



**Construction
& Property
Consultants**

Sonic Star Properties Ltd

**BREEAM Non-Domestic New
Construction Pre-Assessment Report**

For

173 – 175 Friar Street, Reading

24th November 2020



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BREEAM Non-Domestic New Construction Pre-Assessment Report
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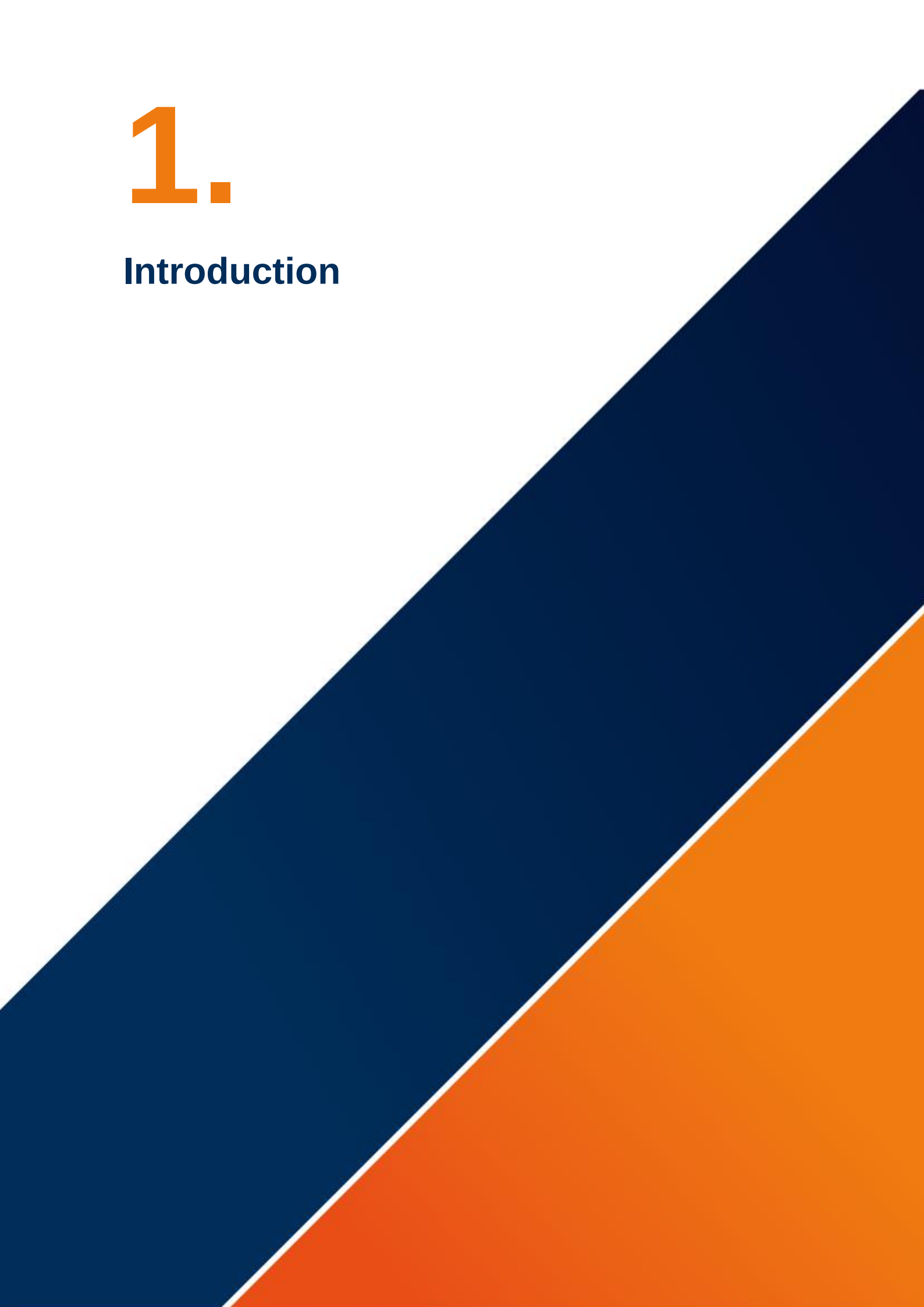
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1.

Introduction

1. Introduction

Summers-Inman have an experienced team of licensed BREEAM assessors to undertake BREEAM assessments for a wide range of project types and can tailor our service level to suit the specific project requirements. Our assessors also have BREEAM Accredited Professional (AP) status and are therefore able to provide specialist advice.

