

BREEAM Refurbishment and Fitout Pre-assessment

Project: 1069 – Astec House
Document Version: 02
Date of issue: 30 January 2026
BREEAM Version: BREEAM Non-Domestic Refurbishment and Fit-out 2014
Scope of pre-assessment: Part 1: Fabric and Services, Part 2: Core Services, Part 3: Local Services and Part 4: Interior Design.
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A BREEAM pre-assessment has been undertaken for the proposed refurbishment and change of use development at Astec House in Reading. The purpose of this technical note is to demonstrate that the student accommodation scheme can achieve a BREEAM ‘Very Good’ rating in line with Reading’s planning policy for minor conversion developments. To meet the BREEAM ‘Very Good’ rating target, a score of 55% should be achieved. The pre-assessment shows that the scheme can achieve:

- **Estimated Total Score at pre-assessment stage: 55.34%**
- **Estimated BREEAM rating at pre-assessment stage: ‘Very Good’ (threshold for ‘Very Good’ 55%)**

Table 1 and Figures 1 on the following page shows a summary of the pre-assessment results with or without ecology credit categories scoped in.

Subsequently, Table 2 examines each BREEAM category to identify which individual credits are possible. It includes a description of the credit requirements and notes where credits could be potentially achieved, as well as sets out outline information relating to the key actions that should be carried out by the design team to ensure successful certification. It should be noted that a significant number of credits require action at RIBA Stages 2 (see items highlighted in green) and should be integrated into the project at an early stage – we recommend that early engagement be undertaken for these credits where feasible to avoid challenges to achieve the corresponding credits further down the design and construction process.

We also recommend that at least 59% credits be targeted for BREEAM Very Good to allow for some buffer in case credits are dropped at detailed design and construction stages.

To achieve full certification, formal submission of detailed evidence documentation to the BRE through a certified BREEAM assessor should occur at Detailed Design stage and Post Construction stage. This pre-assessment is intended to provide outline guidance to achieve the targeted BREEAM rating at planning submission stage only and does not constitute a full evidence schedule for Design and Post Construction submissions.

The design team should refer to the details of BREEAM criteria and evidence requirements, accessible at: [BREEAM UK Refurbishment and Fit-out 2014](#).

For ease of reference, actions/evidence responsibilities for the Stage 2 team are colour coded as follows:

- Client – Bagri Foundation
- PM – tbc
- Architect – Mountford Pigott
- M&E consultant – tbc
- Quantity Surveyor - tbc
- Acoustic consultant – tbc
- Transport consultant - tbc
- Energy and sustainability consultant - Ecolytik
- Drainage consultant – tbc
- Ecologist – tbc
- Main contractor - tbc
- Other specialists (including Structural Engineer, Community engagement consultant, Commissioning manager, Suitably Qualified Security Specialist, Lighting designer, Life specialist, Demolition consultant/ contractor, Air Quality consultant and IAQ testing, Contaminated land consultant).

Table 1. BREEAM Refurbishment and Fitout 2014 Pre-Assessment results summary.

	Credits available	Credits achieved	% credits achieved	Available weighted score	Category Score
Man	21	12	57.14%	13.63%	7.78%
Hea	20	3	15.00%	15.49%	2.32%
Ene	25	21	84.00%	16.35%	13.73%
Tra	9	4	44.44%	6.82%	3.03%
Wat	9	6	66.67%	6.82%	4.54%
Mat	13	3	23.08%	14.20%	3.27%
Wst	10	4	40.00%	7.10%	2.84%
LE	4	4	100.00%	9.09%	9.09%
Pol	12	10	83.33%	10.49%	8.74%
Inn	10	0	0.00%	10.00%	0.00%
Total	133	67	50.38%	-	55.34%
Rating					Very Good

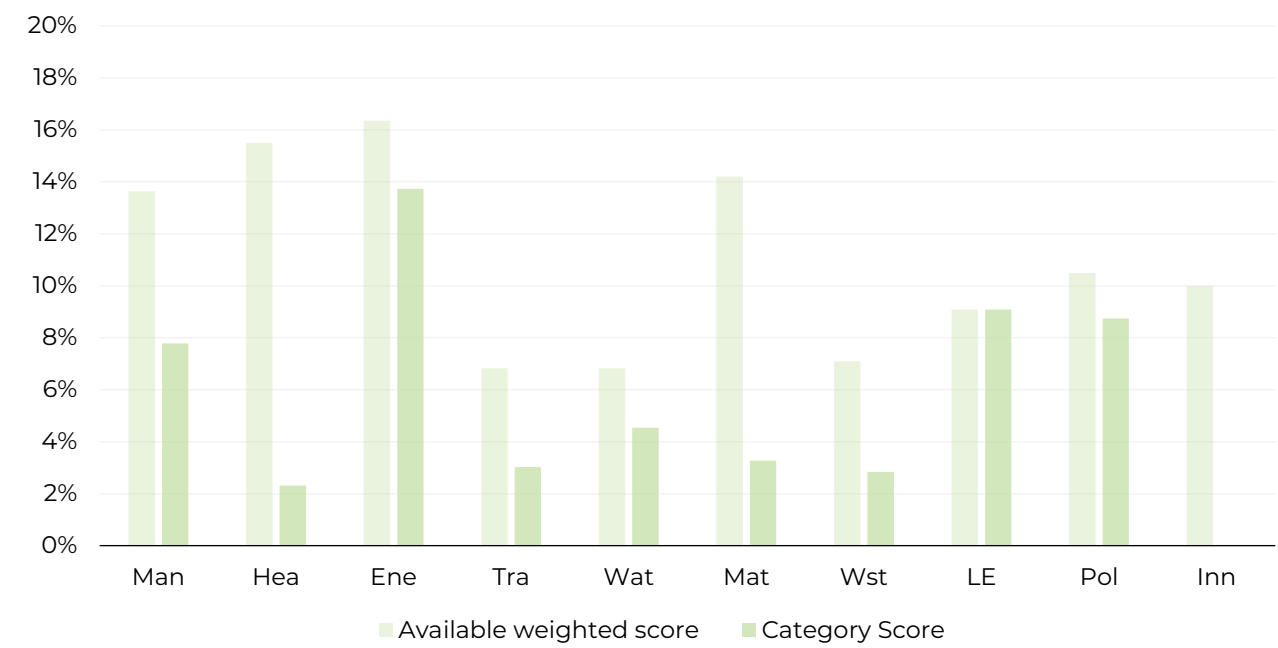


Figure 1. BREEAM Refurbishment and Fitout Pre-Assessment performance by category.

