Responsible construction management	2	1.05%	2	1.05%	0	0%
Man 03: Responsible construction practices > 6. Monitoring of construction site impacts : Pre-requisite	0	0%	0	0%	0	0%
Man 03: Responsible construction practices > 6. Monitoring of	1	0.52%	1	0.52%	0	0%

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construction site impacts : Utility consumption						
Man 03: Responsible construction practices > 6. Monitoring of construction site impacts : Transportation of construction materials and waste	1	0.52%	1	0.52%	0	0%
Man 04: Commissioning and handover > 1. Commissioning - testing schedule and responsibilities	1	0.52%	1	0.52%	0	0%
Man 04: Commissioning and handover > 2. Commissioning - design and preparation	1	0.52%	1	0.52%	0	0%
Man 04: Commissioning and handover > 3. Testing and inspecting building fabric	1	0.52%	1	0.52%	0	0%
Man 04: Commissioning and handover > 4. Handover	1	0.52%	1	0.52%	0	0%
Man 05: Aftercare > 1. Aftercare support	1	0.52%	1	0.52%	0	0%
Man 05: Aftercare > 2. Commissioning - implementation	1	0.52%	1	0.52%	0	0%
Man 05: Aftercare > 3. Post Occupancy Evaluation (POE)	1	0.52%	1	0.52%	0	0%
Management Totals	21	11.00%	21	11.00%	0	0.00%

Lingth and Mallhaing	Available		Targeted		Potential	
Health and Wellbeing	Credits	Percent	Credits	Percent	Credits	Percent
Hea 01: Visual comfort > 1. Control of glare from sunlight control	1	0.78%	1	0.78%	0	0%
Hea 01: Visual comfort > 2. Daylighting	2	1.56%	0	0%	0	0%
Hea 01: Visual comfort > 3. View out	1	0.78%	0	0%	0	0%
Hea 01: Visual comfort > 4. Internal and external lighting levels, zoning and control	1	0.78%	1	0.78%	0	0%
Hea 02: Indoor air quality > 1. Pre- requisite	0	0%	0	0%	0	0%
Hea 02: Indoor air quality > 2. Ventilation	1	0.78%	1	0.78%	0	0%
Hea 02: Indoor air quality > 3. Emissions from construction products	2	1.56%	1	0.78%	1	0.78%
Hea 02: Indoor air quality > 4. Post- construction indoor air quality measurement	1	0.78%	1	0.78%	0	0%
Hea 04: Thermal comfort > 1. Thermal modelling	1	0.78%	1	0.78%	0	0%
Hea 04: Thermal comfort > 2. Design for future thermal comfort	1	0.78%	1	0.78%	0	0%
Hea 04: Thermal comfort > 3. Thermal zoning and controls	1	0.78%	1	0.78%	0	0%
Hea 05: Acoustic performance > 1. Sound insulation	1	0.78%	1	0.78%	0	0%
Hea 05: Acoustic performance > 2. Indoor ambient noise level	1	0.78%	1	0.78%	0	0%



Hea 05: Acoustic performance > 3. Room acoustics	1	0.78%	1	0.78%	0	0%
Hea 06: Security	1	0.78%	1	0.78%	0	0%
Hea 07: Safe and healthy surroundings > 1. Safe access	1	0.78%	1	0.78%	0	0%
Hea 07: Safe and healthy surroundings > 2. Outside space	1	0.78%	0	0%	0	0%
Health and Wellbeing Totals	18	14.00%	13	10.11%	1	0.78%

[norm/	Available		Targeted		Potential	
chergy	Credits	Percent	Credits	Percent	Credits	Percent
Ene 01: Reduction of energy use and carbon emissions > 1. Energy performance	9	6.86%	4	3.05%	2	1.52%
Ene 01: Reduction of energy use and carbon emissions > 2. Prediction of operational energy consumption	4	3.05%	4	3.05%	0	0%
Ene 02: Energy monitoring > 1. Sub- metering of end use categories	1	0.76%	1	0.76%	0	0%
Ene 02: Energy monitoring > 2. Sub- metering of high energy load and tenancy areas	1	0.76%	1	0.76%	0	0%
Ene 03: External lighting	1	0.76%	1	0.76%	0	0%
Ene 04: Low carbon design > 1. Passive design : Passive design analysis	1	0.76%	1	0.76%	0	0%
Ene 04: Low carbon design > 1. Passive design : Free cooling	1	0.76%	0	0%	0	0%
Ene 04: Low carbon design > 2. Low and zero carbon technologies	1	0.76%	1	0.76%	0	0%
Ene 08: Energy efficient equipment	2	1.52%	0	0%	0	0%
Energy Totals	21	16.00%	13	9.90%	2	1.52%