The BREEAM AP qualification is a formal recognition of specialist skills in the design of sustainable buildings combined with a high level of competence in the BREEAM assessment process. BREEAM AP's provide the design team with expert advice on built environmental sustainability design and assessment. They will facilitate your team's efforts to successfully schedule activities, set priorities and negotiate the trade-offs required to achieve a target BREEAM rating.

Summers-Inman believes that the key to achieving exemplary ratings with any building assessment is to work as an integrated member of the team by developing relationships with the client, design and construction team throughout the project and working together as a group of professionals to find successful solutions. Our approach engages the team and aims to provide clear step by step guidance, with commercial and targeted advice to ensure that cost plans reflect the sustainable design solutions proposed.

Summers-Inman have been commissioned to carry out a Pre-Assessment of the proposed development at 173-175 Friar Street. The development aspiration is to demonstrate a Very Good rating against the BREEAM Non-Domestic New Construction 2018 scheme and concludes the preliminary BREEAM score and rating the development could achieve based on the individual credits targeted.

The project proposals comprise the demolition of the existing building and subsequent construction of a new 9 storey hotel including basement.

The results presented are indicative only and do not represent a formal certified BREEAM assessment or rating and must not be communicated as such.

2.

BREEAM Non-Domestic New Construction 2018

2. BREEAM Non-Domestic New Construction 2018

BREEAM is the world's first and leading sustainability assessment and certification scheme for the built environment. It is an international standard that is locally adapted, operated and applied through a network of scheme operators, assessors and industry professionals.

The primary aim of BREEAM Non-Domestic New Construction is to mitigate the life cycle impacts of new buildings on the environment in a robust and cost effective manner.

The assessment criteria covers a range of environmental issues which are categorised as follows:

- Management
- Health and Wellbeing
- Energy
- Transport
- Water
- Materials
- Waste
- Land Use and Ecology
- Pollution
- Innovation

BREEAM Scoring and Reporting

There are a number of elements that determine the overall performance of a new construction project assessed using BREEAM. They are:

1. The BREEAM rating level benchmarks
2. The minimum BREEAM standards
3. The environmental section weightings
4. The BREEAM assessment issues and credits

The rating benchmarks for projects assessed using the 2018 version of BREEAM Non-Domestic New Construction are:

BREEAM Rating	% Score
Outstanding	≥ 85
Excellent	≥ 70
Very Good	≥ 55
Good	≥ 45
Pass	≥ 30
Unclassified	< 30

BREEAM sets minimum standards (mandatory credits) against fundamental environmental issues that must be achieved in order for a rating to be achieved; without achievement of this credits, regardless of the score achieved, the rating will not be achieved. These standards are summarised as follows:

BREEAM Issue	Minimum standards by BREEAM rating level				
	Pass	Good	Very Good	Excellent	Outstanding
Man 03: Responsible Construction Practices	-	-	-	1 credit (responsible construction management)	2 credits (responsible construction management)
Man 04: Commissioning and Handover	-	-	1 credit (commissioning – test schedule and responsibilities)	1 credit (commissioning – test schedule and responsibilities)	1 credit (commissioning – test schedule and responsibilities)
Man 04: Commissioning and Handover	-	-	Criterion 11 (building user guide)	Criterion 11 (building user guide)	Criterion 11 (building user guide)
Man 05: Aftercare	-	-	-	1 credit (commissioning - implementation)	1 credit (commissioning - implementation)
Ene 01: Reduction of Energy Use and Carbon Emissions	-	-	-	4 credits (energy performance or prediction of operational energy consumption)	6 credits (energy performance) and 4 credits (prediction of operational energy consumption)
Ene 02: Energy Monitoring	-	-	1 credit (first sub-metering credit)	1 credit (first sub-metering credit)	1 credit (first sub-metering credit)
Wat 01: Water Consumption	-	1 credit	1 credit	1 credit	2 credits
Wat 02: Water Monitoring	-	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only
Mat 03: Responsible Sourcing of Materials	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only
Wst 01: Project Waste Management	-	-	-	-	1 credit
Wst 03: Operational Waste	-	-	-	1 credit	1 credit

3.