Table 2. BREEAM Pre-Assessment Schedule

					Stage 2 actions				
					Optional additional credits for consideration to get closer to BREEAM Excellent.				
Table references: P – Prerequisite, E – Exemplary									
Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
Management									
MAN01 Project Brief and Design	Project delivery consultation	1	0	-	Client to develop clear sustainability brief <u>BEFORE</u> Stage 2 which sets out: - Client requirements e.g. internal environmental conditions required - Client requirements e.g. internal environmental conditions required - Timescales and budget - List of consultees and professional appointments that may be required e.g. Suitably Qualified Acoustician etc. - Constraints for the project e.g. technical, legal, physical, environmental. Prior to completion of Stage 2, the project delivery stakeholders to meet to identify and define roles, responsibilities, and contributions for each key phase of project delivery, considering: - End user requirements - Aims of the design and design strategy - Particular installation and construction requirements/limitations - Design and construction risk assessments e.g. CDM, legionella risk assessment - Legislative requirements e.g. building control notification, heritage requirements - Procurement and supply chain - Identifying and measuring project success in line with project brief objectives - Occupiers' budget and technical expertise in maintaining any proposed systems - Maintainability and adaptability of the proposals - Requirements for the production of project and end user documentation - Requirements for commissioning, training and aftercare support. (credit not targeted)	Sustainability Brief. Formal letters of correspondence, meeting minutes.	No significant items. Difficult to gather evidence retrospectively if BREEAM was not discussed in team meetings in the outset.	Client and PM	
	Stakeholder consultation (third party)	1	0	-	Prior to completion of Stage 2, the design team to consult with all interested parties on matters that cover the minimum consultation content. Demonstrate how the stakeholder contributions and consultation exercise outcomes influence the Initial Project Brief and Concept Design.	Consultation plan setting out the process and scope of the consultation. Consultation report.	No significant items. Difficult to gather evidence if 3 rd party and community consultation	Client and PM + Architect + Community engagement	27/1/2026 - Ecolytik to send requirements.

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					Prior to completion of Stage 4, all interested parties give and receive consultation feedback. (credit not targeted)		not carried out in line with BREEAM requirements.	consultant (where present)	
	Sustainability Champion (design)	1	1	-	Involve a BREEAM AP from RIBA Stages 1 and 2. The project team to formally agree strategic BREEAM targets at Concept Stage (Stage 2). (not currently targeted)	Contract or letters of appointment to agree targets. Meetings minutes, communication records, formal notes of conversations and other statements reporting on discussions.	BREEAM AP	Client and PM + BREEAM AP	
	Sustainability Champion (monitoring progress)	1	0	1	As above for Developed Design Stage (Stage 3 and 4). (not currently targeted)	As above for Developed Design Stage.	BREEAM AP	Client and PM + BREEAM AP	
MAN02 Life cycle cost and service life planning	Elemental LCC	2	0	2	An outline, entire asset LCC plan to be carried out at Stage 2 together with any design options appraisals in line PD 156865: 2008 and BREEAM requirements. Elemental LCC plan to be used to influence building and systems design and specification to minimise life cycle costs and maximise critical value. (not currently targeted)	Elemental LCC plan.	Assessment and Report by QS	Quantity Surveyor	27/1/2026 - Ecolytik to send through requirements
	Component Level LCC	1	0	-	A component level LCC options appraisal to be carried out by the end of Stage 4 in line with PD 156865: 2008 and BREEAM requirements. Component LCC plan to be used to influence building and systems design and specification. (not currently targeted)	Component level LCC options appraisal plan.	Assessment and Report by QS	Quantity Surveyor	
	Capital cost reporting	1	1	-	Report the capital cost for the building in pounds per square metre of gross internal floor area (£k/m²) as part of the submission to BRE.	Predicted capital costs via BREEAM Projects.	No significant items	Quantity Surveyor	
MAN03 Responsible construction practices	Legal and sustainable timber	P	P	-	All timber and timber-based products used during the construction process of the project are legal and sustainable timber.	Commitment by client at design stage. Copies of all relevant certificates or chain of custody evidence at construction stage.	Contractor item	Client and PM + Contractor	
	Environmental management	1	1	-	All parties who at any stage manage the construction site (e.g. the principal contractor, the demolition contractor) operate an EMS covering their main operations.	Commitment by client at design stage. A copy of the principal contractors EMS/EMAS certificate or for BS 8555 evidence of their status.	Contractor item	Client and PM + Contractor	27/1/2026 – TBC, may exclude smaller contractors.
	BREEAM AP (site)	1	1	-	The client and the contractor to formally agree performance targets. Involve a BREEAM AP at Construction Stage.	Contract or letters of appointment to agree targets. Meetings minutes, communication records, formal notes of conversations and other statements reporting on discussions.	Contractor item	Client and PM + BREEAM AP (contractor)	27/1/2026 – TBC, may exclude smaller contractors.

