CIRCLE SUSTAINABILITY

Data Centre BREEAM Pre-assessment

Latos Manchester Limited

March 2026

Introduction

This report is intended as a summary of progress against the targeted credits for the following assessment:

Project Name	Latos Manchester East
Version	Data Centres 2010
Assessment stage	Pre-assessment
Lead Consultant	Sarah Howe
Targeted Score	61.60%
Target Rating	Very Good (55%)
Current Score	0 %
Current Rating	Unclassified

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.

Within the report the progress against each credit will be marked as follows:

Red	Not yet started	No information received
Amber	Ongoing	Partial information received OR full credits no longer achievable.
Green	Achieved	All required information received and credit awarded.
Grey	Not targeted	Not targeted.

Minimum Standards

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

BREEAM Issue	Awarded	Maximum Rating				
		Pass	Good	Very Good	Excellent	Outstanding
		No. Credits Required				
Man 1 - Commissioning	0	1	1	1	1	2
Man 2 – Considerate Constructors	0	-	-	-	1	2
Man 4 – Building User Guide	0	-	-	-	1	1
Hea 4 – High Frequency Lighting	0	1	1	1	1	1
Hea 12- Microbial Contamination	0	1	1	1	1	1
Ene 1 – Reduction of CO2 Emissions	0	-	-	-	6	10
Ene 2 – Sub-metering of Substantial Energy Uses	0	-	-	1	1	1
Ene 5 – Low or Zero Carbon Technologies	0	-	-	-	1	1
Wat 1 – Water Consumption	0	-	1	1	1	2
Wat 2 – Water Meter	0	-	1	1	1	1
Wst 3 – Storage of Recyclable Waste	0	-	-	-	1	1
LE 4 – Mitigating Ecological Impact	0	-	-	1	1	1

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:

Awarded	Credits which have been achieved.
Targeted	Credits which the project is expected to achieve.
Potential	Credits which could be achieved with some addition.

Credit Progress Log – Management

Man 1 – Commissioning							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Man 1 	1	0	1	0	Client	**Requirement 1** An appropriate project team member(s) is appointed to monitor and programme pre-commissioning, commissioning and, where necessary, re-commissioning on behalf of the client. **Requirement 2** Commissioning to be carried out in line with current Building Regulations and BSRIA1 and CIBSE2 guidelines, where applicable. **Requirement 3** The main contractor accounts for the commissioning programme, responsibilities and criteria within the main programme of works. **Requirement 4** A specialist commissioning manager is appointed (by either client or contractor) for complex systems such as: · Air conditioning / cooling systems · Mechanical ventilation, displacement ventilation, complex passive ventilation · Building management systems (BMS) · Renewable energy sources · Microbiological safety cabinets and fume cupboards · Cold storage enclosures and refrigeration plant · Uninterruptible Power Supply (UPS) systems · Standby power generation systems The specialist commissioning manager must have been appointed during the design stage and the scope of their responsibility includes: · Design input: commission ability design reviews · Commissioning management input to construction programming · Commissioning management input during installation stages · Management of commissioning, performance testing and handover/post-handover stages. **Requirement 5** 5. Where BMS specified, the following commissioning procedures must be carried out: a. Commissioning of air and water systems is carried out when all control devices are installed, wired and functional b. In addition to air and water flow results, commissioning results include physical measurements of room temperatures, off coil temperatures and other key parameters as appropriate c. The BMS/controls installation should be running in auto with satisfactory internal conditions	**Requirement 1 & 4** A copy of a letter or commissioning responsibilities schedule confirming the appointment of [or commitment to appoint]: · Design team member(s) as commissioning monitor and scope of their commissioning role. · Specialist commissioning manager **Requirement 3** A copy of the specification clause confirming: · The managing contractor's responsibilities with respect to this requirement. OR A copy of a commissioning schedule highlighting: · Managing contractor's **Requirement 5** A copy of the specification clause/commissioning schedule confirming: · The stages of the BMS/Controls commissioning procedures.

Man 1 – Commissioning							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						prior to handover d. All BMS schematics and graphics (if BMS is present) are fully installed and functional to user interface before handover e. The occupier will be fully trained in the operation of the system.	
Second Credit Man 1	1	0	1	0	Client	**Requirement 1** The first credit has been achieved. **Requirement 2** The above appointment(s) include the following seasonal commissioning responsibilities over a minimum 12 month period, once the building becomes occupied: **Complex Systems – Specialist commissioning manager** a. Testing of all building services under design load conditions, including heating/cooling/ventilation/humidity control/power supply systems and those in office/ancillary areas. b. Where applicable, testing should also be carried out during periods of extreme (high or low) load conditions. c. Where specified, free cooling systems should be tested on a seasonal basis. d. Interviews with building occupants (where they are affected by the complex services) to identify problems or concerns regarding the effectiveness of the systems e. Re-commissioning of systems (following any work needed to serve revised loads), and incorporating any revisions in operating procedures into the O&M manuals. Where specialist building services systems such as fume cupboards, microbiological safety cabinets and a cold storage system are present then the assessor must ensure that these systems are included in the specialist commissioning agent's responsibilities. **Simple Systems (naturally ventilated) – External Consultant/Facilities Manager** a. Review thermal comfort, ventilation, and lighting, at three, six and nine month intervals after initial occupation, either by measurement or occupant feedback. b. Take all reasonable steps to re-commission systems following the review and incorporate any relevant revisions in operating procedures into the O&M manuals.	**Requirement 1** Evidence (as outlined above) confirming compliance with the first credit. **Requirement 2** As evidence criteria for 1 & 3 of the first credit. This evidence must confirm the scope of seasonal commissioning responsibilities/tasks (as required).

Man 2 – Considerate Constructors							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Man 2 	2	0	2	0	Contactor	**Requirement 1** The main contractor has complied with and achieved formal certification under the Considerate Constructors Scheme(CCS), credits awarded as follows: a. One credit where the contractor achieved a CCS *Code of Considerate Practice* score between 24 and 31.5. b. Two credits where the contractor achieved a CCS *Code of Considerate Practice* score between 32 and 35.5. **OR** **Requirement 2** The main contractor has complied with an **alternative, independently assessed scheme** (equivalent to CCS), credits awarded as follows: (see Checklist A2) a. One credit where the site has been independently assessed using the alternative scheme, **AND** the alternative scheme addresses all the mandatory items plus 50% of the optional items in Checklist A2. b. Two credits where the site is to be independently assessed using the alternative scheme **AND** the alternative scheme addresses all the mandatory items plus 80% of the optional items in Checklist A2.	**Requirement 1** A copy of the relevant section of the main contract specification confirming: · A requirement to comply with the CCS · The minimum score to be achieved in each CCS section. **OR** A formal letter from the client/developer confirming: · The main contract will include a clause requiring CCS certification · The scope of the main contractor's works · A completed copy of checklist A1. **Requirement 2** A copy of the assessment criteria for the alternative scheme that allows the assessor to complete checklist A2. **AND** A formal letter from the client/developer confirming: · The main contract will include a clause requiring compliance with the alternative scheme · The procedure, and individual/ organisation responsible for third party assessment of site compliance. · The scope of the main contractor's works

Man 2 – Considerate Constructors							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
Exemplary Credit e1	1	0	0	0	Contractor	**Exemplary Requirement** 1. The main contractor has complied with and achieved a certified CCS *Code of Considerate Practice* score of 36 or more. **OR** 2. The main contractor has complied in full with the alternative, independently assessed scheme, and the alternative scheme addresses all the mandatory and optional items in Checklist A2.	**Exemplary Requirement** A formal letter from the main contractor confirming their commitment to: · Gaining CCS or equivalent certification · A minimum score of ≥36 or equivalent.

Man 3 – Construction Site Impacts							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Man 3 	4 for newbuilds/refurbs	0	4	0	Contactor	**Requirement 1** One credit where evidence provided demonstrates that 2 or more of items a-g (listed below) are achieved. **OR** Two credits where evidence provided demonstrates that 4 or more of items a-g (listed below) are achieved. **OR** Three credits where evidence provided demonstrates that 6 or more of items a-g (listed below) achieved: a. Monitor, report and set targets for CO2 or energy arising from site activities b. Monitor, report and set targets for CO2 or energy arising from transport to and from site c. Monitor, report and set targets for water consumption arising from site activities d. Implement best practice policies in respect of air (dust) pollution arising from the site e. Implement best practice policies in respect of water (ground and surface) pollution occurring on the site f. Main contractor has an environmental materials policy, used for sourcing of construction materials to be utilised on site g. Main contractor operates an Environmental Management System. **Requirement 2** One credit where evidence provided demonstrates that at least 80% of site timber is responsibly sourced and 100% is legally sourced.	**All Requirements** A copy of the relevant section from the main contract specification confirming: · Contractor's obligations in respect to each item on the checklist · Site timber will be sourced from suppliers capable of providing certification to the level required for the particular tier claimed (see table 13 of BREEAM issue MAT 5) · All timber will come from a 'legal source' and is not on the CITES list*. **OR** Where the main contract specification is not yet available, a formal letter from the client/developer including: · Completed checklist A3 identifying which items will form part of the main contractor's obligations. · The policy for sourcing site timber for the project. · Confirmation that the above will be implemented in compliance with BREEAM's criteria.

Man 4 – Building User Guide							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Man 4	1	0	1	0	Client	**Requirement 1** A Building User Guide that contains the information described under the '*User Guide Contents*' heading (see additional guidance) has been developed. **Requirement 2** The *guide* is relevant to the non-technical building user and appropriate to the stakeholder(s) that will occupy the building.	**Requirement 1 & 2** A copy of the specification clause confirming: · Requirement to develop a Building User Guide · Scope of the Guide's contents. **OR** A formal letter from the client/developer confirming: · That the design team will be required to develop a Building User Guide. · The contents of the Guide will be developed in compliance with the BREEAM criteria.

Man 8 – Security							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Man 4	1	0	0	1	Client	**Requirement 1** The design team has consulted with and sought the advice of the local police *Architectural Liaison Officer* (ALO) or *Crime Prevention Design Advisor* (CPDA) on designing out the opportunity for crime, in accordance with the principles and guidance of *Secured by Design7*. **Requirement 2** Consultation with the ALO/CPDA occurred during or prior to the *concept design* stage (RIBA stage C) or equivalent. **Requirement 3** The final design embodies the recommendations of the ALO/CPDA and is built to conform to the principles and guidance of *Secured by Design*.	**Requirement 1 & 2** Correspondence from or a copy of the report/feedback from the ALO/CPDA confirming: · Scope of their advice/involvement · The stage of design in which their advice was sought · Summary of their recommendations **Requirement 3** A marked-up copy of the site/design plan(s) highlighting examples of: · The development conforming to ALO/CPDA recommendations and SBD principles and guidance. OR If the timing of assessment does not permit the above, a copy of the specification clause confirming: The development will conform to ALO/CPDA recommendations and SBD principles and guidance.