Pre-Assessment Summary

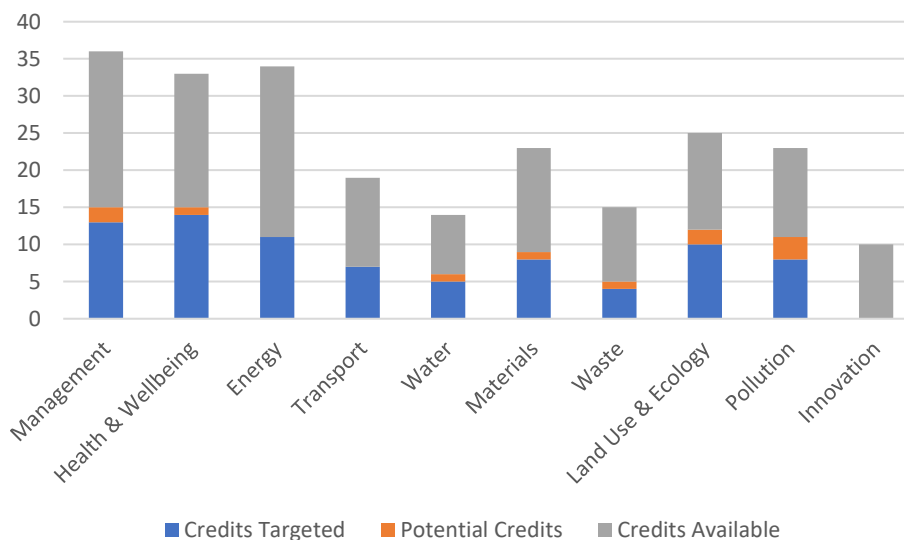
3. Pre-Assessment Summary

The Pre-Assessment has indicated that the scheme would be expected to achieve a score of 61.86% which is equivalent to a Very Good rating.

The development has been assessed based on the drawings, other information provided and the assumptions detailed within the assessment.

The credits targeted meet the minimum BREEAM standards (mandatory credits) and the report demonstrates that the development can achieve the aspired Very Good rating under the BREEAM Non-Domestic New Construction 2018 scheme.

BREEAM Section	Credits Available	Credits Targeted	% of Credits Achieved	Section Weighting	Section Score
Management	21	13	61.90%	11.00%	6.80
Health & Wellbeing	18	14	77.78%	14.00%	10.88
Energy	23	11	47.83%	16.00%	7.65
Transport	12	7	58.33%	10.00%	5.83
Water	8	5	62.50%	7.00%	4.37
Materials	14	8	57.14%	15.00%	8.57
Waste	10	4	40.00%	6.00%	2.40
Land Use & Ecology	13	10	76.92%	13.00%	10.00
Pollution	12	8	66.67%	8.00%	5.33
Innovation	10	0	0.00%	10.00%	0.00
Current Target BREEAM Score				61.86%	
Current Target BREEAM Rating				Very Good	



As part of report, we have identified further potential credits that could be targeted to off-set any of the currently targeted credits which are deemed unachievable.

4.