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
	Responsible construction management	2	2	-	Achieve compliance with the Considerate Constructors Scheme. <u>(Minimum requirement for BREEAM Excellent and above, 1 credit)</u>	Commitment by client at design stage. CCS report and certification at post construction stage.	Contractor item	Contractor	
	Responsible construction management (exemplary)	1E	0	0	Achieve an exemplary rating with the Considerate Constructors Scheme. (not currently targeted)	As above.	Contractor item	Contractor	
	Monitoring of construction site impacts	2	2	-	Assign responsibility to an individual for monitoring, recording and reporting: - 1 Credit: energy use, water consumption and - 1 Credit: transportation resulting from all on-site construction processes (and dedicated off-site manufacturing) throughout the build programme (not assumed, can be an optional credit).	Commitment by client at design stage. Utility records and transportation data.	Contractor item	Contractor	
MAN04 Commissioning and handover	Commissioning - testing schedule and responsibilities	1	1	-	Prepare a schedule of commissioning and testing covering all relevant systems and controls. Testing to be carried out in line with appropriate standards. Appoint an appropriate project team member to monitor and programme pre-commissioning, commissioning and testing. Where necessary include re-commissioning activities. The principal contractor accounts for the commissioning and testing programme, responsibilities and criteria within their budget and the main programme of works.	Contracts or appointment documents. Schedule of commissioning and testing. Principal contractor programme of works accounting for commission and testing.	Commissioning monitoring	Client and PM + Commissioning manager + Contractor + M&E consultant	
	Commissioning building services	1	1	-	For complex building services and systems, a specialist commissioning manager who is appointed during the design stage (by either client or contractor) will have responsibility to carry out the following: - Undertaking design reviews and giving advice on suitability for ease of commissioning - Providing commissioning management input to construction programming and during installation stages - Management of commissioning, performance testing and handover/post handover stages.	Contracts or appointment documents. Commissioning reports.	Specialist commissioning	Client and PM + Commissioning manager + Contractor + M&E consultant	
	Testing and inspecting building fabric	1	0	- Not deemed suitable for listed building	Complete post-construction testing and inspection to quality-assure the integrity of the building fabric. Rectify any defects identified during post-construction testing and inspection. Will require thermographic survey at various construction stages and air tightness test prior to completion. (not currently targeted)	Commissioning and inspection report.	Thermographic Survey and Air Tightness Test	Commissioning manager + Contractor	
	Handover	1	1	-	Prior to handover, develop 2 building user guides: a non-technical user guide for distribution to the building occupiers and a technical user guide for the premises facilities managers. Prepare 2 corresponding training schedules timed appropriately around handover and proposed occupation plans. <u>(Minimum requirement for BREEAM Excellent and above)</u>	Commitment by client at design stage. Building user guides and training schedules.	Building User Guides and training schedules	Client and PM + Contractor	
MAN05 Aftercare	Aftercare support	1	1	-	Provide aftercare support to the building occupiers through having in place operational infrastructure and resources.	Commitment by client at design stage.	Aftercare for building user	Client and PM +	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
						Contract to provide compliant aftercare support and training.	(Contractor item)	Contractor	
	Seasonal commissioning	1	0	1	Carry out BREEAM compliant commissioning activities over a minimum 12-month period once the building becomes substantially occupied. (Minimum requirement for BREEAM Excellent and above) (not currently targeted)	Commitment by client at design stage. Commissioning records, reports and letter of appointment.	Seasonal commissioning (Contractor item)	Client and PM + Commissioning manager + M&E consultant	
	Post-occupancy evaluation (POE)	1	0	1	Appoint an independent party to carry out a POE exercise one year after the building is substantially occupied. The client or building occupier to commit funds to pay for the POE in advance.	Commitment by client at design stage.	Post occupancy evaluation	Client and PM	27/1/2026 Ecolytik to send more information.
Health and wellbeing									
HEA01 Visual comfort	Glare control	1	1	-	The potential for disabling glare has been designed out of all relevant building areas using a glare control strategy, either through building form and layout and/or building design measures. The glare control strategy avoids increasing lighting energy consumption. Applicable to areas with work stations (relevant to all bedrooms with desk areas and office). Blinds to be provided to all relevant rooms (not curtains).	Drawings, specification of glare control measures.	Potential glare control items	Architect	27/1/2026 – MP ok with blinds.
	Daylighting	3	1	0	The relevant building areas meet the following daylight levels: - average daylight factor of 2% for - 40% of area: 1 credit - 60% of area: 2 credits - 80% of area: 3 credits - AND - Either achieve a uniformity ratio of at least 0.3 OR The BREEAM room depth criterion is achieved. Or meet the relevant daylight illuminance criteria of Table 14 of Hea01. 1no. credit likely achievable based on current daylight results.	Drawings, specification of glare control measures.	No significant cost.	Architect + Daylight consultant	
	Daylighting (exemplary)	1E	0	-	Relevant building areas meet the following exemplary daylight levels: - 80% of area to achieve average daylight factor of 3% - 80% of area to achieve at least 300 lux average daylight illuminance for 2650 hours per year or more, and minimum daylight illuminance at worst lit point will be at least 90 lux for 2650 hours per year. Not likely to be achievable based on current daylight results. (not currently assumed)	Daylighting calculations	-	Architect + Daylight consultant	
	View out	2	0	-	1 credit: 80% of the floor area in relevant building areas provides an adequate view out. 2 credits: 95% of the floor area in relevant building areas provides an adequate view out.	View out calculations.	-	Architect + Daylight consultant	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					Credit not likely to be achievable based on window sizes to some rooms (2 nd and 3 rd floors).				