Man 12 – Life Cycle Costing							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Man 12 	1	0	0	0	Client	**Requirement 1** A Life Cycle Cost (LCC) analysis has been carried out based on the proposals developed during RIBA Work Stages C/D (concept design/design development), or equivalent. **Requirement 2** The Life Cycle Costs analysis, based on the concept design/design development proposals, covers the following stages: a. Construction b. Operation - includes, as a minimum, utilities c. Maintenance - includes, as a minimum, planned maintenance, replacements and repairs, cleaning, management costs d. End of life **Requirement 3** The LCC analysis uses a study period of 25 or 30 (as applicable) **AND** 60 years, shown in *real* and *discounted* cash flow terms. **Requirement 4** The analysis demonstrates that at least two of the following issues have been analysed at a strategic and system level (as per figure 6, Different levels of analysis at different stages of the life cycle, ISO 15686-5 8), comparing alternative options: a. Structure b. Envelope c. Services d. Finishes The chosen solution is the one that best meets the performance criteria for the built asset. **Requirement 5** The option(s) with the lowest discounted LCC over the period is preferred, assuming that their selection results in at least one of the following: a. The lowest building energy consumption over the operational life span of the building (compared to other options/alternatives analysed) b. A reduction in maintenance requirement/frequency c. Prolonged replacement intervals of services infrastructure/systems or building fabric d. Dismantling and recycling or reuse of building components. **Requirement 6** The model was updated during RIBA Work Stages D/E (design development/technical design) or equivalent.	**Requirement 1 - 4** A copy of the feasibility stage LCC analysis. The details of the cost consultant who has completed the analysis. **Requirement 5** A formal letter from the design team or cost consultant confirming: · The preferred option. **Requirement 6** An updated copy of the LCC analysis for the detailed and final design. **OR** A formal letter from the design team confirming: · The LCC analysis will be updated to reflect the detailed and final design proposals. · Any proposed change(s) made to the specification will be on the basis that they will minimise life cycle costs and impacts.

Man 12 – Life Cycle Costing							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
Second Credit Man 12 	1	0	0	0	Client	**Requirement 1** The first credit has been achieved. **Requirement 2** The results of the study have been implemented in the specification, design and final construction of the assessed building.	**Requirement 1** Evidence (as outlined above) confirming compliance with the first credit. **Requirement 2** A formal letter from the design team confirming: · The option(s) with the lowest discounted life cycle costs have been, or will be, implemented in the design and specification.

Credit Progress Log – Health and Wellbeing

Hea 1 – Daylighting							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 1	1	0	0	0	Architect	**Requirement 1** At least 80% of net lettable office floor area is adequately daylit as follows: a. An average daylight factor of 2% or more. **PLUS** either (b) **OR** (c **AND** d) below b. A uniformity ratio of at least 0.4 or a minimum point daylight factor of at least 0.8% (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 1.4%). **OR** c. A view of sky from desk height (0.7m) is achieved. **AND** d. The room depth criterion **d/w +d/HW < 2/(1-RB)** is satisfied. Where: d = room depth w = room width HW = window head height from floor level RB = average reflectance of surfaces in the rear half of the room. Note: Table 7 Reflectance for maximum room depths and window head heights (see Additional Information) gives maximum room depths in metres for different room widths and window head heights of side lit rooms **Requirement 2** The provision of daylight has been designed in accordance with the guidance in CIBSE Lighting Guide 1010 Daylighting and window design, BS8206 Part 211 and the BRE Site Layout Guide12.	**All Requirement** Design plans for each floor in the building with each room/area appropriately labelled for use. **AND** Daylight calculations confirming: · Building areas assessed · The daylighting variables/criterion measured · Average daylight factor for each area · Compliance with room depth criterion, uniformity ratio, view of sky (if required) · The daylight provision is in compliance with the relevant standards.
Exemplary Credit e2	1	0	0	0	Architect	**<u>Exemplary Credit Requirement</u>** **Requirement 1** At least 80% of the floor area (for the building spaces/room identified above in the standard criteria) has an average daylight factor of 3% in multi-storey buildings and 4% in single storey buildings. **Requirement 2** The criteria outlined above concerning uniformity ratio, view of sky or room depth criterion are met. Where demonstrating compliance via uniformity ratio or point daylight factor the following minimum	

Hea 1 – Daylighting							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						criteria apply: a. Multi-storey: A uniformity ratio of at least 0.4 or a minimum point daylight factor of at least 1.2%; (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 2.1%). b. Single storey: a minimum point daylight factor of at least 1.6%; (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 2.8%).	

Hea 2 – View Out							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 2	1	0	1	0	Architect	**Requirement 1** At least 80% of net lettable office floor area is adequately daylit as follows: a. An average daylight factor of 2% or more. **PLUS** either (b) **OR** (c **AND** d) below b. A uniformity ratio of at least 0.4 or a minimum point daylight factor of at least 0.8% (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 1.4%). **OR** c. A view of sky from desk height (0.7m) is achieved. **AND** d. The room depth criterion **d/w +d/HW < 2/(1-RB)** is satisfied. Where: d = room depth w = room width HW = window head height from floor level RB = average reflectance of surfaces in the rear half of the room. Note: Table 7 Reflectance for maximum room depths and window head heights (see Additional Information) gives maximum room depths in metres for different room widths and window head heights of side lit rooms **Requirement 2** The provision of daylight has been designed in accordance with the guidance in CIBSE Lighting Guide 1010 Daylighting and window design, BS8206 Part 211 and the BRE Site Layout Guide12.	**All Requirement** Design plans for each floor in the building with each room/area appropriately labelled for use. **AND** Daylight calculations confirming: · Building areas assessed · The daylighting variables/criterion measured · Average daylight factor for each area · Compliance with room depth criterion, uniformity ratio, view of sky (if required) · The daylight provision is in compliance with the relevant standards.

Hea 2 – View Out							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
Exemplary Credit Hea 2 	1	0	0	0	Architect	**Exemplary Credit Requirement** **Requirement 1** At least 80% of the floor area (for the building spaces/room identified above in the standard criteria) has an average daylight factor of 3% in multi-storey buildings and 4% in single storey buildings. **Requirement 2** The criteria outlined above concerning uniformity ratio, view of sky or room depth criterion are met. Where demonstrating compliance via uniformity ratio or point daylight factor the following minimum criteria apply: a. Multi-storey: A uniformity ratio of at least 0.4 or a minimum point daylight factor of at least 1.2%; (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 2.1%). b. Single storey: a minimum point daylight factor of at least 1.6%; (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 2.8%).	

Hea 3 – Glare Control							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 3 	1	0	1	0	Architect	**Requirement 1** An occupant-controlled shading system on all windows, glazed doors and rooflights in all *relevant building areas*.	**All Requirement** Marked-up copy of the design plan(s) confirming: · A description of the function of each of the building spaces. A copy of the relevant specification clause(s), window schedule or design plan confirming: · Type of shading system(s) and control to be installed.

Hea 4 – High Frequency Lighting							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 4 	1	0	1	0	M&E	**Requirement 1** All fluorescent and compact fluorescent lamps are fitted with high frequency ballasts.	**All Requirement** A copy of the specification clause or room data sheets confirming: · A compliant lighting strategy.

Hea 5 – Internal and External Lighting Levels							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 5	1	0	1	0	M&E	**Requirement 1** Illuminance (lux) levels in all internal areas of the building are specified in accordance with the CIBSE Code for Lighting 200614. **Requirement 2** For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 715 sections 3.3, 4.6, 4.7, 4.8 and 4.9. This gives recommendations highlighting: a. Limits to the luminance of the luminaires, to avoid screen reflections. (Manufacturers' data for the luminaires should be sought to confirm this). b. For up-lighting, the recommendations refer to the luminance of the lit ceiling rather than the luminaire; a design team calculation is usually required to demonstrate this. c. Recommendations for direct lighting, ceiling illuminance, and average wall illuminance. **Requirement 3** Illuminance levels for lighting in all external areas within the *construction zone* are specified in accordance with CIBSE Lighting Guide 6, '*The outdoor environment'16*.	**All Requirement** **EITHER** A copy of the specification or relevant room schedules confirming: · The internal/external maintained illuminance levels **AND/OR** · The standards that the illuminance levels are specified to. **OR** A formal written declaration of conformity from the relevant member of the design team confirming: · The maintained illuminance levels for each internal/external space are in

Hea 6 – Lighting Zones and Controls							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 6 	1	0	1	0	M&E	**Requirement 1** Lighting is zoned to allow *separate occupant control* of the following areas (where applicable): a. Office and circulation spaces b. In office areas, zones of no more than four workplaces c. Workstations adjacent to windows/atria and other building areas separately zoned and controlled. d. Seminar and lecture rooms: zoned for presentation and audience areas e. Library spaces: separate zoning of stacks, reading and counter areas. f. Dining, restaurant, café areas: separate zoning of servery and seating/dining areas	**All Requirement** Design plans for each floor of the building highlighting: · Space arrangement and room type **AND** Specification or design plans confirming: · Lighting zones · Location and scope of user-controls.

Hea 7 – Potential for Natural Ventilation							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 7 ●	1	0	0	0	M&E	**Requirement 1** *Occupied spaces* of the building are designed to be capable of providing fresh air entirely via a natural ventilation strategy, demonstrated via **EITHER** of the following: a. The *openable window area* in each *occupied space* is equivalent to 5% of the gross internal floor area of that room/floor plate. For room/floor plates between 7m-15m depth, the *openable window area* is on opposite sides and evenly distributed across the area to promote adequate cross-ventilation. **OR** b. The design demonstrates (by calculation, using ventilation design tool types recommended by CIBSE AM1017) that the natural ventilation strategy provides adequate cross flow of air to maintain required thermal comfort conditions and ventilation rates. For a strategy which does not rely on *openable windows*, or which has *occupied spaces* with a plan depth greater than 15m, the design must demonstrate (by calculation in accordance with requirement 1b above) that the ventilation strategy can provide adequate cross flow of air to maintain the required thermal comfort conditions and ventilation rates. **Requirement 2** The strategy is capable of providing at least two levels of user-control on the supply of fresh air to the *occupied space* with higher rates of ventilation achievable to remove short-term odours and/or prevent summertime overheating. This would typically be demonstrated by providing a large enough area of manually opening windows or powered window actuators. Any opening mechanisms must be easily accessible and provide adequate user-control over air flow rates to avoid draughts	**All Requirement** Design plans and elevations, specification or calculations confirming: · Ventilation strategy in each *occupied space* · The depth of the room · Gross internal floor area of each *occupied space* · The type of window/ventilator and total *openable area* * · The location of openings · The type and degree of user-control. **AND (where relevant)** A copy of the results from the appropriate software modelling tool demonstrating compliance. *Manufacturers'/suppliers' literature may also be used as evidence.

Hea 8 – Indoor Air Quality							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 8	1	0	0	1	Consultant	**Requirement 1** **Air-conditioned and mixed-mode buildings**: Where the building's air intakes and exhausts are over 10m apart to minimise recirculation **AND** intakes are over 20m from *sources of external pollution.* **Requirement 2** **Naturally-ventilated buildings**: Where openable windows/ventilators are over 10m from *sources of external pollution*. **Requirement 3** In addition to the specific BREEAM criteria above, the building has been designed to provide fresh air rates to dilute pollutants in accordance with the following good practice: a. In general office type areas fresh air is provided in accordance with the top of the range recommended in the British Council for Offices *Guide to Best Practice in the Specification of Offices18* i.e. 12 litres per second per person.	**Requirement 1&2** A marked-up proposed site plan highlighting: · Locations of intakes, extracts, openable windows, ventilators · Any existing or proposed sources of external pollution. **Requirement 3** Design team calculations and/or performance specification criteria confirming: · The fresh air rate set for each space · That the fresh air rate can be met using the chosen strategy · The relevant standard(s) to which the design is in accordance with.