Pre-Assessment Credits

4. Pre-Assessment Credits

MANAGEMENT				
Criteria	Credits Available	Status	Credits Targeted	Assumptions
Man 01 – Project Brief and Design				
Prior to completion of Concept Design: project delivery stakeholders meet to set out compliant roles and responsibilities established	1	Targeted	1	We understand that the design team have met from Stage B to identify and define their roles, responsibilities and contributions for each of the key phases of project delivery. The project team will demonstrate how the project delivery stakeholder contributions and the outcomes of the consultation process have influenced or changed the Initial Project Brief, including if appropriate, the Project Execution Plan, Communication Strategy and the Concept Design
Prior to completion of Concept Design; third party consultation activities undertaken	1	Targeted	1	We understand that third party consultation has been carried during Stage 2 out in line with the BREEAM requirements. Comments have been reviewed and will inform the design where appropriate. Consultees will be provided with feedback
BREEAM AP appointed at or before RIBA Stage 1 and a target rating contractually agreed before RIBA Stage 2	1	Not Targeted	0	Credit not currently targeted as not aware of an AP appointment having been made
BREEAM AP involved and reports on progress through RIBA Stages 2 to 4	1	Not Targeted	0	Credit not currently targeted as not aware of an AP appointment having been made
Man 02 – Life Cycle Cost and Service Life Planning				
A Concept Design Stage 2 elemental LCC analysis commissioned	2	Not Targeted	0	These credits are not being targeted due to the cost of carrying out a compliant LCC analysis
A component level LCC plan has been developed by the end RIBA Stage 4	1	Not Targeted	0	This credit is not being targeted due to the cost of carrying out a compliant LCC analysis
The capital cost of the building will be reported in £k/m ²	1	Targeted	1	The capital cost of the project will be reported
Man 03 – Responsible Construction Practices				
Timber and timber-based products used on the project are legal and sustainable timber	Pre-Requisite	Targeted	0	All new timber and wood-derived products will be sourced from only independently verifiable legal and sustainable sources or FLEGT (forest law enforcement, governance and trade) licensed timber or equivalent timber
Principal contractor operates an environmental management system (ISO 14001)	1	Targeted	1	The principal contractor must operate an EMS and implement best practice pollution prevention policies and procedures on site
BREEAM AP monitors and reports progress through RIBA Stages 5 to 6	1	Potential	0	Appointment of a suitable AP to monitor the project to be confirmed
Principal contractor uses the Considerate Constructors scheme (CCS)	2	Targeted	2	Principal contractor will register the scheme with Considerate Constructors scheme and achieves a score of at least 35 with a score of 7 in each of the sections assessed
Monitor and record site energy and potable water consumption	1	Targeted	1	Principal contractor will monitor and record data on the energy consumption (kWh) and potable water consumption (m ³) arising from the use of construction plant, equipment (mobile and fixed) and site accommodation
Monitor and record data on transport movements for deliveries and waste removal	1	Targeted	1	Principal contractor will monitor and record data on transport movements and impacts resulting from delivery of the majority of construction materials to site and removal of waste from site
Man 04 – Commissioning and Handover				
Commissioning and testing of building services to CIBSE, BSRIA, Building Regulations etc. and monitored on behalf of the client by an appropriate person	1	Targeted	1	An appropriate project team member will be appointed to monitor and programme pre-commissioning, commissioning and, where necessary, recommissioning and will be carried out in accordance with the relevant guidelines
For complex systems, a specialist commissioning agent is appointed during the design stage	1	Targeted	1	Specialist commissioning manager will be appointed during the design stage to provide design advice regarding commissioning
Thermographic survey conducted and any defects rectified	1	Targeted	1	Post construction testing and inspection by a Level 2 certified thermographer
Building user guides and training schedules are prepared for non-technical and technical users	1	Targeted	1	BREEAM compliant building user guides will be developed for the new building and schedules of training identified for relevant building occupiers/premises managers
Man 05 – Aftercare				
Operational infrastructure and resources in place to provide aftercare support to the building occupiers	1	Targeted	1	Principal contractor to provide support during the defects period
Seasonal commissioning activities are undertaken over a 12 month period once the building is occupied	1	Potential	0	Appointment of the principal contractor to provide the required commissioning to be confirmed
Commitment to carry out a post occupancy evaluation exercise one year after occupation	1	Not Targeted	0	This credit is not targeted due to the costs involved with appointing a third party to undertake the exercise
HEALTH AND WELLBEING				
Hea 01 – Visual Comfort				
Glare control (e.g. blinds/external shading) fitted to windows in occupied rooms	1	Targeted	1	The potential for disabling glare will be designed out of all relevant building areas using a glare control strategy, either through building form and layout and/or building design measures.
Daylighting should be met following either of the below options: 1. 2% daylight factor AND either (a) OR {(b) and (c)} (a) Uniformity ratio of 0.3 or point daylight factor of 0.3 times the relevant average daylight factor or a uniformity ratio of 0.7 or point daylight factor of 0.3 times the relevant average daylight factor where the spaces have glazed roofs (i.e. atria) (b) 80% of the room has a view of the sky from desk or table top height (c) The room depth criterion d/w + d/HW < 2/(1-RB) is satisfied 2. Minimum 80% of the relevant building areas achieve at least 300 lux of average daylight illuminance and 90 lux of minimum daylight illuminance for 2000 hours per year or more	1	Potential	0	Daylighting analysis will be carried out to confirm how many credits can be achieved
95% of floor area in the relevant building is within 7m of a wall which has a window or permanent opening that provides an adequate view out	1	Targeted	1	There will be a view out in occupied rooms to a landscape or buildings ≥10m away (rather than just the sky) at seated eye level (1.2 – 1.3m). The window will be ≥20% of the wall area
Internal / external lighting specified to SLL, CIBSE and BS standards and adequately zoned and controlled	1	Targeted	1	Requirements to be included within the design specification