	Internal and external lighting levels, zoning and control	1	1	-	<u>Internal lighting</u> - All internal fluorescent and CFL are fitted with high frequency ballasts. - Internal lighting in all relevant areas of the building is designed to provide illuminance (lux) levels and colouring rendering index in accordance with the SLL Code for Lighting 2012 and other relevant standards. - For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 7. <u>Internal lighting</u> is zoned to allow for occupant control. <u>External lighting</u> located within the construction zone is specified in accordance with BS 5489-1:2013 Code for the practice for the design of road lighting. Lighting of roads and public amenity areas and BS EN 12464-2:2014 Light and lighting - Lighting of work places - Part 2: Outdoor workplaces. External lighting should provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately, especially during the night.	Drawings, specifications, internal and external lighting design strategy and calculations.	No significant items	Architect	
HEA02 Indoor air quality	Indoor air quality (IAQ) plan	1	0	1	A site-specific indoor air quality plan has been produced and implemented in line with BREEAM requirements. (not currently targeted)	IAQ plan.	IAQ Report	Air quality consultant	
	Ventilation	1	0	-	The building has been designed to minimise the indoor concentration and recirculation of pollutants in the building: - Provide fresh air in accordance with the criteria of the relevant standard for ventilation. - Ventilation pathways are designed to minimise ingress and build-up of air pollutants indoors. - The building's air intakes and exhausts are over 10m apart and intakes are over 20m from sources of external pollution; OR - The location of the building's air intakes and exhausts, in relation to each other and external sources of pollution, is designed in accordance with CEN/TR 16798-4:2017 Sections 8.8.1 to 8.8.4 - HVAC systems must incorporate suitable filtration to minimise external air pollution, as defined in BS EN 16798-3:2017 with filters of at least SUP2. - Occupied spaces to have CO₂ or AQ sensors specified in accordance with Building Regs ADF2. (not currently targeted, openable windows are close to main road)	Ventilation strategy, specification, drawings, calculations to demonstrate compliance.	-	M&E consultant	
	Volatile organic compound (VOC) emission levels (products)	1	0	1	<u>For 1 credit:</u> All decorative paints and varnishes specified meet the criteria in Table 20 of the BREEAM manual. At least 5 of the 7 remaining product listed in Table 20 meet the testing requirements and emission level criteria for VOC emissions. (not currently targeted)	Product specifications, standards, order forms, chain of custodies and relevant emission testing certificates.	VOC free finishes	Architect + FFE specialist + Contractor	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
	Volatile organic compound (VOC) emission levels (post construction)	1	0	-	Post construction (but pre-occupancy) IAQ testing is carried out. Formaldehyde concentration does not exceed 100µg/m³ averaged over 30 mins. TVOC concentration in indoor air is measured post construction (but pre-occupancy) and does not exceed 300µg/m³ over 8 hours. Where limits are exceeded, the project team confirms the measures that have been undertaken in accordance with the IAQ plan, to reduce the levels to within the above limits. (not currently targeted)	IAQ testing report and confirmation of measures undertaken to rectify any shortfalls.	IAQ testing, pre-occupancy flush out if required	Contractor + IAQ testing	
	Adaptability – Potential for natural ventilation	1	0 - cannot meet requirement for thermal comfort if windows are restricted and no comfort cooling.	See Hea04	The building ventilation strategy is designed to be flexible and adaptable to potential building occupant needs and climatic scenarios. The natural ventilation strategy is capable of providing at least two levels of user-control on the supply of fresh air to the occupied space. Thermal comfort requirements : - Occupied spaces of the building are designed to be capable of providing fresh air entirely via a natural ventilation strategy. The following are methods deemed to satisfy this criterion dependent upon the complexity of the proposed system: - Room depths are designed in accordance with CIBSE AM10 (section 2.4) to ensure effectiveness of any natural ventilation system. The openable window area in each occupied space is equivalent to 5% of the gross internal floor area of that room/floor plate; OR - The design demonstrates that the natural ventilation strategy provides adequate cross flow of air to maintain the required thermal comfort conditions and ventilation rates. This is demonstrated using ventilation design tool types that meet the requirements of CIBSE AM10.	Design drawings and calculations.	See Hea04	Architect + M&E consultant	27/1/2026 - Ecolytik to check opening extents
HEA04 Thermal comfort	Thermal modelling	1	0 - cannot meet CIBSE TM52 with 200mm opening (in total) above and below for sash windows, and without comfort cooling.	1 Windows should be much less restricted to achieve this credit, subject to TM52 modelling. Or cooling should be provided.	Fully dynamic thermal modelling to be carried out in accordance with CIBSE AM11. For air-conditioned buildings, summer and winter operative temperature ranges in occupied spaces are in accordance with the criteria set out in CIBSE Guide A, or occupied spaces meet the Category B requirements for PPD, PMV and local discomfort set out in Table A.1 of Annex A of ISO 7730:2005.	Dynamic thermal modelling report.	Hea04 thermal modelling report, need bigger window openings or cooling.	Energy consultant	27/1/2026 - Likely no cooling. Windows restricted to 100mm above and below for the sash windows.
	Design for future thermal comfort	1	0 - as above	-	Achieve Hea04 Thermal modelling credit above. Thermal modelling to demonstrate that the relevant requirements set out above are achieved for a projected climate change environment. Where the requirements are not met, the project team demonstrates how the building has been adapted or designed to be easily adapted in future using passive design solutions.	Dynamic thermal modelling report.	As above	Energy consultant	
	Thermal zoning and controls	1	0 - as above	-	Achieve Hea04 Thermal modelling credit above. The thermal modelling analysis has informed the temperature control strategy for the building and its users. The heating and	HVAC zoning and control strategy, drawings and specifications.	Relevant controls. As above.	M&E consultant	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					cooling strategy: - Should be zoned to efficiently heat and cool spaces. - Should have degree of occupant control based on occupancy type, patterns and room functions, how the user is likely to interact with the system, and user knowledge and expectations.				