Transport	Available		Targeted		Potential	
Transport	Credits	Percent	Credits	Percent	Credits	Percent
Tra 01: Transport assessment and travel plan	2	1.67%	2	1.67%	0	0%
Tra 02: Sustainable transport measures	10	8.33%	4	3.33%	0	0%
Transport Totals	12	10.00%	6	5.00%	0	0.00%

Wator	Available		Targeted		Potential	
Water	Credits	Percent	Credits	Percent	Credits	Percent
Wat 01: Water consumption	5	4.38%	2	1.75%	0	0%
Wat 02: Water monitoring	1	0.88%	1	0.88%	0	0%
Wat 03: Water leak detection > 1. Leak	1	0 000/	1	0 000/	0	0%
detection system	Ţ	0.8870	1	0.8870	0	070
Wat 03: Water leak detection > 2. Flow	1	0 000/	1	0.000/	0	00/
control devices	L	0.00/0	1	0.00/0	0	070
Water Totals	8	7.00%	5	4.38%	0	0.00%



Matariala	Avai	lable	Targ	eted Pote		Potential	
Materials	Credits	Percent	Credits	Percent	Credits	Percent	
Mat 01: Environmental impacts from construction products - Building life cycle assessment (LCA) > 1. Superstructure	6	6.43%	6	6.43%	0	0%	
Mat 01: Environmental impacts from construction products - Building life cycle assessment (LCA) > 2. Substructure	1	1.07%	1	1.07%	0	0%	
Mat 02: Environmental impacts from construction products - Environmental Product Declarations (EPD)	1	1.07%	0	0%	1	1.07%	
Mat 03: Responsible sourcing of construction products > 1. Pre-requisite - Legal and sustainable timber	0	0%	0	0%	0	0%	
Mat 03: Responsible sourcing of construction products > 2. Enabling sustainable procurement	1	1.07%	1	1.07%	0	0%	
Mat 03: Responsible sourcing of construction products > 3. Measuring responsible sourcing	3	3.21%	3	3.21%	0	0%	
Mat 05: Designing for durability and resilience	1	1.07%	1	1.07%	0	0%	
Mat 06: Material efficiency	1	1.07%	1	1.07%	0	0%	
Materials Totals	14	15.00%	13	13.93%	1	1.07%	

Wasta	Availab		Targeted		Potential	
waste	Credits	Percent	Credits	Percent	Credits	Percent
Wst 01: Construction waste						
management > 2. Construction resource	3	2%	2	1.33%	0	0%
efficiency						
Wst 01: Construction waste						
management > 4. Diversion of resources	1	0.67%	1	0.67%	0	0%
from landfill						
Wst 02: Use of recycled and sustainably	1	0 (70/	0	00/	0	0%
sourced aggregates	T	0.67%	0	0%	0	0%
Wst 03: Operational waste	1	0.67%	1	0.67%	0	0%
Wst 05: Adaptation to climate change	1	0.67%	1	0.67%	0	0%
Wst 06: Design for disassembly and	1	0.670/	1	0.070/	0	00/
adaptability > 1. Recommendations	T	0.67%	T	0.67%	0	0%
Wst 06: Design for disassembly and	1	0.670/	1	0.070/	0	00/
adaptability > 2. Implementation	L	0.67%	1	0.67%	U	0%
Waste Totals	9	6.00%	7	4.67%	0	0.00%

Land Lice and Ecology	Avai	Available		geted	ed Pot	
Land Use and Ecology	Credits Percent		Credits	Percent	Credits	Percent
LE 01: Site selection > 1. Previously occupied land	1	1%	1	1%	0	0%
LE 01: Site selection > 2. Contaminated land	1	1%	0	0%	0	0%
LE 02: Ecological risks and opportunities > 1. Statutory obligations	0	0%	0	0%	0	0%



LE 02: Ecological risks and opportunities	1	1%	0.5	0.5%	0	0%
LE 02: Ecological risks and opportunities						
> 3. Determining ecological outcomes	1	1%	0.5	0.5%	0	0%
LE 03: Managing impacts on ecology > 1 .	0	001	0	001	0	001
Ecological risks and opportunities	0	0%	0	0%	0	0%
LE 03: Managing impacts on ecology > 2.	4	10/	4	10/	0	001
Planning and measures on-site	1	1%	1	1%	0	0%
LE 03: Managing impacts on ecology > 3.						
Managing negative impacts of the	2	2%	1	1%	0	0%
project						
LE 04: Ecological change and						
enhancement > 1. Managing negative	0	0%	0	0%	0	0%
impacts on ecology						
LE 04: Ecological change and						
enhancement > 2. Change and	3	3%	0	0%	0	0%
enhancement of ecology						
LE 04: Ecological change and						
enhancement > 3. Ecological	1	1%	0	0%	0	0%
enhancement						
LE 05: Long term ecological						
management and maintenance > 1.	0	0%	0	0%	0	0%
Statutory obligations, planning and site	0	0%	0	0%	0	0%
implementation						
LE 05: Long term ecological						
management and maintenance > 2.	1	10/	0	0%	0	0%
Management and maintenance	Т	170	0	0%	0	0%
throughout the project						
LE 05: Long term ecological						
management and maintenance > 3.	1	10/	0	0%	0	0%
Landscape and ecology management	Ŧ	Τ/0	U	070	U	070
plan						
Land Use and Ecology Totals	13	13.00%	4	4.00%	0	0.00%