Criteria	Credits Available	Status	Credits Targeted	Assumptions
Hea 02 – Indoor Air Quality				
Production and implementation of an Indoor Air Quality Plan	Pre-Requisite	Targeted	0	It is assumed that an Indoor Air Quality Plan will be developed to allow other credits under this category to be claimed
Fresh air is provided. All openable windows in naturally ventilated areas are >10m from sources of pollution (roads/car parks/delivery routes/building exhausts). All mechanical intakes are >20m from sources of pollution & >10m from the exhaust. CO ₂ sensors are provided for high/variable occupancy areas	1	Not Targeted	0	It is assumed that the relevant criteria will not be achieved
Specification and use of internal finishes and fittings with low emissions of volatile organic compounds (VOCs)	2	Targeted	2	All applicable internal finishes and fittings will be specified/used with low emissions of VOCs
Post construction testing for volatile organic compounds	1	Not Targeted	0	Currently not targeted but if required, the principal contractor could be requested to allow for the necessary testing
Hea 03 – Safe Containment in Laboratories				
Credit no longer assessed as a separate issue				
Hea 04 – Thermal Comfort				
Thermal modelling is carried out using software in accordance with CIBSE AM11 and confirms comfort levels meet CIBSE Guide A (air-conditioned buildings) and CIBSE Guide A and CIBSE TM52 (naturally ventilated buildings)	1	Targeted	1	Thermal modelling will be carried out and it is expected that the design will demonstrate comfort levels can be met
Thermal modelling demonstrates the relevant requirements set out in the above credit for a projected climate change environment.	1	Targeted	1	Thermal modelling will include an analysis of internal temperatures in a projected climate change environment
Appropriate thermal zoning strategy, providing user control within the zone	1	Targeted	1	Thermal modelling analysis will aim to inform the temperature control strategy for the building and it's users. Adequate user control will be provided for each thermal zone and areas appropriately zoned
Hea 05 – Acoustic Performance				
Building meets acoustic standards & testing for specific building type for sound insulation, indoor ambient noise level and reverberation times	4	Targeted	4	An acoustician will be appointed to ensure Indoor ambient noise levels comply with the relevant criteria and All relevant rooms will be designed to meet the British Standards, as per the Acoustician's report. Pre-completion testing will be carried out to ensure that the relevant spaces (as built) achieve the required performance standards. Remedial works carried out prior to handover and occupation if standards are not met
Hea 06 – Security				
Suitably Qualified Security Specialist (SQSS) conducts an evidence-based Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent). They produce a set of recommendations and solutions to ensure the design of the development is planned, designed and specified to address the issues identified in the preceding SNA	1	Not Targeted	0	It is assumed that an SQSS will not be appointed
Hea 07 – Safe and Healthy Surroundings				
Safe access for pedestrians and cyclists is provided	1	Targeted	1	There will be dedicated pedestrian and cycle lanes with direct access from the site entrance(s) to building entrance and any cycle storage facilities respectively
An outdoor space for building users is provided	1	Targeted	1	External terrace and courtyard areas being provided
ENERGY				
Ene 01 – Reduction of Energy Use and Carbon Emissions				
Construction results in a reduction of operational energy demand, primary energy consumption and carbon emissions	9	Targeted	3	As a minimum, the Energy Performance Ratio should be more than 0.3, based on the energy consumption and carbon emissions performance of the development
Predict operational energy consumption from energy design workshops and additional energy modelling	4	Not Targeted	0	It is assumed that the required workshops have not been undertaken and the additional modelling will not be carried out
Ene 02 – Energy Efficiency Rating Post Refurbishment				
Major energy consuming systems are monitored through an accessible BEMS	1	Targeted	1	All major energy consuming items will be metered (connected to a BMS)
Separate tenanted areas or building function areas/floor plates have energy consumption separately metered through either accessible sub-meters or accessible BEMS	1	Targeted	1	Separate tenanted areas or building function areas/floor plates will be separately metered
Ene 03 – External Lighting				
Provision of energy-efficient light fittings for external areas, controlled through a time switch, or daylight sensor, to prevent operation during daylight hours	1	Targeted	1	The average initial luminous efficacy of the external light fittings within the construction zone will be not less than 70 luminaire lumens per circuit Watt
Ene 04 – Renewable Technologies				
Analysis of the proposed building design/development before RIBA Stage 2 is undertaken to identify opportunities for passive design solutions	1	Targeted	1	The building will use passive design measures to reduce the total heating, cooling, mechanical ventilation and lighting loads and energy consumption in line with the findings of the passive design analysis which demonstrates a meaningful reduction in the total energy demand as a result
The building utilises a free cooling strategy	1	Not Targeted	0	The building will be air conditioned therefore this credit cannot be targeted
LZC feasibility study carried out before RIBA Stage 2 and implemented showing that a meaningful reduction in regulated CO ₂	1	Not Targeted	0	It is assumed that no complaint renewable technologies are planned for this development
Ene 05 – Energy Efficient Cold Storage				
Credit not applicable to this development				
Ene 06 – Energy Efficient Transportation Systems				
An analysis of the transportation demand and usage patterns for the building has been carried out	1	Targeted	1	An analysis of the transportation demand and usage patterns for the building will be carried out
The lifts specified comply with the three energy efficient features	1	Targeted	1	The lift manufacturer (with the design team's support) is expected to ensure these credits are achieved
Ene 07 – Energy Efficient Laboratory Systems				
Credit not applicable to this development				
Ene 08 – Energy Efficient Equipment				
Unregulated energy consumption is monitored and a meaningful reduction is made in the building	2	Targeted	2	Energy efficient equipment will be specified to meet the relevant rating levels and schemes
TRANSPORT				
Tra 01 – Transport Assessment and Travel Plan				
Site specific travel assessment/statement is undertaken to inform a compliant travel plan developed at feasibility stage and implemented	1	Targeted	1	BREEAM compliant travel plan will be developed based on a site specific transport statement