HEA05 Acoustic performance	Acoustic performance	4	0 – MP to check May be issues with structural borne transmission due to existing building	1	The following to be met and confirmed by a suitably qualified acoustician (SQA) via pre-completion testing. - 1 credit - Airborne sound insulation values are at least 3dB higher and impact sound insulation values are at least 3dB lower than the performance standards in the relevant Building Regulations or Standards. - 3 credits - Airborne sound insulation values are at least 5dB higher and impact sound insulation values are at least 5dB lower than the performance standards in the relevant Building Regulations or Standards. - 4 credits - Airborne sound insulation values are at least 8dB higher and impact sound insulation values are at least 8dB lower than the performance standards in the relevant Building Regulations or Standards. Assume 1 credit (at least 3dB reduction) can be achieved.	Acoustic report setting out required performance standard and relevant design measures to achieve them. Testing report post construction.	Acoustic report, potentially additional acoustic insulation and pre-completion testing	Acoustic consultant	27/1/2026 - Ecolytik to check spec from MP.
HEA06 Safety and Security	Security of site and building	1	0	-	A Suitably Qualified Security Specialist (SQSS) conducts an evidence-based Security needs assessment (SNA) during or prior to Stage 2. The set of security controls and requirements developed by the SQSS to be incorporated into the development. Correspondence or a copy of the report/feedback from the Designing Out Crime Officer (DOCO, or Crime Prevention Design Advisor or Architectural Liaison Officer), is acceptable as evidence for this issue. (Not likely to be achievable if SQSS not appointed at Stage 2. Not currently targeted.)	Appointment of SQSS at Stage 2. SNA report by SQSS. Drawings and specifications showing incorporation of security measures.	SQSS appointment and report.	Suitably Qualified Security Specialist	
Energy									
ENE01 Reduction of energy use and carbon emissions	Option 1: Whole building energy model	15	15	0	Calculate an Energy Performance Ratio for Non Domestic Refurbishment (EPR NDR). Compare the EPR NDR achieved with the benchmarks in Table 27 of the BREEAM manual. <u>(Minimum requirement for BREEAM Excellent: 6 credits; for BREEAM Outstanding: 10 credits)</u> 15 credits likely achievable for scheme based on planning stage energy model.	A copy of the building regulations output document from the approved software at design and as-built stages.	-	Energy consultant + Contractor	27/1/2026 – Credits updated with no cooling.
	Zero regulated carbon (exemplary)	2E	0	-	The building achieves an EPR NC ≥ 0.9 and zero net regulated CO ₂ -eq emissions. (not currently targeted)	As above.	-	Energy consultant	
	Carbon negative (exemplary)	3E	0	-	The building is carbon negative in terms of its total modelled operational delivered energy consumption, including regulated and unregulated energy. - 1 credit: >20% unregulated delivered energy consumption from carbon neutral sources. - 2 credits: >50% unregulated delivered energy consumption from carbon neutral sources.	Evidence confirming total carbon neutral energy generation, source of carbon neutral energy, and estimate of exported surplus.	-	Energy consultant + Client and PM	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					- 3 credits: >100% unregulated delivered energy consumption from carbon neutral sources. (not currently targeted)				
ENE02 Energy monitoring	Sub-metering of end-use categories	1	1	-	BMS/EMS meets the following requirements: - Install energy metering systems so that at least 90% of the estimated annual energy consumption of each fuel is assigned to the end-use categories. - The energy consuming systems in buildings with a total useful floor area greater than 1,000m2 are metered using an appropriate energy monitoring and management system. - The end energy consuming uses are identifiable to the building users, for example through labelling or data outputs. <u>(Minimum requirement for BREEAM Very Good and above)</u>	Energy metering strategy, metering schematics, drawings, specifications.	BMS/EMS	M&E consultant	
ENE03 External lighting	External lighting	1	1	-	No external lighting (which includes lighting on the building, at entrances and signs) OR External light fittings within the construction zone with: - Average initial luminous efficacy of not less than 60 lm/cW. - Automatic control to prevent operation during daylight hours. - Presence detection in areas of intermittent pedestrian traffic.	Drawings, specifications and calculations on external lighting design and control systems.	No significant items beyond typical provisions.	Architect + M&E consultant	
ENE04 Low carbon design	Passive design	1	0 - need Hea04 thermal comfort first credit.	1	Achieve HEA04 Thermal comfort first credit. 1 credit: At RIBA Stage 2. carry out passive design analysis and implement passive design measures to reduce the total HVAC and lighting loads and energy consumption in line with analysis findings.	Dynamic simulation modelling report demonstrating the reduced energy demand and CO ₂ -eq emissions from the specified passive design measures.	Passive design report	Energy consultant	
	Free cooling	1	0	1	The 'Passive design' credit above is achieved. The passive design analysis includes an analysis of free cooling and identifies opportunities for the implementation of free cooling solutions, or if building is naturally ventilated. (not currently targeted)	Passive design report to demonstrate free cooling strategy can reduce the cooling demand.	-	Energy consultant	27/1/2026 - Ecolytik to check
	Low and zero carbon (LZC) technologies	1	0	-	At RIBA Stage 2, LZC feasibility study to be carried out by energy specialist. Specify local LZC technologies in line with the feasibility study recommendations.	LZC report demonstrating reductions in CO ₂ -eq from the specified LZC technology.	LZC report.	Energy consultant	27/1/2026 – Gas boilers only.
ENE06 Energy efficient transportation systems	Energy consumption	1	1 new lift will be installed.	-	Analyse transportation demand and usage patterns for the building to determine the optimum number and size of lifts. Calculate the energy consumption in accordance with BS EN ISO 25745 Part 2 or Part 3 for at least 2 options for each transportation type or at least 2 options considering different system arrangements and control strategies. Consider the use of regenerative drives. Specify the transportation system with the lowest energy consumption. If the existing lift will be refurbished then the requirements above also apply.	Transportation Energy Analysis report.	Transportation Energy Analysis report. Lift spec.	Lift specialist or M&E consultant	
	Energy efficient features	2	2 new lift will be installed.	-	Specify all of the following features for each lift: standby condition for off-peak periods; lift car lighting and display lighting provides an average luminous efficacy across all fittings in the car of > 55 lm/cW; regenerative drives where their use is demonstrated to	Drawings, specifications, certification showing low energy features are	Lift spec.	Lift specialist	