Hea 9 – Volatile Organic Compounds							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 9 	1	0	1	0	Consultant	**Requirement 1** The products listed in the guidance document (where specified) have been tested against and meet the relevant standards outlined the table 8 for Volatile Organic Compound (VOC) emissions.	**Requirement 1** A copy of the relevant specification clause confirming: · The VOC content of the relevant specified product types will comply with the standards specified above.

Hea 10 – Thermal Comfort							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 10 	1	0	0	1	Consultant	**Requirement 1** Thermal modelling has been carried out using software selected and applied in accordance with CIBSE AM11 *Building Energy and Environmental Modelling41*. **Requirement 2** The modelling demonstrates that the building design and services strategy can deliver thermal comfort levels in *occupied spaces* in accordance with the criteria set out in CIBSE Guide A *Environmental Design42*; in particular that internal winter and summer temperature ranges will be in line with the recommended comfort criteria in table 1.5 of the Guide. **Requirement 3** The software used to carry out the simulation at the detailed design stage must provide *full dynamic* *thermal analysis*. For smaller and more basic building designs an alternative less complex means of analysis may be appropriate (such methodologies must still be selected and applied in accordance with CIBSE AM11).	**Requirement 1&3** A copy of the relevant specification clause confirming: · The criteria for thermal comfort analysis. **OR** Correspondence (e.g. letter, email or meeting minutes) from the design team confirming: · The name of the thermal comfort modelling software used. · The software has been selected and applied in accordance with CIBSE AM11. **Requirement 2** A copy of the results from the modelling demonstrating the internal temperatures in compliance with the relevant standards.

Hea 11– Thermal Zoning							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 11	1	0	1	0	Consultant	**Requirement 1** The heating/cooling system is designed to allow *occupant control* of zoned areas within all *occupied spaces* in the building. **Requirement 2** The zoning allows *separate occupant control* (within the *occupied space*) of each perimeter area (i.e. within 7m of each external wall) and the central zone (i.e. over 7m from the external walls).	**Requirement 1&2** A copy of the relevant clauses of specification and/or marked-up M&E drawings confirming: · Scope of the heating/cooling system · The type of user controls for the above systems · The scope of the controls i.e. control zone.

Hea 12– Microbial Contamination							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 12	1	0	1	0	Consultant	**Requirement 1** All *water systems* in the building are designed in compliance with the measures outlined in the Health and Safety Executive's "*Legionnaires' disease - The control of legionella bacteria in water systems*". Approved Code of Practice and guidance, 200043. **Requirement 2** Where no humidification is specified or only steam humidification is provided.	**Requirement 1&2** A copy of the relevant specification clause(s) confirming: · All types of water system in the building and on the assessed site. · The standards to which all water systems in the building will be designed. Where design responsibility is to be passed on to the contractor/installer, a copy of the relevant specification clause(s) stating: · The criteria on the contractor/installer with regards to minimising the risk of Legionnaires disease from the specified water systems.

Hea 13 – Acoustic Performance							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Hea 13 	1	0	0	0	Acoustic Consultant	**Requirement 1** Indoor ambient noise levels in *unoccupied* staff/office areas comply with the following: a. ≤ 40dB *L*Aeq,*T* in single occupancy offices b. 40-50dB *L*Aeq,*T* in multiple occupancy offices c. £ 40 dB *L*Aeq,*T* general spaces (staffrooms, restrooms) d. £ 35 dB *L*Aeq,*T* in spaces designed for speech e.g. seminar/lecture rooms e. ≤ 50 dB *L*Aeq,*T* in informal café/canteen areas **Requirement 3** Pre-completion acoustic testing is carried out by a *suitably qualified acoustician* to ensure that all relevant spaces (as built) achieve the performance standards required, and any required remedial works in spaces that do not meet the standards are completed prior to handover and occupation.	**Requirement 1&2** A copy of the design plan for each level of the building with each room/area clearly labelled. A copy of the specification clause or acousticians calculations confirming: · Indoor ambient noise levels in each relevant room/area. · If relevant, sound insulation levels between each *acoustically sensitive room* and adjacent *occupied areas*. · The standards to which calculations/measurements have complied, or are required to comply with. **Requirement 3** A copy of the specification clause or a formal letter from the project team confirming: · A programme of pre-completion acoustic testing by a *suitably qualified acoustician* will be commissioned. · Where rooms/areas do not comply with the required levels, appropriate remedial

Credit Progress Log - Energy

Ene 1 – Reduction of CO2 Emissions							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
Credit Ene 1 	15	0	13	0	M&E	**Requirement 1** The number of credits achieved is determined by comparing the building's; a. predicted Power Usage Effectiveness (PUE) **AND** b. CO2 index (EPC Rating) taken from the Energy Performance Certificate (EPC), with the table of benchmarks below. Both benchmarks must be met in order to achieve the associated number of credits (e.g. to achieve 8 credits for a new build project, the building must have a CO2 index which falls between 40 and 26 and a predicted PUE of 1.45). **Requirement 2** The assessed building's CO2 index (EPC Rating) must be entered in to the relevant box of the Ene 1 Reduction of CO2 emissions calculator. **Requirement 3** The building must have been modelled using a method compliant with the National Calculation Method (NCM) and an Energy Rating and certificate produced using Approved software by an Accredited Energy Assessor. **Requirement 4** The assessed building's predicted PUE must be calculated as the annual average (i.e. not the 'Instantaneous' PUE) and must assume full load conditions.	**Requirement 1-3** A copy of the EPC output from the *approved software* for the assessed building at the design stage. The *accredited energy assessor's* name and accreditation number (this information will be on the EPC). **Requirement 1&4** A copy of the relevant clauses of specification and/or marked-up M&E drawings confirming: · The power delivery components specified · The cooling system components specified. **AND** Design team calculations confirming the predicted PUE rating, based on the predicted IT equipment power and total facility power.

Exemplary Credit e4	3	0	0	0		**<u>Exemplary Credit Requirements</u>** **Requirement 1** One additional innovation credit can be awarded where evidence provided demonstrates that the building achieves a predicted PUE of ≤1.20 and an EPC rating of 25 or less (or 31 or less for a refurbished building). **Requirement 2** Two additional innovation credits can be awarded where evidence provided demonstrates that the building achieves a predicted PUE of ≤1.10 and an EPC rating of 25 or less	

Ene 2 – Sub-metering of Substantial Energy Uses							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Ene 2 	1	0	1	0	M&E	**Requirement 1** Separate *accessible energy sub-meters*, labelled with the end energy consuming use, are provided for the following systems (where present): a. Space Heating b. Domestic Hot Water c. Humidification d. Cooling e. Fans (major) excluding fans in chillers/CRACs etc f. Lighting g. Small Power (lighting and small power can be on the same sub-meter where supplies are taken at each floor/department). h. UPS systems (input and output) i. Generators j. Power Distribution Units (PDUs) k. Other major energy-consuming items where appropriate (see Compliance Notes).	**Requirement 1** Specification document or technical drawings confirming: · Energy-consuming systems and their rated outputs · Metering arrangements for each system, type and location of meter specified. · If applicable, scope of BMS and its energy-monitoring capability. **Requirement 2-4** A copy of the specification confirming: · A description of the type and scope of the BMS and its level of control. Where using an existing BMS to demonstrate compliance, a written description from the client/building occupier confirming: The type and scope of the BMS and its level of control
Second Credit Ene 2 	1	0	0	0	M&E	**Requirement 2** The first credit is achieved. **Requirement 3** A BMS with the ability to monitor and control the following as well as the relevant systems above has been installed: a. Chillers, air handling units and pumps and other major HVAC plant (where specified) b. Internal environmental conditions **Requirement 4** The BMS must have the ability to draw to the attention of the user out of range operational values (using an alarm system).	

Ene 4 – External Lighting							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Ene 4 	1	0	1	0	M&E	**Requirement 1** All external light fittings for the building, access ways and pathways have a luminous efficacy of at least 50 lamp lumens/circuit Watt when the lamp has a colour rendering index (Ra) greater than or equal to 60. **OR** 60 lamp Lumens / circuit Watt when the lamp has a colour rendering index (Ra) less than 60. **Requirement 2** All external light to the car parking areas, associated roads and floodlighting has a luminous efficacy of at least 70 lamp lumens/circuit Watt when the lamp has a colour rendering index (Ra) greater than or equal to 60 . OR 80 Lamp lumens / circuit Watts when the lamp has a colour rendering index (Ra) less than 60. **Requirement 3** All external light fittings for signs and uplighting has a luminous efficacy of at least 60 lamp lumens/ circuit Watt when the lamp wattage is greater than or equal to 25W. OR 50 lamp lumens/ circuit Watt when the lamp wattage is less than 25W. **Requirement 4** External light fittings are controlled through a time switch, or daylight sensor, to prevent operation during daylight hours. Daylight sensor override on a manually switched lighting circuit is acceptable.	**Requirement 1-4** Marked-up site plan and building elevations showing: · Location and purpose of all external lighting fittings. Lighting specification or lighting designer's calculations confirming: · Lamp lumens/circuit watt for each type of fitting as well as the colour rendering index Ra (where appropriate) · External lighting control strategy..

Ene 5 – Low or Zero Carbon Technologies							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Ene 5	1	0	0	0	M&E	**Requirement 1** A feasibility study has been carried out by an *energy specialist* (see Compliance Notes) to establish the most appropriate local (on-site or near-site) LZC energy source for the building/development.. The study cover as a minimum: a. Energy generated from LZC energy source per year b. Payback c. Land use d. Local planning criteria e. Noise f. Feasibility of exporting heat/electricity from the system g. Life cycle cost/lifecycle impact of the potential specification in terms of carbon emissions h. Any available grants i. All technologies appropriate to the site and energy demand of the development. j. Reasons for excluding other technologies. **Requirement 2** A local LZC energy technology has been specified for the building/development in line with the recommendations of the above feasibility study. **Requirement 3** The feasibility study has been carried out at RIBA stage C (concept design) or equivalent procurement stage. OR **Requirement 4** The organisation that occupies the building has in place a contract with an energy supplier to provide electricity for the assessed building/development from a 100% renewable energy source. This supply must be delivered by an accredited external renewable source. The contract must be valid for a minimum of 3 years from the date an assessed building becomes occupied.	**Requirement 1&3** A copy of the feasibility study report. Letter from the energy specialist confirming: · Compliance with the definition of an energy specialist · The timing of the feasibility report within the plan of works. **Requirement 2** Marked-up design plan or specification confirming: · Proposed installation of LZC energy technology. Manufacturer's technical data and details or calculations stating the carbon savings **Requirement 4** Where an offsite supply is being used as a method of compliance, supplier's documentation confirming: · Name and details of supplier · Details of the source of supply. A copy of the contract or other formal documentation confirming the length of contract to supply 100% renewable energy.