Dellution	Avai	lable	Targ	geted	Pote	ential
Pollution	Credits	Percent	Credits	Percent	Credits	Percent
Pol 01: Impact of refrigerants > 2. Refrigerant use : Pre-requisite	0	0%	0	0%	0	0%
Pol 01: Impact of refrigerants > 2. Refrigerant use : Impact of refrigerant	2	1.33%	2	1.33%	0	0%
Pol 01: Impact of refrigerants > 2. Refrigerant use : Leak detection	1	0.67%	1	0.67%	0	0%
Pol 02: Local air quality	2	1.33%	2	1.33%	0	0%
Pol 03: Flood and surface water management > 1. Pre-requisite	0	0%	0	0%	0	0%
Pol 03: Flood and surface water management > 2. Flood resilience	2	1.33%	2	1.33%	0	0%
Pol 03: Flood and surface water management > 3. Surface water run-off : Pre-requisite	0	0%	0	0%	0	0%



Pol 03: Flood and surface water management > 3. Surface water run-off	1	0.67%	0	0%	0	0%
: Rate						
Pol 03: Flood and surface water	1	0.67%	1	0.67%	0	0%
: Volume	T	0.0776	T	0.0776	0	078
Pol 03: Flood and surface water management > 5. Minimising watercourse pollution	1	0.67%	0	0%	0	0%
Pol 04: Reduction of night time light pollution	1	0.67%	1	0.67%	0	0%
Pol 05: Reduction of noise pollution	1	0.67%	1	0.67%	0	0%
Pollution Totals	12	8.00%	10	6.67%	0	0.00%

Innovation	Available Targeted Potenti		Targeted		ential	
Innovation	Credits	Percent	Credits	Percent	Credits	Percent
Inn 01: Innovation	10	10%	0	0%	0	0%
Man 03: Responsible construction						
practices > 1. Responsible construction	1	1%	0	0%	0	0%
management						
Hea 01: Visual comfort > 1. Daylighting	1	1%	0	0%	0	0%
Hea 01: Visual comfort > 2. Internal and	1	10/	0	0%	0	0%
external lighting	T	170	0	0%	0	0%
Hea 02: Indoor air quality	1	1%	0	0%	0	0%
Hea 06: Security	1	1%	0	0%	0	0%
Ene 01: Reduction of energy use and						
carbon emissions > 1. Energy	3	3%	0	0%	0	0%
performance						
Ene 01: Reduction of energy use and						
carbon emissions > 2. Prediction of	2	2%	0	0%	0	0%
operational energy consumption : Post-	2	2 /0	0	070	0	070
occupancy stage						
Wat 01: Water consumption	1	1%	0	0%	0	0%
Mat 01: Environmental impacts from						
construction products - Building life						
cycle assessment (LCA) > 1. Core	1	1%	1	1%	0	0%
building services options appraisal						
during Concept Design						
Mat 01: Environmental impacts from						
construction products - Building life	1	1%	0	0%	0	0%
cycle assessment (LCA) > 2 . LCA and	-	170	Ū	070	U	070
LCC alignment						
Mat 01: Environmental impacts from						
construction products - Building life	1	1%	1	1%	0	0%
cycle assessment (LCA) > 3. Third party	-	1/0	-	1/0	Ũ	070
verification						
Mat 03: Responsible sourcing of	1	1%	0	0%	0	0%
construction products	-	2,0				
Wst 01: Construction waste						
management > 1. Construction	1	1%	0	0%	0	0%
resource efficiency						



Innovation Totals (Up to a maximum of 10 credits)	10	10.00%	2	2.00%	0	0.00%
LE 04: Ecological change and enhancement	1	1%	0	0%	0	0%
LE 02: Ecological risks and opportunities	1	1%	0	0%	0	0%
Wst 05: Adaptation to climate change	1	1%	0	0%	0	0%
Wst 02: Use of recycled and sustainably sourced aggregates	1	1%	0	0%	0	0%