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					save energy; uses a drive controller capable of variable speed, variable-voltage, and variable-frequency (VVVF) control of the drive motor. If the existing lift will be refurbished then the requirements above also apply.	incorporated into transportation systems.			
ENE08 Energy efficient equipment	Energy efficient equipment	2	2	-	Identify the building's unregulated energy consuming loads. Estimate their contribution to the total annual unregulated energy consumption. Identify the systems or processes that use a significant proportion of the total annual unregulated energy consumption. Demonstrate a meaningful reduction in the total annual unregulated energy consumption of the building. All <u>small power equipment and plug-in equipment</u> to have Energy Star rating OR has been procured in accordance with the Government Buying Standard. Any <u>domestic scale appliances</u> to meet the following: - Fridges, fridge-freezers: A+ rating - Washing machines: A++ rating - Dishwashers: A+ rating - Washer-dryers and tumble dryers: A rating.	Calculation for building's unregulated energy loads and to demonstrate meaningful reduction is achieved.	No significant items beyond typical provisions.	Client and PM + Energy/BREEAM consultant + M&E consultant + Architect	
Ene09 Drying space	Drying space	1	0	1	Individual bedrooms: an adequate internal or external space with posts and footings, or fixings capable of holding: - 2m or more of drying line where drying facilities are provided for each room; OR - 2m of drying line per bedroom, for the first 30 bedrooms, plus one metre of drying line for each additional bedroom where drying facilities are shared.	Drawings, reports, specifications.	Drying lines to all bedrooms.	Architect + Contractor	27/1/2026 – To assume no drying lines.
Transport									
TRA01 Sustainable transport accessibility	Accessibility Index	3	2	-	1 credit – accessibility index of >2. 2 credits - accessibility index of >4. 3 credits - accessibility index of >8. Assume 2 credits achievable. Will require detailed assessment post planning to confirm.	PTAL output.	No significant items	BREEAM Assessor	
TRA02 Proximity to amenities	Proximity to amenities	2	2	-	Availability of >4 types of BREEAM compliant amenities within 1km of site. There are food outlets, cash point, leisure facility, outdoor open spaces within 1km of the building.	Plan showing location and distance of amenities.	No significant items	BREEAM Assessor	
TRA03 Cyclist facilities	Cycle storage	1	0	- Insufficient space to provide 21 secure cycle spaces.	BREEAM compliant cycle parking: - 1 space per every 10 staff and - 1 space per every 2 residents Assuming 19no. single rooms and 10no. double rooms (39 residents) and 1no. staff - 21no. spaces would be required to meet BREEAM credit target. Cycle spaces should: - Be covered overhead - Enable cycles to be secured within spaces in rack(s) - Be in a prominent location that is viewable from an occupied building - Have adequate lighting in line with Hea01	Drawings, reports, specifications.	Secure cycle storage racks under a covered space. No. of cycle spaces to meet BREEAM requirements.	Transport consultant + Architect + Contractor	27/1/2026 - Insufficient space to provide 21 secure cycle spaces.