Criteria	Credits Available	Status	Credits Targeted	Assumptions
Tra 02 – Sustainable Transport Measures				
Provision of sustainable transport measures	10	Targeted	5	It is assumed that the following sustainable transport measures will be provided/implemented: 1. Accessibility index of ≥8 will be achieved (Price and Myers previously advised an accessibility index of 8.02) 2. A public transport information system in a publicly accessible area will be provided 3. Install compliant cycle storage spaces (1nr per 10 staff) 4. Provide at least two compliant cyclist facilities (showers, changing facilities, lockers and drying spaces) 5. Existing accessible amenities are present within 500m of the site
WATER				
Wat 01 – Water Consumption				
Efficiency of new domestic scale water-consuming components shows an improvement over notional baseline	4	Targeted	2	It is assumed that fittings will be specified using the following standards as guidance: • WC – 4 lt effective flush volume • WHB taps – 6 l/min • Showers – 8 l/min • Baths – 160 litres • Urinal – 3 l/bowl/hr • Kitchen taps (kitchenette) – 7 l/min • Kitchen taps (restaurants) – 8.3 l/min • Domestic sized dishwashers - 13 l/cycle • Domestic sized washing machines - 50 l/use • Commercial sized dishwashers - 6 l/rack • Commercial sized washing machines - 10 l/kg There is a potential for an additional credit if the above performance levels were improved
Wat 02 – Water Monitoring				
The specification of a water meter on the mains water supply to each building, water-consuming plant or building areas, consuming 10% or more of the building's total water demand, are either fitted with sub meters or have water monitoring equipment integral to the plant or area and each meter (main and sub) has a pulsed output to enable connection to a Building Management System (BMS) and if there is an existing BMS any new build must be connected to the existing BMS	1	Targeted	1	It is assumed that compliant water meters and associated sub-meters will be provided
Wat 03 – Water Monitoring				
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	1	Targeted	1	It is assumed that a BREEAM compliant leak detection system will be installed on the mains incoming water supply
Flow control devices are fitted in WC areas to ensure water is supplied only when needed	1	Targeted	1	It is assumed that flow control devices will be provided in the WC areas
Wat 04 – Water Efficient Equipment				
Credit not applicable to this development as no unregulated water consumption				
MATERIALS				
Mat 01 – Environmental Impacts from Construction Products – Building Life Cycle Assessment				
Identify opportunities for reducing environmental impacts during Concept and Technical Design stages by carrying out options appraisals for 2 to 4 significantly different superstructure design options using a building LCA tool recognised by BREEAM that fulfil the functional requirements specified by the client and record the results in the Mat 01/02 submission tool	6	Targeted	3	It is assumed that the Architect will have reviewed different design options meaning that the options appraisals can be provided
Identify opportunities for reducing environmental impacts during Concept Design stage by carrying out options appraisals of a combined total of at least 6 significantly substructure and hard landscaping design options (at least 2 shall be substructure and at least 2 shall be hard landscaping) using a building LCA tool recognised by BREEAM that fulfil the functional requirements specified by the client and record the results in the Mat 01/02 submission tool	1	Targeted	1	It is assumed that the Architect will have reviewed different design options meaning that the options appraisals can be provided
Mat 02 – Environmental Impacts from Construction Products – Environmental Product Declarations (EPD)				
Specify construction products with EPD	1	Targeted	1	It is assumed that construction products will be specified that have an EPD to allow the minimum score of 20 to be achieved
Mat 03 – Responsible Sourcing of Materials				
Timber and timber-based products used on the project are legal and sustainable	Pre-Requisite	Targeted	0	All new timber and wood-derived products will be sourced from only independently verifiable legal and sustainable sources or FLEGT (forest law enforcement, governance and trade) licensed timber or equivalent timber.
A sustainable procurement plan must be used by the design team to specify sustainable construction products from Concept Design stage	1	Not Targeted	0	It is assumed that a sustainable procurement plan has not been prepared
Materials are responsibly sourced from a responsible sourcing scheme	3	Targeted	1	Principal contractor will ensure materials are responsibly sourced There is the potential to achieve a further credit for materials being sourced from heavier weighted schemes (i.e. BES 6001)
Mat 04 – Insulation				
Credit no longer assessed as a separate issue				
Mat 05 – Designing for Durability and Resilience				
The design incorporates suitable durability and protection measures or design features/solutions to prevent damage to the vulnerable parts of the internal and external building and landscaping elements and the relevant building elements incorporate design and specification measures to limit material degradation due to environmental factors	1	Targeted	1	Appropriate design for robustness will be included within the design and specification of materials and fittings. An analysis will be carried out to assess ensure that the exposed parts of the building are protected from material degradation