Ene 5 – Low or Zero Carbon Technologies							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
Second Credit Ene 5 	1	0	0	0	M&E	**Requirement 1** The first credit for a feasibility study must be achieved. **Requirement 2** A local LZC energy technology has been installed in line with the recommendations of the above feasibility study and this method of supply results in a 10% reduction in the building's CO2 emissions. **Requirement 3** Figures used for calculations of the percentage carbon reduction provided by LZC technology provided by LZC technology are based on the output from approved energy modelling software.	**Requirement 1** Evidence (as outlined above) confirming compliance with the first credit. **Requirement 2&3** A copy of the report produced by the approved energy modelling software illustrating; · The name of the approved software used to carry out the modelling · Confirmation of the expertise and experience of the individual carrying out the modelling. · Total CO2 emissions for the assessed building (without LZC energy technology) AND Calculations/outputs from the manufacturer, supplier, engineer or approved software confirming: · Total carbon savings as a result of the installed LZC technology.
Third Credit Ene 5 	1	0	0	0	M&E	**Requirement 1** The first credit for a feasibility study must be achieved. **Requirement 2** A local LZC energy technology has been installed in line with the recommendations of the above feasibility study and this method of supply results in a 15% reduction in the building's CO2 emissions. **Requirement 3** Figures used for calculations of the percentage carbon reduction provided by LZC technology provided by LZC technology are based on the output from approved energy modelling software	
Exemplary Credit e5 	1	0	0	0	M&E	**<u>Exemplary Credit Requirement</u>** **Requirement 1** The first credit for a feasibility study must be achieved. **Requirement 2** A local LZC energy technology has been installed in line with the recommendations of the above feasibility study and this method of supply results in a 20% reduction in the building's CO2 emissions. **Requirement 3** Figures used for calculations of the percentage carbon reduction provided by LZC technology provided by LZC technology are based on the output from approved energy modelling software.	

Ene 22 – Procurement of Sustainable IT Equipment							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Ene 22 	1	0	0	1	M&E	**Requirement 1** Where IT Equipment integral to the design and operation of the inherent building systems e.g. UPS systems, Generators, Cooling, BMS/EMS etc), is procured in accordance with the 'EU Code of Conduct on Data Centres' Best practice supplement version 2'56	**Requirement 1-2** A formal letter from the developer/owner that the relevant clauses will be included in the lease once written. A copy of the relevant specification clause confirming the make and model of relevant IT equipment Manufacturer's literature confirming the IT equipment Is in compliance with the Code of Conduct for Data Centres. **OR** A formal letter from the design team or building occupier confirming the specific undertaking.
Second Credit Ene 22 	1	0	0	1	M&E	**Requirement 2** The first credit is achieved. **Requirement 3** Where IT Equipment, for the running and operation of the building (servers, racks etc) once constructed and in use is procured in accordance with the 'EU Code of Conduct on Data Centres' Best practice supplement version 2'56.	

Credit Progress Log – Transport

Tra 1 – Provision of Public Transport							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Tra 1 	3	0	1	0	Client	**Requirement 1** The public transport *Accessibility Index* (AI) for the building is calculated and BREEAM credits awarded in accordance with AI index greater than 2 = 1 credit, AI index greater than 4 = 2 credits and AI index greater than 8 = 3 credits. The *Accessibility Index* is determined by entering the following information in to the BREEAM assessor's TRA 1 *Provision of Public Transport calculator:* a. The distance (m) from the *main building entrance* to each *compliant public transport node* b. The public transport type serving the compliant node e.g. bus or rail c. The *average number of services* stopping per hour at each *compliant node* during the standard *operating hours* of the building for a *typical day* (see additional guidance).	**Requirements** A copy of the output from the *Provision of Public Transport calculator* *. *Or via the alternative means for buildings in Greater London (see Additional Information) Scale map highlighting the location of the building and all public transport nodes in proximity of the building. Timetables for each service at each public transport node considered.

Tra 2 – Proximity to Amenities							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Tra 2 	1	0	0	0	Client	**Requirement 1** Where the building is within 500m of the following amenities: a. Grocery shop and/or food outlet b. Post box c. Cash machine	**Requirements** Marked-up site plan or map highlighting: · Location of assessed building · Location and type of amenities · The route to the amenities · Plan/map scale Where the amenities do not currently exist, but are due to be developed, a letter from the client/developer confirming: · The location and type of amenities to be provided · The timescale for development of the amenities.

Tra 3 – Cyclist Facilities							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Tra 3 	1	0	1	0	Client	**Requirement 1** The number of *compliant cycle storage spaces* provided is as follows: a. 10% of *building users* up to 500 **PLUS** b. 7% for *building users* in the range of 501 – 1000 **PLUS** c. 5% for *building users* over 1000	**Requirements** Site plan, design drawings and/or a copy of the specification confirming: · The location of the cycle storage facilities · The number of cycle spaces provided · The type, dimensions and layout of cycle racks · The materials and construction specified for the facility. · The lighting for the facility is in accordance with BS5489 Part 1. · Building occupancy or, where relevant, net lettable/floor area. Where the building is in a city centre location, and the benchmarks reduced, evidence as outlined under BREEAM credit Tra 1 demonstrating the relevant number of credits achieved.

Tra 3 – Cyclist Facilities							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
Second Credit Tra 3 	1	0	0	0		**Requirement 1** The first credit must be achieved. **Requirement 2** At least two of the following *compliant facilities* must be provided for the *building users*: a. Compliant showers b. Compliant changing facilities and lockers for clothes c. Compliant drying space for wet clothes	**Requirement 1** Evidence (as outlined above) confirming compliance with the first credit. **Requirement 2** Design drawings or a copy of the specification confirming: · Number of showers · Changing room · Secure locker locations, dimensions and numbers · Drying space

Tra 4 – Pedestrian and Cyclist Safety							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Tra 4 	1	0	1	0	Client	**Requirement 1** Where external site areas form part of the assessed site and these areas contain vehicle access roads, parking and/or pedestrian access to the building, adequate cycle lanes and pedestrian pathways must be provided. If the building does not have any external areas and internal access is directly from the public highway/footpath, then the credit(s) can be awarded on a default basis. **Requirement 2** The cycle lanes have been designed and constructed in accordance with the guidance in the National Cycle Network *Guidelines and Practical Details – issue 2*, Sustrans59 and the relevant parts of Appendix VI *NCN Design and Construction Checklist60* **Requirement 3** The cycle lanes and pedestrian paths meet the following minimum width dimensions: a. Where pedestrian and cycle routes are shared the minimum total width of the combined path is 3.0m b. Where the cycle lane is segregated from both the pedestrian route and carriageway the minimum width of the cycle path is 2.0m and the minimum width of the pedestrian path is 1.5m c. Where the cycle route forms a part of the carriageway, the minimum width of the lane is1.5m Minimum widths should not be regarded as the design target, where	**Requirements 1 & 3-9** A scaled proposed site plan, specification and/or design details highlighting all necessary features and dimensions. **Requirements 2** A copy of the specification or scaled proposed site plan confirming: · Cycle routes have been or will be designed in accordance with the best practice guidance[1] **AND** · A signed and dated copy of the *NCN Design and Construction Checklist* from the design/project team (or completed by the assessor using design information). **Requirement 10** A copy of the specification, site plan and/or manufacturer's technical details. confirming: · External lighting design strategy.

Tra 4 – Pedestrian and Cyclist Safety							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						possible best practice as detailed in the Sustrans guidelines and DfT61 guidance must be aimed for. **Requirement 4** Cycle lanes provide direct access to any cycle storage facilities provided on the site, without the need to deviate from the cycle path and, if relevant, connect to offsite cycle paths where these run adjacent to the development's boundary. **Requirement 5** Onsite footpaths connect to public footpaths off site, providing access to local transport nodes and other offsite amenities (where present). **Requirement 6** Where provided, drop-off areas are designed off the access road and provide direct access to pedestrian pathways/areas, therefore avoiding the need for the pedestrian to cross vehicle access routes. **Requirement 7** Where dedicated pedestrian crossing of a vehicle access route is provided, the road is raised to the pavement level (i.e. the pavement is not lowered to road level). **Requirement 8** For larger developments with a high number of public users/visitors, pedestrian pathways must be signposted to other local amenities off site, including public transport nodes. **Requirement 9** Delivery areas are not accessed through parking areas and do not cross or share pedestrian and cyclist routes and other outside amenity areas accessible to building users and general public. **Requirement 10** Lighting design of pedestrian pathways and cycle paths on site are in compliance with CIBSE Lighting Guide 6 (LG6)16 and BS5489 Part 158.	

Tra 5 – Travel Plan							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Tra 5 	1	0	1	0	Client/Transport Consultant	**Requirement 1** A travel plan has been developed as part of the feasibility and design stages which considers all types of travel relevant to the building type and *users*. **Requirement 2** The travel plan is structured to meet the needs of the particular site and takes into consideration the findings of a site-specific transport survey and assessment that covers the following (as a minimum): a. Where relevant, existing travel patters and opinions of existing building or sire users b. Travel patterns and transport impact of future building users c. Current local environment for walkers and cyclists (accounting for visitors who may be accompanied by young children) d. Disabled access (accounting for varying levels of disability and visual impairment) e. Public Transport links serving the site f. Current facilities for cyclists. **Requirement 3** The travel plan includes a package of measures that have been used to steer the design of life development in order to meet the travel plan objectives and minimise car-based travel patters. a. Providing parking priority spaces for car sharers b. Providing dedicated and convenient cycle storage and changing facilities c. Lighting, landscaping and shelter to make pedestrian and public transport waiting areas pleasant d. Negotiating improved bus services, i.e altering bus routes or offering discounts e. Restricting and/or charging for car parking f. Crtieria for lobby areas where information about public transport or car sharing can be made available g. Pedestrian and cycle friendly (for all types of users regardless of the level of mobility or visual impairment) via the provision of cycle lanes, safe crossing points, direct routes, appropriate tactile surfaces, well lit and signposted to other amenities, public transport nodes and adjoining offsite pedestrian and cycle routes. **Requirement 4** The travel plan includes measures tailored to minimise the impacts of operational- related transport e.g. deliveries to and from the site.	**Requirements 1-3** A copy of the Travel Plan. A copy of the site-specific transport survey/assessment. **Requirement 3** A marked-up copy of the site plan demonstrating examples of design measures, implemented in support the travel plan's findings. **OR** Where a detailed site plan is not available, a formal letter from the client confirming that measures will be implemented into the final design in support the travel plan's findings. **Requirement 4** A section within the Travel Plan or written confirmation that the plan will address operational related transport impacts.

Tra 6 – Maximum Car Parking Capacity							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Tra 6	1	0	0	0	Client	**Requirement 1** No more than one parking space is provided for every three *building users*.	**Requirements** A site plan or copy of the specification confirming: · Number and type of parking spaces provided for the building. Relevant documentation or correspondence from the design team or client confirming the number of building users.
Second Credit Tra 6	1	0	0	0		**Requirement 2** No more than one parking space is provided for every four *building users*.	