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
Tra04 Maximum car parking capacity	Maximum car parking capacity	2	0 - If only 1 staff then no. of occupants will be 40. Parking spaces will need to be =<10 for 1 credit.	-	<u>Assume accessibility index of <8, max. parking capacity should not exceed 1 space per 4 building user (1 credit) or 1 space per 5 building use. Assuming 40 building users (39 residents and 1 staff), then</u> - <u>1 credit: =<10 spaces</u> - <u>2 credits: =<8 spaces</u> <u>If 11 spaces then no credits can be awarded.</u>	Drawings, reports, specifications.	No significant items	Architect + Client and PM	27/1/2026 – currently 11 spaces
TRA05 Travel plan	Travel plan	1	0	1	Undertake a site-specific transport assessment (or develop a travel statement) and draft travel plan in line with BREEAM requirements at no later than Stage 2. Demonstrate that the travel plan will be implemented and supported by the building's management in operation. (not currently targeted).	Drawings, reports, specifications.	Transport assessment/statement and Travel Plan.	Transport consultant	27/1/2026 - May be prepared for planning, TBC.

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Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
Water									
WAT01 Water consumption	Water consumption	5	3	-	For 2 credits, achieve 25% improvement in water consumption over BREEAM baseline performance. For 3 credits, achieve 30% improvement. Greywater and rainwater harvesting likely to be required to achieve more than 3 credits. <u>For 2 credits:</u> - WC – 4.5L effective flush vol. - Wash hand basin taps – 7.5 L/min - Showers: 8 L/min - Baths: 160 L - Kitchenette tap – 7.5 L/min - Domestic scale dishwasher: 13 litres/cycle - Domestic scale washing machines: 50 litres/use <u>For 3 credits:</u> Indicative sanitary fittings/appliances flow rates etc as follows, TBC at detailed design stage: - WC – 4L effective flush vol. - Wash hand basin taps – 4.5 L/min - Showers: 6 L/min - Baths: 140 L - Kitchenette tap – 5 L/min - Domestic scale dishwasher: 12 litres/cycle - Domestic scale washing machines: 40 litres/use <u>(Minimum requirement for BREEAM Good, Very Good and Excellent: 1 credit; for Outstanding: 2 credits)</u>	Copy of the WAT01 calculator. Documentary evidence supporting the data used to complete the calculator tool.	No significant items beyond low flow sanitary fittings and appliances.	Architect + M&E consultant + BREEAM Assessor	27/1/2026 - To include water softener and aerated taps etc.
WAT02 Water monitoring	Water monitoring	1	1	-	Specify a water meter on the mains water supply to each building. <u>(Minimum requirement for BREEAM Good and above)</u> For water-consuming plant or building areas consuming 10% or more of the building’s total water demand, fit easily accessible sub-meters or install water monitoring equipment for the area. All meters to have pulsed or other open protocol communication output and be connected to BMS where available.	Calculations, drawings, specifications, datasheets that form part of the water metering strategy.	Water meter with pulsed output to mains water supply	M&E consultant	
WAT03 Water leak detection and prevention	Leak detection system	1	1	-	Install a leak detection system capable of detecting a major water leak on the utilities water supply within the buildings and between the buildings and the utilities water supply.	Drawings, specifications, datasheets for the leak detection system.	Leak detection system to mains water supply	M&E consultant	27/1/2026 - Ecolytik to provide details
	Flow control devices	1	0	-	Install flow control devices that regulate the water supply to each WC area or sanitary facility. All bedrooms will require a separate flow control device with solenoid valve, which can be onerous. Not currently targeted.	Drawings, specifications, datasheets for the flow control devices.	Flow control devices to each WC zone	M&E consultant	
Materials									
MAT01 Environmental impact of materials	Project lifecycle assessment study	6	0	4 or more	The project uses a life cycle assessment (LCA) tool or undertakes a building information model life cycle assessment (BIM LCA) to measure the life cycle environmental impact of the refurbishment or fit-out works.	LCA calculations, options appraisal report and MAT01 calculator tool. Evidence that the LCA options appraisal summary document has been received by the design team	LCA report.	Sustainability Consultant + Full team input	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					Complete and meet the mandatory requirements of the Mat01 Calculator. Demonstrate how the LCA has reduced environmental impact of the building. Submit LCA tool output to the BRE. Credits awarded based on comparison of LCA results with BRE benchmarks. (not currently targeted).	and client. Evidence of how the LCA design options have benefitted the project.			
MAT03 Responsible sourcing of materials	Legal and sustainable timber	P	P	-	100% of timber and timber-based products used on the project are 'Legal' and 'Sustainable' as per the UK Government's Timber Procurement Policy. (Minimum requirement for BREEAM compliance)	Timber certificates.	Contractor item	Contractor	
	Sustainable procurement plan	1	0	1	The principal contractor sources materials for the project in accordance with a documented sustainable procurement plan to be provided by the client. (not currently targeted).	Sustainable Procurement Plan.	Sustainable Procurement Plan.	Client and PM	
	Responsible sourcing of materials (RSM)	3	2	-	Use the Mat 03 calculator tool and methodology to determine the number of credits achieved for the construction products specified or procured in line with Table 53 of the BREEAM manual. Assumed >36% of RSM points achieved.	Responsible sourcing certificates. MAT03 calculation tool.	Contractor item	Contractor + Sustainability Consultant	
MAT04 Insulation	Embodied impact	1	1	-	The Insulation Index calculated using the BREEAM Mat04 calculator for the building fabric and services insulation is the same as or greater than 2.5. Aim to specify high performance insulation as far as feasible.	Drawings, specifications and datasheets showing insulation installed. MAT04 calculation tool.	Contractor item	Architect + M&E consultant + Contractor + Sustainability Consultant	
MAT05 Designing for durability and resilience	Designing for durability and resilience	1	0	1 - Tricky for listed building	Protecting vulnerable parts of the building from damage - In areas of higher risk, suitable durability and protection measures to vulnerable parts of the building, including: robust external wall construction; corridor walls specified to Severe Duty; protection rails; kick plates or impact protection on doors; hard-wearing and easily washable floor finishes; door stoppers etc. Protecting exposed parts of the building from material degradation - Key exposed building elements to been designed and specified to limit long and short-term degradation due to environmental factors.	Drawings, specifications, reports showing design measures for durability and resilience.	Durability and resilience provisions	Architect	27/1/2026 - Tricky for listed building
MAT06 Material efficiency	Material efficiency	1	0	-	From Stage 1 through to Stage 5, opportunities have been identified by the client, design and construction team, and appropriate measures investigated and implemented within the scope of refurbishment or fit-out works, to optimise the use of materials through building design, procurement, refurbishment, maintenance, and end of life. (not currently targeted).	Material efficiency report.	Material efficiency report.	Architect	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
Waste									
WST01 Project waste management	Pre-refurbishment audit	1	0 -TBC by MP	1	A competent person to complete a pre-refurbishment audit of any existing buildings, structures or hard surfaces being considered for demolition at Stage 2. This must be used to guide the design, consideration of materials that can be reused, and to set targets for waste management and ensure all contractors are engaged in the process of maximising high grade reuse and recycling opportunities. The Pre-refurbishment plan to be referenced in the Resource Management Plan. A competent person someone who has knowledge of the value and condition of materials and what can or cannot be repaired. It should be someone who has appropriate knowledge of buildings, waste and options for the reuse and recycling of different waste streams. A demolition contractor would be ideal for the role but it could also be the main contractor. The 'competent person' does not have to be independent of the project. (not currently targeted).	Pre-refurbishment audit.	Pre-refurbishment audit and report.	Demolition consultant/ contractor	27/1/2026 - MP to discuss with client
	Reuse and direct recycling of materials	2	0	0	A % of waste generated by the refurb works will be directly reused onsite or are sent back to the manufacturer for close-loop recycling:. <u>1 credit:</u> 50% of total available points for the waste material types detailed in Table 65, that are present on the project have been achieved. <u>2 credits:</u> 75% of total available points for the waste material types detailed in Table 65, that are present on the project have been achieved. (not currently targeted).	MAT01 calculator tool.	Contractor item	Architect + Sustainability Consultant + Contractor	
	Resource efficiency	3	2	0	Prepare a compliant Resource Management Plan covering non-hazardous waste materials including demolition and excavation waste and accurate data records on waste arisings and waste management routes. <u>For 2 credits:</u> Meet the following benchmarks for non-haz construction waste : <4.5 m³ (actual, not bulk volume) per 100m² (GIFA) or <1.2 tonnes per 100m² (GIFA). For extra 1 credit: Meet the following benchmarks for non-haz construction waste : <2.1 m³ (actual, not bulk volume) per 100m² (GIFA) or <0.4 tonnes per 100m² (GIFA). <u>(Minimum requirement for BREEAM Outstanding: 1 credit)</u>	Resource Management Plan. Calculations, waste records, chain of custody showing non-haz construction waste targets are met.	Contractor item	Client and PM + Contractor	