Criteria	Credits Available	Status	Credits Targeted	Assumptions
Mat 06 – Material Efficiency				
Opportunities and appropriate measures have been identified, investigated and implemented, to optimise the use of materials in building design, procurement, construction, maintenance and end of life across RIBA Stages 1-5	1	Targeted	1	Opportunities will be identified, and appropriate measures investigated and will be implemented/have been implemented, to optimise the use of materials in building design, procurement, construction, maintenance and the end of life in order to maximise the material efficiency of the project
WASTE				
Wst 01 – Construction Waste Management				
A pre-demolition audit of the existing buildings, structures or hard surfaces will be completed by the client at RIBA Stage 2	1	Not Targeted	0	It is assumed that this was not undertaken at RIBA Stage 2
Develop and implement a compliant resource management plan and achieve the required resource efficiency benchmark	3	Targeted	2	Principal contractor will prepare and implement a compliant resource management plan and achieve the benchmark of ≤7.5m³/≤6.5 tonnes per 100m² GIA A further potential credit is available is the benchmarks of ≤3.4m³/≤1.9 tonnes per 100m² GIA
Non-hazardous construction and demolition waste are diverted from landfill	1	Targeted	1	Principal contractor to ensure that 70% (volume) of construction waste and 80% (volume) of demolition waste are diverted from landfill
Wst 02 – Use of Recycled and Sustainably Sourced Aggregates				
Use of recycled, secondary aggregates and reuse of aggregates in-situ	1	Not Targeted	0	It is assumed that the total amount of recycled and/or secondary aggregate specified will not be greater than 25% (by weight or volume) of the total high-grade aggregate specified for the development
Wst 03 – Operational Waste				
Provision of labelled dedicated storage facilities for a building's operational-related recyclable waste with an appropriate capacity to the building type, size and number of units. Where significant food waste is produced, composting facilities are provided and where significant packaging waste, a compactor/baler is provided	1	Targeted	1	Appropriate spaces to be provided
Wst 04 – Speculative Finishes				
Credit not applicable as the issue is only applicable to office developments				
Wst 05 – Adaptation to Climate Change				
Climate Change Adaptation Strategy Appraisal for the structural and fabric resilience will be undertaken by the end of Concept Design (RIBA Stage 2 or equivalent) to evaluate the impact on the building over its projected life cycle from expected extreme weather conditions arising from climate change and, where feasible, mitigate against these impacts	1	Not Targeted	0	It is assumed that a Climate Change Adaptation Strategy Appraisal for structural and fabric resilience will be undertaken by the end of Concept Design Stage 2
Wst 06 – Design for Disassembly and Adaptability				
A building-specific disassembly and functional adaptability strategy study has been undertaken by Concept Design (RIBA Stage 2 or equivalent) and implemented in the design	1	Not Targeted	0	It is assumed that a functional adaptation strategy will not be developed by the Concept Design Stage 2
LAND USE AND ECOLOGY				
LE 01 – Site Selection				
At least 75% of the proposed development's footprint is on an area of land which has previously been developed for use	1	Targeted	1	The proposed development is on at least 75% of previously developed land
The site is deemed to be significantly contaminated and will be remediated	1	Not Targeted	0	It is assumed that the land is not contaminated therefore the credit cannot be targeted
LE 02 – Ecological Risks and Opportunities				
Compliance is monitored against all relevant UK and EU or international legislation relating to the ecology of the site	Pre-Requisite	Targeted	0	A suitably qualified ecologist will be appointed to confirm compliance with the legislation
Survey and evaluation for the site undertaken at RIBA Stage 1/2 by a suitably qualified ecologist to demine the sites ecological baseline	1	Targeted	1	A suitably qualified ecologist will be appointed by RIBA Stage 2 to undertake the survey and evaluation
Identify, appraise and select measures to meet the optimal ecological outcomes for the site in line with the mitigation hierarchy	1	Targeted	1	Design team to ensure the hierarchy is adhered to and the optimal ecological outcomes are incorporated in the scheme
LE 03 – Managing Impacts on Ecology				
Credits associated with LE 02 have been achieved	Pre-Requisite	Targeted	0	
Avoid and manage negative ecological impact on site is achieved and measures for managing negative ecological impact during site preparation and construction are implemented	1	Targeted	1	A suitably qualified ecologist will be appointed by RIBA Stage 2 to provide the necessary advise and recommendations
Negative impacts from site preparation and construction works are managed according to the mitigation hierarchy and there is no overall loss of ecological value to the site	2	Targeted	2	Design team to ensure the hierarchy is adhered to and the optimal ecological outcomes are incorporated in the scheme
LE 04 – Ecological Change and Enhancement				
Credits associated with LE 03 have been achieved	Pre-Requisite	Targeted	0	
Measures are implemented to enhance the ecological value of the site based on input from the design stage and suitably qualified ecologist	1	Targeted	1	A suitably qualified ecologist will be appointed by RIBA Stage 2 to provide the necessary advise and recommendations and recommendations are implemented within the designs
Credits awarded based on the change in ecological value occurring as a result of the project	3	Targeted	1	Potential for further credits however, these are unable to be determined at this stage
LE 05 – Long Term Ecological Management and Maintenance				
Compliance is monitored against all relevant UK and EU or international legislation relating to the ecology of the site	Pre-Requisite	Targeted	0	A suitably qualified ecologist will be appointed to confirm compliance with the legislation
Credits associated with LE 03 have been achieved	Pre-Requisite	Targeted	0	
Measures are implemented to manage and maintain ecology throughout the project and a section on Ecology and Biodiversity is included within the Building User Guide / O&M Manuals	1	Targeted	1	Principal contractor to ensure compliance
Landscape and Ecology Management Plan is developed covering at least the first five years after project completion	1	Targeted	1	Principal contractor to prepare the required plan