Credit Progress Log – Water

Wat 1 – Water Consumption							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wat 1	1	0	1	0	Client	**Sanitary Fittings** **Requirement 1** All WCs have an *effective flush volume* of 4.5 litres or less. **Requirement 2** Of the following, the two that offer the greatest possible reduction in annual water consumption have been specified: · All taps except kitchen taps, cleaners' sinks and external taps have a maximum flow rate less than 6 litres/min for a water pressure of 0.3MPa and are one of, or a combination of, the following types: · Timed automatic shut-off taps e.g. push taps · Electronic sensor taps · Low flow screw-down/lever taps · Spray taps · All showers, where specified, have a measured flow rate that does not exceed 9 litres per minute for a water pressure of 0.3MP · All urinals are either: · Fitted with individual presence detectors that operate the flushing control after each use. · Ultra-low flush or waterless urinals.	**Requirements 1-2** A copy of the relevant section of the M&E specification and/or manufacturer's details confirming: · Technical specification for sanitary fittings (flow rate) and controls to be installed. Design plan showing the location within the building of the sanitary facilities.
Second Credit Wat 1	2	0	2	0	Client	**Cooling Systems (including passive systems)** **Requirement 3** A technology/strategy is adopted which demonstrates a ≥20% reduction in the potable water consumption associated with the data centres cooling process. **Requirement 4** A technology/strategy is adopted which demonstrates a ≥40% reduction in the potable water consumption associated with the data centres cooling process.	**Requirements 3-4** A copy of the relevant section of the M&E specification and/or manufacturer's details confirming: · Technical specification for the cooling system solution to be installed. Design team calculations demonstrating: · Predicted base line potable water consumption. · Predicted potable water consumption of specified cooling system solution.
Exemplary Credit e6	1	0	0	0	Client	**Exemplary Credit Requirements** A technology/strategy is adopted which demonstrates a ≥50% reduction in the potable water consumption associated with the data centres cooling process.	

Wat 2 – Water Meter							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wat 2 	1	0	1	0	Client	**Requirement 1** The specification of a water meter on the mains water supply to each building; this includes instances where water is supplied via a borehole or other private source. **Requirement 2** The water meter has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption.	**Requirements 1-2** A copy of the specification clause confirming: · The specification and type of water meter(s). Design plan(s) showing: · Location of the water meter(s) in each assessed building/unit.
Exemplary Credit e7	1	0	0	0	Client	**Exemplary Credit Requirements** **Requirement 1** Where sub meters are fitted to allow the metering of individual water-consuming plant or building areas, where demand in such areas will be equal to or greater than of 10% of the total water demand of the building (see also compliance note). **Requirement 2** Each sub meter has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption.	

Wat 3 – Major Leak Detection							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wat 3	1	0	1	0	Client	**Requirement 1** A leak detection system capable of detecting major leaks on the water supply has been installed. The system must cover all mains water supply between and within the building and the site boundary. **Requirement 2** The leak detection system is: a. Audible when activated b. Activated when the flow of water passes through the water meter/data logger at a flow rate above a pre-set maximum for a pre-set period of time c. Able to identify different flow and therefore leakage rates, e.g. continuous, high and/or low level, over set time periods d. Programmable to suit the owner/occupiers' water consumption criteria e. Where applicable, designed to avoid false alarms caused by normal operation of large water-consuming plant such as chillers.	**Requirements 1&2** A copy of the specification clause confirming · Scope and performance criteria of leak detection system. **AND/OR** Manufacturer's details confirming: · The technical specification the specified systems.

Wat 4 – Sanitary Supply Shut Off							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wat 4	1	0	0	1	Client	**Requirement 1** Solenoid valves are installed on the water supply to each toilet area in the building and the flow of water through that supply is controlled by a link to either: · Infra-red movement detectors within each toilet facility **OR** · Sensors or switches placed at or on entry doors to each facility.	**Requirements 1** A copy of the specification clause confirming: · The specification of shut-off valves · The controls for the shut-off valves. A design plan showing: · The location of the toilet facilities.

Wat 5 – Water Recycling							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wat 5	1	0	0	0	Client	**Requirement 1** Where a rainwater collection tank has been installed and the tank is sized to collect at least 50% of **EITHER:** a. The total predicted rainwater run-off from the roof catchment area for the *defined period of collection*. **OR** b. The rainwater run-off required to meet the total predicted flushing demand for the *defined period of collection*. **Requirement 2** Waste water from wash hand basins and showers is collected from >80% of fittings and recycled to meet part (minimum of 10% or the total of WC/urinal flushing demand within the building(s). **Requirement 3** A combination of waste water and rainwater collection that meets at least 50% of **EITHER:** a. The total predicted toilet and urinal flushing demand for the *defined period of collection* **OR** b. The total predicted toilet and urinal flushing demand for the *defined period of collection* and (where specified) irrigation of planting and landscaping.	**All Requirements** A copy of the specification clause confirming: · Type of collection system specified. · WC, urinal, taps and shower specification (where appropriate). Design team calculations for the *defined period of collection* demonstrating (where appropriate): · Rainwater yield for the catchment area (mm) · Predicted WC/urinal flushing demand · Estimated potential for waste water collection from taps/showers. · Size (litres) of the rainwater/greywater collection tank specified.

Wat 6 – Irrigation Systems							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wat 6	1	0	1	0	Client	**Requirement 1** Where the irrigation method specified for internal or external planting and/or landscaping complies with **ANY ONE** of the following: a. Drip feed subsurface irrigation that incorporates soil moisture sensors. The irrigation control should be zoned to permit variable irrigation to different planting assemblages. b. Reclaimed water from a rainwater or greywater system. c. External landscaping and planting that relies solely on precipitation, during all seasons of the year. d. The only planting specified is restricted to species that thrive in hot and dry conditions. e. Where no dedicated, mains-supplied irrigation systems (including pop-up sprinklers and hoses) are specified, and planting will rely solely on manual watering by building occupier or landlord. **Requirement 2** Where a sub-surface drip feed irrigation system is installed for external areas, a rainstat must also be installed to prevent automatic irrigation of the planting and the landscape during periods of rainfall.	**All Requirements** Design team confirmation via assessment meeting minutes, letter or email confirming the irrigation strategy for the site **AND** Proposed site plan, marked up to illustrate the scope of the irrigation specified **AND** One of the following: A copy of the specification clause confirming: · Type of irrigation system and controls. **OR** Manufacturer's information detailing: · The technical details of the specified system.

Credit Progress Log – Materials

Mat 1 – Materials Specification (Major Building Elements)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Mat 1	6	0	4	2	Client	**Requirement 1** The Green Guide rating for the specifications for the following building elements must be determined and entered un to the BREEAM assessor *Mat 1 Calculator* Building Elements: - External walls - Windows - Roof - Upper Floor Slabs - Internal Walls - Floor Finishes/Coverings	**All Requirements** Specification confirming: · A detailed description of each applicable element and its constituent materials. Design drawings or specification detailing: · Location and area (m2) of each applicable element. A copy of the output from the Mat 1 Calculator, including Green Guide rating and element number* for each specification assessed. * Element numbers may change from time-to-time due to updates in the green guide data. As a result assessors should keep a note of the element numbers they use to give Green Guide rating advice on BREEAM assessments for auditing purposes.
Exemplary Credit e8	1	0	0	0		**Exemplary Credit Requirements** One exemplary BREEAM credit can be awarded as follows: a. Where assessing four or more applicable building elements, the building achieves at least two points additional to the total points required to achieve maximum credits under the standard BREEAM criteria. b. Where assessing fewer than four applicable building elements, the building achieves at least one point additional to the total points required to achieve maximum credits under the standard BREEAM criteria.	

Mat 2 – Hard Landscaping and Boundary Protection							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Mat 2 	1	0	1	0	Client	**Requirement 1** Where at least 80% of all external hard landscaping and boundary protection (by area) achieves an A or A+ rating, as defined in the *Green Guide to Specification*.	**All Requirements** Specification confirming: · A detailed description of each applicable element and its constituent materials. Design drawings or specification detailing: · Location and area (m2) of each applicable element. The Green Guide rating and element number for the assessed specifications.

Mat 3 – Re-Use of Façade							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Mat 3 	1	0	0	0	Client	**Requirement 1** At least 50% of the total final building façade (by area) is reused. **Requirement 2** At least 80% of the reused façade (by mass) comprises in-situ reused material.	**All Requirements** Drawings detailing: · The elevations of the existing and the new-build façades. Calculations demonstrating: · The % of façade comprising in situ material. These calculations should be simply based on the volume of each material and its density, with totals compared for the new and retained parts of the structure.

Mat 4 – Re-Use of Structure							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Mat 4	1	0	0	0	Client	**Requirement 1** Where at least 80% by volume of an existing primary structure is reused without significant strengthening or alteration works. **Requirement 2** Where a project is part refurbishment and part new build, the reused structure comprises at least 50% by volume of the final building, i.e. any new-build extension to a building being refurbished should not be larger than the original building to qualify for this credit.	**All Requirements** Drawings or design team calculations detailing: · The sections of the existing structure to be reused. · Any parts of the structure to be demolished and the total new structure. · Where appropriate, calculations confirming any strengthening/alteration are not deemed 'significant' in terms of the assessment criteria for the mass of materials used.

Mat 5 – Responsible Sourcing of Materials							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Mat 5	3	0	2	0	Client	**Requirement 1** **New Build and Major Refurbishment assessments (3 Credits)** 1. Up to 3 credits are available where evidence provided demonstrates that 80% of the *applicable materials* (listed below) comprising each of the following building elements are responsibly sourced: a. Structural Frame b. Ground floor c. Upper floors (including separating floors) d. Roof e. External walls f. Internal walls g. Foundation/substructure h. Staircase **Applicable materials** · Brick (including clay tiles and other ceramics) · Resin-based composites and materials, including GRP and polymeric render · Concrete (including in-situ and pre-cast concrete, blocks, tiles, mortars, cementious renders etc.) · Glass · Plastics and rubbers (including EPDM, TPO, PVC and VET roofing	**Requirement 1** Design plan and/or specification confirming: · the location of elements and materials specified · Details of the materials specified. **Requirement 2&3** A copy of the output from the Responsible Sourcing of Materials Calculator Tool. **AND EITHER** A letter of intent from the design team confirming: · The product shall be sourced from suppliers capable of providing certification to the level required for the particular tier claimed. **OR** If the material has been ordered, supplied or the supplier is known:

Mat 5 – Responsible Sourcing of Materials							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						membranes including polymeric renders) · Metals (steel, aluminium etc.) · Dressed or building stone including slate · Timber, timber composite and wood panels (including glulam, plywood, OSB, MDF, chipboard and cement bonded particleboard) · Plasterboard and plaster · Bituminous materials, such as roofing membranes and asphalt · Other mineral-based materials, including fibre cement and calcium silicate · Products with recycled content **Requirement 2** Each *applicable material* is assigned to a responsible sourcing tier level based on the level and scope of certification achieved by the material supplier(s)/manufacturer(s) (see Table 13 Responsible Sourcing Tier Levels and Criteria. **Requirement 3** Follow the *Calculation Procedure* outlined in the additional guidance section, and use the *Mat 5 Responsible Sourcing Calculator* to determine the number of credits to be awarded. **Requirement 4** Any non-certified timber used in the development comes from a legal source and is not included on the CITES list *(see definition for legally sourced timber).*	· Purchase order from the supplier including (as appropriate) Chain of Custody (CoC) number and/or BES6001:2008 Certificate number and/or EMS Certificate number **OR** · A copy of the CoC and/or BES6001 and/or EMS certificate.
First Credit e9 ●	1	0	0	0		**Exemplary Credit Requirements** Where, in addition to the above criteria, 95% of the applicable materials, comprised within the applicable building elements, have been responsibly sourced.	

Mat 6 – Insulation							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Mat 6 	1	0	1	0	Client	**Requirement 1** Any new insulation specified for use within the following building elements must be assessed: · External walls · Ground floor · Roof · Building services **Requirement 2** The Green Guide rating for the thermal insulation materials must be determined. Green Guide ratings for thermal insulation can be found at: www.thegreenguide.org.uk (please refer to the Compliance Notes for guidance where specific insulation has been assessed within an element for the Mat 1 BREEAM issues). **Requirement 3** Where the *Insulation Index* for the building insulation is the same as or greater than 2. **Requirement 4** The *Insulation Index* is calculated using the Mat 6 *Insulation Index Calculator Tool* in the BREEAM assessor's spreadsheet tool. For each type of thermal insulation used in the relevant building elements, the volume weighted thermal resistance provided by each type of insulation is calculated as follows: a. (Area of insulation (m2) * thickness(m)) / Thermal Conductivity (W/m.K) **OR** b. Total volume of insulation used (m3) / Thermal conductivity (W/m.K)	**Requirements 1-4** Marked-up design plan/elevations and/or a copy of the specification confirming: · The location of insulating materials. · The area (m2) and thickness (m) or volume (m3) of insulation specified. Manufacturer's technical details confirming: · Thickness and thermal conductivity of the insulating materials specified. A copy of the output from the Insulation Index Calculator Tool. The Green Guide rating and element number for the assessed insulation specifications.
Second Credit Mat 6 	1	0	1	0		**Requirement 5** At least 80% of the thermal insulation used in the building elements identified in Item 1 must be responsibly sourced, i.e. each insulation product must be certified in accordance with Levels 1, 2 or 3 described in Table 13 Tier levels and criteria, as outlined in Mat 5. Table 16 below shows the Key Processes and Supply Chain processes required for common insulation products.	**Requirement 5** Evidence (as outlined in Mat 5) confirming compliance for the insulating materials.

Mat 7 – Insulation							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Mat 7 	1	0	1	0	Client	**Requirement 1** Internal and external areas of the building where vehicular, trolley and pedestrian movement occur have been identified. **Requirement 2** Suitable durability and protection measures or design features have been specified to prevent damage to the vulnerable parts of these building areas from such traffic. This must include, but is not necessarily limited to: a. Protection from the effects of high pedestrian traffic in main entrances, public areas and thoroughfares (corridors, lifts, stairs, doors etc). b. Protection against any internal vehicular/trolley movement within 1m of the internal building fabric in storage, delivery, corridor and kitchen areas. c. Protection against, or prevention from, any potential vehicular collision where vehicular parking and manoeuvring occurs within 1m of the external building façade for all car parking areas and within 2m for all delivery areas.	**Requirement 1** Design drawings marked up to illustrate: · Vulnerable areas/parts of the building **Requirement 2** Design drawings and/or specification measures confirming: - The durability measures specified.

Credit Progress Log – Waste

Wst 1 – Construction Site Waste Management							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wst 1	4 (new build)	0	2	0	Client	**Requirement 1** Where non-hazardous construction waste generated by the building's construction phase (excluding demolition and excavation waste) meets or exceeds the resource efficiency benchmarks. (up to 3 credits) **Requirement 2** Where there is a Site Waste Management Plan (SWMP) that contains: c. The target benchmark for resource efficiency i.e. m3 of waste per 100m2 or tonnes of waste per 100m2 b. Procedures and commitments for minimising non-hazardous waste in line with the benchmark c. Procedures for minimising hazardous waste d. Procedures for monitoring, measuring and reporting hazardous and non-hazardous site waste e. Procedures for sorting, reusing and recycling construction waste into defined waste groups (see additional guidance section), either on site or through a licensed external contractor c. The name or job title of the individual responsible for implementing the above.	**All Requirements** A copy of the compliant Site Waste Management Plan containing the appropriate benchmarks, commitments and procedures. Where relevant, a copy of the predemolition/ pre-refurbishment audit. **OR** A copy of the specification clause that: · Requires the principal contractor to produce a SWMP in line with the criteria · Contains the detailed criteria with respect to resource efficiency benchmarks and target(s) and procedures to be included in the SWMP · Where relevant, requires the principal contractor to carry out a pre- demolition/pre-refurbishment audit. **OR** A letter from the client or their representative containing: · Confirmation that the specification will contain a clause on site waste management criteria. · An outline of the detailed criteria that will be included in that specification clause.
First Credit e10	1	0	0	0		**Requirement 1** Where non-hazardous construction waste generated by the building's development meets or exceeds the resource efficiency benchmark required to achieve three credits (as outlined above). **Requirement 2** Where at least 90% by weight (80% by volume) of non-hazardous construction waste and 95% of demolition waste by weight (85% by volume) (if applicable) generated by the build has been diverted from landfill and either: a. Reused on site (in-situ or for new applications) b. Reused on other sites c. Salvaged/reclaimed for reuse d. Returned to the supplier via a 'take-back' scheme	

Wst 1 – Construction Site Waste Management							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						e. Recovered from site by an approved waste management contractor and recycled. **Requirement 3** All key waste groups are identified for diversion from landfill at pre-construction stage SWMP.	

Wst 2 – Recycled Aggregates							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wst 2	1	0	0	0	Client	**Requirement 1** Where the amount of recycled and secondary aggregate specified is over 25% (by weight or volume) of the total *high-grade* aggregate uses for the building. Such aggregates can be **EITHER**: a. Obtained on site **OR** b. Obtained from waste processing site(s) within a 30km radius of the site; the source will be principally from construction, demolition and excavation waste (CD&E) – this includes road planings **OR** c. Secondary aggregates obtained from a non-construction post-consumer or post-industrial by-product source (see Compliance Notes).	**All Requirements** A copy of the relevant specification or contract clause confirming: · Recycled and secondary aggregate use criteria for the project. A letter from the design team or main contractor confirming: · The source of recycled/secondary aggregates · The amount and quality required can be obtained from this source.

Wst 3 – Recycled Aggregates							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wst 3	1	0	1	0	Client	**Requirement 1** A dedicated storage space to cater for recyclable materials generated by the building during occupation, compliant with the following: a. Clearly labelled for recycling b. Placed within accessible reach of the building (see Compliance Notes) c. In a location with good vehicular access to facilitate collections. **Requirement 2** The size of the space allocated must be adequate to store the likely volume of recyclable materials generated by the building's occupants/operation. Whilst a fixed area cannot always be given, the following must be complied with as a minimum: a. At least 2m2 per 1000m2 of net floor area for buildings <5000m2 b. A minimum of 10m2 for buildings ≥5000 m2 c. An additional 2m2 per 1000m2 of net floor area where catering is provided (with an additional minimum of 10m2 for buildings ≥5000m2).	**All Requirements** Marked-up building/site plan and/or copy of the specification confirming: · The location of the dedicated recyclable storage area · Storage area for general waste · The area (m2) of the storage space(s) · Description of the labelling.

Wst 4 – Compactor/Bailer							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Wst 4	1	0	0	0	Client	**Requirement 1** A static waste compactor or baler is installed and situated in a service area or dedicated waste management space. **Requirement 2** At least one water outlet is provided for each waste sorting and/or storing facility. **Requirement 3** The recyclable waste storage requirements of BREEAM credit WST 3 have been met.	**Requirements 1-2** Marked-up design plan and/or a copy of the specification confirming: · Provision of waste compactor/baler · Location and size of space for waste compactor/baler · Water outlet Manufacturer/supplier literature confirming · The type of compactor/baler specified. **Requirement 3** As defined in the schedule of evidence for BREEAM credit WST 3.

Credit Progress Log – Land Use & Ecology

LE 1 – Construction Site Waste Management							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit LE 1	1	0	0	0	Client	**Requirement 1** At least 75% of the proposed development's footprint is on an area of land which has previously been *developed* for use by industrial, commercial or domestic purposes in the last 50 years.	**All Requirements** Existing site plan, report or site photographs confirming: · Type and duration of previous land use. · Area (m2) of previous land use. Proposed site plan showing; · Location and footprint (m2) of proposed development and temporary works.

LE 2 – Contaminated Land							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit LE 2	1	0	0	0	Client	**Requirement 1** The site is deemed to be *significantly contaminated* as confirmed by a contaminated land specialist's site investigation, risk assessment and appraisal identifying: a. the degree of contamination b. the contaminant sources/types c. the options for remediating sources of pollution which present an unacceptable risk to the site. **Requirement 2** Remediation The client or contractor confirms that remediation of the site will be carried out in accordance with the remediation strategy and its implementation plan.	**Requirement 1** A copy of the specialist's land contamination report confirming: · The degree, type and sources of site contamination. · The options for remediating the site. Existing site plan(s) showing: · Location of areas contaminated and to be remediated in relation to any proposed development **Requirement 2** A letter from the main contractor or remediation contractor confirming: · The remediation strategy for the site. · Summary details of the implementation plan. If a contractor has not yet been appointed, a letter from the client, or their representative confirming: · That the appointed contractor will undertake necessary remediation works to mitigate the risks identified in the

LE 2 – Contaminated Land							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
							specialist report. .

LE 3 – Contaminated Land							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit LE 3 	1	0	1	0	Client	**Requirement 1** Land within the *construction zone* is defined as 'land of low ecological value' using either: a) BREEAM checklist A4 **OR** b) A *suitably qualified ecologist* who has identified the land as being of 'low ecological value' within an ecological assessment report, based on a site survey. **Requirement 2** All existing features of ecological value surrounding the construction zone and site boundary area are adequately protected from damage during clearance, site preparation and construction activities as listed below: · Trees of over 100 mm trunk diameter, and/or of significant ecological value, are protected by barriers. Barriers must prohibit construction works in the area between itself and the tree trunk. Minimum distance between tree trunk and barriers must be either the distance of branch spread or half tree height, whichever is the greater. · In all cases trees must be protected from direct impact and from severance or asphyxiation of the roots. · Hedges and natural areas requiring protection must either have barriers erected and be protected, or, when remote from site works or storage areas, be protected with a prohibition of construction activity in their vicinity. · Watercourses and wetland areas are to be protected by cut-off ditches and site drainage to prevent run-off to natural watercourses (as this may cause pollution, silting or erosion). **Requirement 3** In all cases, the contractor is required to construct ecological protection prior to any preliminary site construction or preparation works (e.g. clearing of the site or erection of temporary site facilities).	**Requirement 1&2** A completed copy of checklist A4 signed and dated by the client, their representative or a design team member e.g. architect. **AND** One of the following: A plan and/or site photographs of the existing site highlighting any ecological features **OR** A copy of the ecologist's report containing: · Confirmation that the land within the construction zone is of low ecological value. · A description of any ecological features within the site or on the site boundary. · Date(s) of site survey(s). A completed copy of checklist A4 signed and dated by the client, their representative or a design team member e.g. architect. **AND** One of the following: A plan and/or site photographs of the existing site highlighting any ecological features **OR** A copy of the ecologist's report containing: · Confirmation that the land within the construction zone is of low ecological value. · A description of any ecological features within the site or on the site boundary.

LE 3 – Contaminated Land							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
							· Date(s) of site survey(s). **Requirement 2&3** A copy of the relevant section of the contract specification confirming: · Requirement to protect all identified features of ecological value. · Scope of protection measures required. · Protection measures implemented prior to commencement of site activities.