Criteria	Credits Available	Status	Credits Targeted	Assumptions
POLLUTION				
Pol 01 – Impact of Refrigerants				
All systems (with electric compressors) must comply with the requirements set out in BS EN 378:2016 (Parts 2 and 3)	Pre-Requisite	Targeted	0	Systems specified will be compliant
Systems using refrigerants have Direct Effect Life Cycle CO ₂ equivalent emissions (DELCO _{2e}) of ≤1000 kgCO _{2e} /kW cooling capacity	2	Targeted	1	It is assumed that the systems will have a DELCO _{2e} of ≤1000 kgCO _{2e} /kW cooling capacity
BREEAM compliant refrigerant leak detection and containment	1	Not Targeted	0	It is assumed that a leak detection system for the refrigerants will not be provided
Pol 02 – Local Air Quality				
Reduce the emission of nitrogen oxides (NO _x) into the atmosphere	2	Targeted	2	We assume the current ME strategy is to use gas fired boilers and so it is expected that the dry NO _x emissions will be 24 mg/kWh
Pol 03 – Flood and Surface Water Management				
Flood risk assessment carried out and the building is defined as being in a low annual probability of flooding zone	2	Targeted	2	A flood risk assessment will be required to be undertaken to confirm the site is in a low risk flood zone
Drainage measures are specified so that the peak rate of run-off from the site to watercourses shows a 30% improvement. Relevant maintenance agreements are in place and calculations include an allowance for climate change	1	Potential	0	A consultant will be appointed to prepare calculations and a drainage strategy to ensure the credit criteria can be achieved
Drainage measures are specified so that the post-development run-off volume over the development lifetime is no greater than it would have been prior to the site's development including an allowance for climate change	1	Potential	0	A consultant will be appointed to prepare calculations and a drainage strategy to ensure the credit criteria can be achieved
Measures are implemented to minimise water course pollution	1	Potential	0	Calculations and a drainage strategy will need to be provided to ensure potential sources of water course pollution will be considered and suitably treated
Pol 04 – Reduction of Night Time Light Pollution				
External lighting is designed in accordance with ILP Guidance and provided with a time switch to allow lighting to be switched off between 2300hrs and 0700hrs. Safety and security lighting complies with the lower levels detailed within the ILP Guidance	1	Targeted	1	All external lighting will be designed in compliance with ILP guidance
Pol 05 – Reduction of Noise Pollution				
A noise impact assessment in compliance with BS 4142 has been carried out by an acoustician	1	Targeted	1	An acoustician will be appointed and is expected to confirm this credit can be achieved. A background noise survey will be carried out and the plant designed to not exceed current background levels

5.

Conclusion

5. Conclusion

This Pre-Assessment Report demonstrates that a Very Good rating can potentially be achieved based on the credits currently targeted and the implementation of the assumptions detailed within.

The score provides a reasonable buffer above the 55% threshold required for a Very Good rating.

Achieving the targeted BREEAM credits through the design and post construction stages will require rigorous adherence to the credit criteria. As some details for full compliance may not be included in this summary report, it is essential for the design team to remain in contact with the assessor as the project develops to confirm that all specifications and designs are in line with the pre-assessment.

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