LE 4 – Mitigating Ecological Impacts							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit LE 4	2	0	2	0	Client	**Requirement 1** One credit where the change in ecological value of the site is less than zero and equal to or greater than minus nine plant species i.e. a minimal change. **Requirement 2** Two credits where the change in ecological value of the site is equal to or greater than zero plant species i.e. no negative change. The change in ecological value of the site is calculated using **EITHER** of the following: **Requirement 3** Determine the following information and input this data in to Ecology calculator 1 within the spreadsheet tool: a. Plot type(s) that define the landscape of the assessed site, in its existing pre-developed state and proposed state (see additional guidance) b. Areas (m2) of the defined existing and proposed plot types. **OR** **Requirement 4** Where a *suitably qualified ecologist* has been appointed and, based on a site survey, they confirm the following and the assessor or ecologist inputs this data in to the Ecology calculator 2: a. Actual plot/habitat types that define the landscape of the	**Requirement 1,2 & 3** Existing and proposed site plans and, if required, maps and aerial photographs confirming: · Landscape and vegetation plot types · Area (m2) of vegetation plot types **AND** A completed copy of Ecology Calculator 1. **Requirement 1,2 & 4** A copy of the suitably qualified ecologist's report confirming prior to and after the development: · Landscape and vegetation plot types · Area (m2) of vegetation plot types **AND** A completed, signed copy of checklist A6 – Relating ecology reports to BREEAM OR a copy of the ecology report containing the information outlined in checklist A6. **AND** A completed copy of Ecology Calculator 2.

LE 4 – Mitigating Ecological Impacts							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						assessed site in its existing predeveloped state and proposed state b. Area (m2) of each plot/habitat type c. Number of different plant species found within each plot type.	

LE 5 – Enhancing Site Ecology							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit LE 5	1	0	0	0	Client	**Requirement 1** A *suitably qualified ecologist* (SQE) has been appointed to report on enhancing and protecting the ecology of the site. a. The SQE provides an Ecology Report with appropriate recommendations for protection and enhancement of the site's ecology. b. The report is based on a site visit/survey by the SQE prior to the commencement of initial site preparation works. **Requirement 2** The general recommendations of the Ecology Report for enhancement and protection of site ecology have been, or will be, implemented.	**Requirement 1** A copy of the ecologist's report containing: · Details and scope of the site survey. · Information as outlined in checklist A6 – Relating ecology reports to BREEAM. **OR** A copy of the ecologist's report containing a completed, signed copy of checklist A6.
Second Credit LE 5	1	0	0	0		**Requirement 1** The first credit is achieved. **Requirement 2** The recommendations of the Ecology Report for enhancement and protection of site ecology have been implemented, and the suitably qualified ecologist confirms that this will result in an increase in ecological value of the site up to (but not including) 6 plant species. **Requirement 3** The increase in plant species has been calculated using Ecology calculator 2, using actual species numbers.	**Requirement 2** Proposed site plan highlighting implementation of the ecologist enhancement recommendations. **AND** One of the following: A copy of the relevant section of the specification requiring the main contractor to implement the SQE's recommendations for protection and enhancement **OR** A letter from the client or design team member confirming:

LE 5 – Enhancing Site Ecology							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
							· That the specification will require the main contractor to implement the ecologist's recommendations.
Third Credit LE 5	1	0	0	0		**Requirement 1** The first credit is achieved. **Requirement 2** The *recommendations* of the Ecology Report for enhancement and protection of site ecology have been implemented, and the suitably qualified ecologist confirms that this will result in an increase in ecological value of the site of 6 plant species or greater. **Requirement 3** The increase in plant species has been calculated using Ecology calculator 2, using actual species numbers.	**Requirement 1-3** Evidence as outlined above, confirming compliance with the first credit. A copy of the SQE's report containing the information outlined in checklist A6 – Relating ecology reports to BREEAM. **OR** A copy of the SQE's report containing a completed, signed copy of checklist A6. **AND** A completed copy of Ecology Calculator 2.

LE 6 – Long Term Impact on Biodiversity							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Mandatory Credit LE 6	1	0	0	0	Client	**Mandatory Criteria***** **Requirement 1** A suitably qualified ecologist (SQE) has been appointed prior to commencement of activities on site. **Requirement 2** The suitably qualified ecologist confirms that all relevant UK and EU legislation relating to protection and enhancement of ecology has been complied with during the design and construction process. **Requirement 3** A landscape and habitat management plan, appropriate to the site, is produced covering at least the first five years after project completion. This is to be handed over to the building occupants and includes: · Management of any protected features on site · Management of any new, existing or enhanced habitats · A reference to the current or future site level or local Biodiversity Action Plan.	**Requirement 1** The SQE report or letter confirming: · That they were appointed prior to commencement of activities on site. · All relevant UK and EU legislations will be complied with. **AND** A completed, signed copy of checklist A6 – Relating ecology reports to BREEAM **OR** A copy of ecology report containing the information outlined in checklist A6. **Requirement 3** A copy of the site management plan. **OR** A copy of the specification requiring the development of plan and outlining the scope of its content. **OR**

LE 6 – Long Term Impact on Biodiversity							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
							Where the timing of assessment does not permit either of the above, a letter from the client confirming: · A commitment to produce a management plan · The scope of the management plan
Second Credit LE 6 	1	0	0	0		**Additional Criteria** **Requirement 1** The contractor nominates a 'Biodiversity Champion' with the authority to influence site activities and ensure that detrimental impacts on site biodiversity are minimised in line with the recommendations of a suitably qualified ecologist. **Requirement 2** The contractor trains the site workforce on how to protect site ecology during the project. Specific training should be carried out for the entire site workforce to ensure they are aware of how to avoid damaging site ecology. Training should be based on the findings and recommendations for protection of ecological features highlighted within a report prepared by a suitably qualified ecologist. **Requirement 3** The contractor records actions taken to protect biodiversity and monitor their effectiveness throughout key stages of construction. The requirement commits the contractor to make such records available where publicly requested. **Requirement 4** Where a new ecologically valuable habitat, appropriate to the local area, is created. This includes habitat that supports nationally, regionally or locally important biodiversity, and/or which is nationally, regionally or locally important itself; including any habitat listed in the UK Biodiversity Action Plan (UK BAP)70, Local Biodiversity Action Plan (LBAP), those protected within statutory sites (e.g. SSSIs), or those within non-statutory sites identified in local plans. **Requirement 5** Where flora and/or fauna habitats exist on site, the contractor programmes site works to minimise disturbance to wildlife. For example, site preparation, ground works, and landscaping have been, or will be, scheduled at an appropriate time of year to minimise disturbance to wildlife. Timing of works may have a significant impact on, for example, breeding birds, flowering plants, seed germination,	**Requirement 1** A letter from the contractor confirming: · The appointment of the biodiversity champion and their job title. · Their on site role and responsibilities. **OR** Where not yet appointed, a copy of the specification clause requiring the appointment of a biodiversity champion. **Requirement 2** Training schedule or letter of confirmation from the contractor committing to provide relevant training. **OR** Where not yet appointed, a copy of the specification clause requiring the training of the site's workforce. **Requirement 3** A letter from the contractor confirming: · Monitoring and reporting criteria for the development. · The records will be publicly available if and when requested. **OR** Where not yet appointed, a copy of the specification clause outlining the contractor's monitoring and reporting criteria. **Requirement 4** A copy of the proposed site plan highlighting the new ecologically valuable habitat.

LE 6 – Long Term Impact on Biodiversity							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						amphibians etc. Actions such as phased clearance of vegetation may help to mitigate ecological impacts. This additional requirement will be achieved where a clear plan has been produced detailing how activities will be timed to avoid any impact on site biodiversity in line with the recommendations of a suitably qualified ecologist.	A SQE's report or letter confirming that the habitat supports the relevant biodiversity action plan(s) **Requirement 5** The SQE's report or letter confirming: · Wildlife on site that needs to be accounted for in programming works. · Actions required with respect to programming site works to minimise disturbance. A copy of the contractor's main programme of works. **OR** A copy of the relevant section of the main contract confirming: · The programme of site works will minimise disturbance to wildlife in accordance with
Third Credit LE 5	1	0	0	0		**Requirement 1** The first credit is achieved. **Requirement 2** The *recommendations* of the Ecology Report for enhancement and protection of site ecology have been implemented, and the suitably qualified ecologist confirms that this will result in an increase in ecological value of the site of 6 plant species or greater. **Requirement 3** The increase in plant species has been calculated using Ecology calculator 2, using actual species numbers.	**Requirement 1-3** Evidence as outlined above, confirming compliance with the first credit. A copy of the SQE's report containing the information outlined in checklist A6 – Relating ecology reports to BREEAM. **OR** A copy of the SQE's report containing a completed, signed copy of checklist A6. **AND** A completed copy of Ecology Calculator 2.

Credit Progress Log – Pollution

Pol 1 – Refrigerant GWP – Building Services							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Pol 1 	1	0	0	0	M&E	**Requirement 1** The building has no refrigerants **OR** **Requirement 2** The refrigerants used within the building services have a GWP less than 5.	**All Requirements** A copy of the specification clause confirming either: · Absence of refrigerant in the development OR · Type(s) of refrigerant to be used. **AND** Manufacturer's information confirming: · GWP of each refrigerant.

Pol 2 – Refrigerant GWP – Building Services (2 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Pol 2 	1	0	0	0	M&E	**<u>Refrigerant Leak Detection</u>** **Requirement 1** The building has no refrigerants **OR** **Requirement 2** Systems using refrigerants are contained in a moderately air tight enclosure (or a mechanically ventilated plant room), and a refrigerant leak detection system is installed covering high-risk parts of the plant. **OR** **Requirement 3** An automatic permanent refrigerant leak detection system is specified, which is NOT based on the principle of detecting or measuring the concentration of refrigerant in air. **Requirement 2** The refrigerants used within the building services have a GWP less than 5.	**Requirement 1** A copy of the specification clause or design plan confirming: · Absence of refrigerants in the development **Requirement 2&3** A copy of the specification clause or letter from the M&E engineer confirming: · Type of leak detection system(s). · Scope of the system(s) · Where relevant, containment strategy for such equipment.
Second Credit Pol 2 	1	0	0	0		**Refrigerant Recovery System** **Requirement 4** The automatic shutdown and pump down of refrigerant occurs on the detection of high concentrations of refrigerant in the plant room/enclosure. For the majority of cases only systems in mechanically ventilated/moderately air tight plant rooms (or enclosures) comply.	**Requirement 4,5,&6** A copy of the specification clause or letter from the M&E engineer confirming: · Type, scope and operation of automatic refrigerant recovery equipment · Details of the plant room enclosure

Pol 2 – Refrigerant GWP – Building Services (2 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						Requirement 5 Automatic pump-down to either a separate storage tank or into the heat exchanger is acceptable but only where automatic isolation valves are fitted to contain the refrigerant once fully pumped down. **Requirement 6** The alarm threshold that triggers automatic pump down is set to a maximum of 2000ppm (0.2%), but lower levels can be set. The credit cannot be awarded for manual systems. ***Note**: The first credit must be achieved in order to award the second credit.	where the refrigeration plant is installed · Alarm threshold for triggering automatic pump down.

Pol 4 – Nox Emissions from Heating Source (2 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Pol 4	1	0	0	0	M&E	**Requirement 1** Where manufacturer's details demonstrate that the plant installed to meet the building's space heating demand has dry NOx emission levels as follows: a. One credit where the dry NOx emissions from delivered space heating energy are ≤70 mg/kWh (at 0% excess O2). b. Two credits where the dry NOx emissions from delivered space heating energy are ≤40 mg/kWh (at 0% excess O2) **OR** where there is no heating plant installed in the building for the purposes of space heating.	**Requirement 1** A copy of the specification clause confirming: · Type of heating system(s) installed. For each system specified, a letter, email or literature from the manufacturer(s) confirming: · Dry NOx emissions rate in mg/kWh. If more than one system is providing heat, design team calculations confirming: · The average NOx emission rate. **Requirement 2** As above or marked up plans showing lack of office space (as appropriate)

Pol 5 – Flood Risk (3 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Pol 5	1	0	1	0	Consultant	**Two Credits** **Requirement 1** Where the assessed development is situated in a flood zone that is defined as having a low annual probability of flooding. **Requirement 2** A site specific Flood Risk Assessment (FRA) confirms that there is a low risk of flooding from all sources. **OR** **One Credit** **Requirement 1** Where the assessed development is situated in a flood zone that is defined as having a medium or high annual probability of flooding **AND** **Requirement 2** A site specific Flood Risk Assessment (FRA) confirms to the satisfaction of the local authority and statutory body that the development is appropriately flood resilient and resistant from all sources of flooding **AND** **Requirement 3** The ground level of the building, and access to it and the site, are designed (or zoned) so they are at least 600mm above the design flood level of the flood zone in which the assessed development is located (see compliance notes for further guidance).	**Requirement 1** A copy of a flood map or flood risk assessment confirming: · Flood zone or annual probability of flooding in the site location. Where appropriate, correspondence from the appropriate statutory body confirming: · Reduced annual probability of flooding due to existing flood defences. **Requirement 2** A copy of the Flood Risk Assessment. **Requirement 3** Site plans/sections confirming: · The design flood level for the site · The design ground level(s) for all developed areas of the site. · Safe access and escape routes
Third Credit Pol 5	1	0	1	0	Consultant	**Additional Credit** **Requirement 1** Where attenuation measures are specified to ensure that the peak rate of run-off from the site to the watercourses (natural or municipal) is no greater for the developed site than it was for the predevelopment site. This should comply with the *Interim Code of Practice for Sustainable Drainage75* systems published by CIRIA, or for at least a 1 year and 100 year return period event with a 6 hour duration. **Requirement 2** The capacity of the attenuation measures must include an allowance for climate change; this should be made in accordance with current best practice76.	**Requirement 1&2** Site plans and a copy of the specification or consultants report confirming: · Type and storage volume (l) of the water run-off attenuation measures · Total area of hard surfaces (m2) · Peak flow rate (l/s) for the design storm event · Additional allowance for climate change designed in to the system.

Pol 6– Minimising Watercourse Pollution (1 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Pol 6	1	0	1	0	Consultant	**Requirement 1** Specification of Sustainable Drainage Systems (SUDs) or source control systems such as permeable surfaces or infiltration trenches where run-off drains are in areas with a relatively low risk source of watercourse pollution. **Requirement 2** Specification of oil/petrol separators (or equivalent system) in surface water drainage systems, where there is a high risk of contamination or spillage of substances such as petrol and oil (see Compliance Notes for a list of areas). **Requirement 3** All water pollution prevention systems have been designed and detailed in accordance with the recommendations of Pollution Prevention Guideline 380 and where applicable the SUDS manual81. **Requirement 4** A comprehensive and up-to-date drainage plan of the site will be made available for the building/site occupiers.	**Requirement 1&2** Marked-up proposed site plan highlighting: · Low and high risk areas of the site. A copy of the specification or design plan confirming: · Type of pollution control systems specified. **Requirement 3&4** A letter from the design team confirming: · All water pollution prevention systems designed in accordance with PPG3 and the SUDS manual (where appropriate) · Outlining indicative examples of compliance with PPG3 and the SUDS manual · A copy of the drainage plan will be produced and handed over to the building occupier

Pol 7 – Reduction of Night Time Light Pollution (1 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Pol 6	1	0	1	0	Consultant	**Requirement 1** The external lighting strategy has been designed in compliance with Table 1 (and its accompanying notes) of the ILE Guidance notes for the reduction of obtrusive light, 200582, (see Additional Information below - Buildings located in Scotland must also refer to the Compliance Notes below for additional criteria). **Requirement 2** All external lighting (except for safety and security lighting) can be automatically switched off between 2300hrs and 0700hrs. This can be achieved by providing a timer for all external lighting set to the appropriate hours. **Requirement 3** If safety or security lighting is provided and will be used between 2300hrs and	**Requirement 1-4** A marked-up copy of the site plan showing: · Areas of the building and site that will be externally lit · Any nearby properties. A copy of the specification clause requiring, or external lighting design confirming: · The external lighting design in compliance with Table 1 of the ILE Guidance notes · Controls for all external lighting.

Pol 7 – Reduction of Night Time Light Pollution (1 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						0700hrs, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 1 of the ILE's Guidance notes, for example by using an automatic switch to reduce the lighting levels at 2300 or earlier. **Requirement 4** Illuminated advertisements, where specified, must be designed in compliance with ILE Technical Report 5 – *The Brightness of Illuminated Advertisements83*.	· Illuminated advertisements designed in compliance with ILE Technical Report 5 (if relevant). In the case of the external lighting design, the M&E engineer or lighting designer must provided indicative examples of where and how the strategy complies with the assessment criteria.

Pol 8 – Noise Attenuation (1 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
First Credit Pol 8	1	0	1	0	Consultant	**Requirement 1** There are, or will be, existing *noise-sensitive areas or buildings* within 800m radius of the assessed development. Where there are or will be no *noise-sensitive areas or buildings* in the locality of the assessed development, the credits can be awarded by default. **Requirement 2** A noise impact assessment in compliance with BS 4142:199785 has been carried out and the following noise levels measured/determined: a. Existing background noise levels at the nearest or most exposed noise-sensitive development to the proposed development; or at a location where background conditions can be argued to be similar. b. The rating noise level resulting from the proposed noise-source. This can be based upon reference to similar installations or sites, or determined by calculation. The noise impact assessment must be carried out by a *suitably qualified acoustic consultant* holding a recognised acoustic qualification and membership of an appropriate professional body. **Requirement 3** Where the rating level of the noise source(s) from the site/building is equivalent to or less than the background noise level, the credits can be awarded.	**Requirement 1** Site plan highlighting: · All existing and proposed noise-sensitive buildings local to, and within, the site boundary · Proposed sources of noise from the new development · Distance (m) from these buildings to the assessed development. **Requirement 2&3** A copy of the acoustician's report. The acoustician's qualifications and professional status. **OR** A copy of the specification clause requiring: · A noise assessment in compliance with BS 4142:1997 by a suitably qualified acoustician. **OR** A formal letter from the client or design team confirming that they will appoint an acoustician to carry out a noise assessment

Pol 8 – Noise Attenuation (1 Credits)							Design Stage Evidence Required
Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**	
						Requirement 4 Where the rating level of the noise source(s) from the site/building is greater than the background noise level, measures have been installed to attenuate the noise at its source to a level where it will comply with requirement 3. .	in compliance with BS 4142:1997 **Requirement 4** Acoustician's report with recommendations for noise attenuation measures. **AND** A marked-up design plan highlighting the specification of the acoustician's attenuation measures **OR** A formal letter from the client or design team confirming that: · If relevant, attenuation measures recommended by an appointed suitably qualified acoustician will be installed.

Credit Progress Log – Innovation

Innovation							
AI - Approved Innovation							
	Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**
Credit e1 ●	Man 2 – Considerate Constructors	1	0	0	0		**Exemplary Requirement** 1. The main contractor has complied with and achieved a certified CCS *Code of Considerate Practice* score of 36 or more. **OR** 2. The main contractor has complied in full with the alternative, independently assessed scheme, and the alternative scheme addresses all the mandatory and optional items in Checklist A2.
Credit e2 ●	Hea 1 – Daylighting	1	0	0	0		**Requirement 1** At least 80% of the floor area (for the building spaces/room identified above in the standard criteria) has an average daylight factor of 3% in multi-storey buildings and 4% in single storey buildings. **Requirement 2** The criteria outlined above concerning uniformity ratio, view of sky or room depth criterion are met. Where demonstrating compliance via uniformity ratio or point daylight factor the following minimum criteria apply: a. Multi-storey: A uniformity ratio of at least 0.4 or a minimum point daylight factor of at least 1.2%; (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 2.1%). b. Single storey: a minimum point daylight factor of at least 1.6%; (spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 2.8%).
Credit e3 ●	Hea 14 – Office Space (BREEAM Retail & Industrial & Datacentres Schemes only)	1	0	0	0		**Requirement 1** An exemplary credit can be awarded where all the measures detailed above have been achieved for at least 80% of the development's office space floor area.
Credit e4 ●	Ene 1 – Reduction of CO2	1	0	0	0		**<u>Exemplary Credit Requirements</u>** **Requirement 1** One additional innovation credit can be awarded where evidence provided demonstrates that the building achieves a predicted PUE of ≤1.20 and an EPC rating of 25 or less (or 31 or less for a refurbished building).

Innovation							
AI - Approved Innovation							
	Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**
							Requirement 2 Two additional innovation credits can be awarded where evidence provided demonstrates that the building achieves a predicted PUE of ≤1.10 and an EPC rating of 25 or less (or 31 or less for a refurbished building).
Credit e5 ●	Ene 5 – Low or Zero Carbon Technologies	1	0	0	0		**Requirement 1** The first credit for a feasibility study must be achieved. **Requirement 2** A local LZC energy technology has been installed in line with the recommendations of the above feasibility study and this method of supply results in a 20% reduction in the building's CO2 emissions. **Requirement 3** Figures used for calculations of the percentage carbon reduction provided by LZC technology provided by LZC technology are based on the output from approved energy modelling software
Credit e6 ●	Wat 1 – Water Consumption	1	0	0	0		A technology/strategy is adopted which demonstrates a ≥50% reduction in the potable water consumption associated with the data centres cooling process**.**
Credit e7 ●	Wat 2 – Water Meter	1	0	0	0		**Requirement 1** Where sub meters are fitted to allow the metering of individual water-consuming plant or building areas, where demand in such areas will be equal to or greater than of 10% of the total water demand of the building (see also compliance note). **Requirement 2** Each sub meter has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption.
Credit e8 ●	Mat 1 – Materials Specification	1	0	0	0		One exemplary BREEAM credit can be awarded as follows: a. Where assessing four or more applicable building elements, the building achieves at least two points additional to the total points required to achieve maximum credits under the standard BREEAM criteria. b. Where assessing fewer than four applicable building elements, the building achieves at least one point additional to the total points required to achieve maximum credits under the standard BREEAM criteria**.**
Credit e9 ●	Mat 5 – Responsible Sourcing of Materials	1	0	0	0		Where, in addition to the above criteria, 95% of the applicable materials, comprised within the applicable building elements, have been responsibly sourced.
Credit e10 ●	Wst 1 – Construction Site Waste Management	1	0	0	0		**Requirement 1** Where non-hazardous construction waste generated by the building's development meets or exceeds the resource efficiency benchmark required to achieve three credits (as outlined above).

Innovation							
AI - Approved Innovation							
	Credit	**Available**	**Awarded**	**Targeted**	**Potential**	**Responsibilities**	**Comments**
							Requirement 2 Where at least 90% by weight (80% by volume) of non-hazardous construction waste and 95% of demolition waste by weight (85% by volume) (if applicable) generated by the build has been diverted from landfill and either: a. Reused on site (in-situ or for new applications) b. Reused on other sites c. Salvaged/reclaimed for reuse d. Returned to the supplier via a ‘take-back’ scheme e. Recovered from site by an approved waste management contractor and recycled. **Requirement 3** All key waste groups are identified for diversion from landfill at pre-construction stage SWMP.