	Diversion of resources from landfill	1	1	-	Meet the following diversion from landfill benchmarks for non-hazardous construction waste and demolition and excavation generated: - By vol.: non-demolition 85%, demolition 90% - By weight: non-demolition 90%, demolition 95%	Calculations, waste records, chain of custody showing diversion targets are met.	Contractor item	Contractor	
	Resource efficiency and Diversion of resources from landfill (exemplary)	2E	0	-	Meet the following benchmarks for non-hazardous construction waste (excluding demolition and excavation waste): <1.4 m³ (actual, not bulk volume) per 100m² (GIFA) or <0.4 tonnes per 100m² (GIFA). Meet the following diversion from landfill benchmarks for non-hazardous construction waste and demolition and excavation	As above. Waste data to be reliable and verifiable in line with BREEAM requirements.	-	Contractor	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					generated: By vol.: non-demolition 95%, demolition 95%; by weight: non-demolition 97%, demolition 97%. (not currently targeted).				
WST02 Recycled aggregates	Recycled aggregates	0	0	-	Use of high-grade aggregate not assumed to be required for project. The percentage of high grade aggregate that is recycled or secondary aggregate, specified in each application (present) must meet the following minimum % levels (by weight or volume) to contribute to the total amount of recycled or secondary aggregate, as specified in Table 68 . The total amount of recycled or secondary aggregate specified, and meeting the above, is greater than 25% (by weight or volume) of the total high grade aggregate specified for the project. The recycled or secondary aggregates are EITHER construction, demolition and excavation waste obtained on-site or off-site; OR secondary aggregates obtained from a non-construction post-consumer industrial by product source. Use of	Calculations, report, datasheets, transport type on aggregates required and used on site.	-	Demolition consultant/contractor	Will resurface but no new base.
WST03 Operational waste	Operational waste	1	1	-	Provide a dedicated space for the segregation and storage of operational recyclable waste generated, in addition to general waste. The space should be clearly labelled, accessible to building occupants or facilities operators, or a capacity appropriate to building type. <u>Total space dedicated for recyclable waste storage to be >2m² based on GIA of <1,000 m². This should be in addition to general waste storage.</u> <u>Vessel(s) for composting suitable organic waste resulting from the building's daily operation and use; OR adequate space(s) for storing segregated food waste and compostable organic material prior to collection and delivery to an alternative composting facility.</u> <u>Each studio/bedroom has a provision of three internal storage containers, as follows:</u> - <u>A minimum total capacity of 30 litres</u> - <u>No individual container smaller than 7 litres</u> - <u>All containers in a dedicated non-obstructive position</u> - <u>The storage containers for recycling are provided in addition to non-recyclable waste storage.</u> (Minimum requirement for BREEAM Excellent and above: 1 credit)	Drawings, calculations and specifications showing operational waste storage strategy and associated signage.	Space for recyclable waste and compostable waste storage. Composting vessel if suitable.	Architect + Contractor	27/1/2026 - MP to check operational waste strategy.
WST05 Adaptation to climate change	Resilience of structure, fabric, building services and renewables installation	1	0	-	Conduct a climate change adaptation strategy appraisal at Stage 2 to identify the impact of expected extreme weather conditions arising from climate change on the building over its projected life cycle. Develop recommendations or solutions based on the climate change adaptation strategy appraisal that aim to mitigate the identified impact. Provide an update during Stage 4 demonstrating how the recommendations or solutions proposed at Stage 2 have been implemented where practical and cost effective. (not currently targeted).	Climate change adaptation strategy reports at Stage 2 and 4.	Climate change adaptation strategy report.	Architect	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
WST06 Functional adaptability	Functional adaptability	1	0	1	Conduct a study to explore the ease of disassembly and the functional adaptation potential of different design scenarios at Stage 2. Develop recommendations or solutions that aim to enable and facilitate disassembly and functional adaptation. Confirmation that the functional adaptability measures have been adopted at Stage 4. (not currently targeted).	Functional adaptation strategy study report.	Functional adaptation strategy study report.	Architect	
Land use and ecology									
LE02 Protection of ecological features	Protection of ecological features	1	1	-	All existing features of ecological value within and surrounding the refurbishment or fit-out zone and site boundary area are adequately protected from damage during clearance, site preparation and refurbishment or fit-out activities in line with BS42020: 2013. The principal contractor is required to construct ecological protection recommended by the Suitably Qualified Ecologist (SQE), prior to any preliminary site refurbishment or fit-out or preparation works.	Site plans and drawings showing ecological protection. Input from Suitably Qualified Ecologist.	Report, see Table 2	Contractor + Ecologist	
LE04 Enhancing site ecology	Ecologist's report and recommendations	1	1 – can be considered	-	A Suitably Qualified Ecologist (SQE) carries out a survey and evaluation for the site early enough to influence site preparation works, layout and, where necessary, strategic planning decisions, typically at Stage 1 or Stage 2. Recommendations and data collected from the survey and evaluation are shared with project team to influence decisions made for during site preparation, design and refurbishment works.	A copy of the Ecological Survey and Evaluation document. Landscape drawings and architectural drawings showing ecological enhancement measures have been incorporated into design.	Ecologist survey and report in line with BREEAM. Any ecological enhancements recommended by Ecologist.	Ecologist + Architect + Landscape architect + Contractor	27/1/2026 - Ecologist has been appointed, bat survey carried out. Desktop review. Client to consider appointing ecologist for Le04 and Le05 credits.
LE05 Long term impact on biodiversity	Long term impact on biodiversity	2	2 - can be considered	-	Where a Suitably Qualified Ecologist (SQE) is appointed prior to commencement of activities on-site and they confirm that all relevant UK and EU legislation relating to the protection and enhancement of ecology has been complied with during the refurbishment or fit-out process. Where a landscape and habitat management plan, appropriate to the site, is produced covering at least the first five years after project completion in accordance with BS 42020:2013 Section 11.1. Where 4 no. additional measures to improve the assessed site's long term biodiversity are adopted by the contractor, according to Table 70 . Recommended measures: - The principal 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. - The principal contractor trains the site workforce on how to protect site ecology during the project. Specific training must be carried out for the entire site workforce to ensure they are aware of how to avoid damaging site ecology during operations on-site. Training should be based on the findings and recommendations for protection of ecological features highlighted within a report prepared by a Suitably Qualified Ecologist.	Meeting minutes, email correspondences, record of phone calls. Consultation reports. SQE confirmation that the proposed measures are sufficient for meeting the optimal ecological outcomes agreed with the team. Habitat and landscape management plan. Contractor evidence on additional measures.	Ecologist survey and report in line with BREEAM requirements. Habitat and landscape management plan. Contractor cost item.	Ecologist + Contractor + Landscape architect	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					- The principal contractor records actions taken to protect biodiversity and monitor their effectiveness throughout key stages of the refurbishment or fit-out process. The requirement commits the principal contractor to make such records available where publicly requested.				
Pollution									
POL01 Impact of refrigerants	No refrigerant use	3	3 – no cooling	-	No refrigerant use within the installed plant or systems. Assumed refrigerants in cooling system. Credits not achievable.	Drawings and specifications of the plant and systems proposed.	-	M&E consultant	27/1/2026 – no cooling currently proposed.
	Compliance with BS EN 378:2016	P	P	-	All systems with electric compressors comply with the requirements of BS EN 378:2016 (parts 2 and 3). Refrigeration systems containing ammonia comply with the Institute of Refrigeration Ammonia Refrigeration Systems code of practice.	Drawings, specification, and datasheets for the refrigerant systems.	No significant items	M&E consultant	
	Impact of refrigerant	2	0	-	<u>1 credit:</u> Systems using refrigerants have a DELC of ≤1000kgCO ₂ -eq/kW cooling and heating capacity. <u>2 credits:</u> All refrigerants used have a GWP ≤10. OR The direct effect life cycle CO ₂ equivalent emissions (DELC) of ≤100 CO ₂ -eq/kW. For systems which provide cooling and heating, the worst performing output based on the lower of kW cooling output and kW heating output is used to complete the calculation.	Pol01 calculation and document supporting the data used for the calculation.	No significant items beyond suitable heat pump system with refrigerant of relatively low GWP.	M&E consultant	
	Leak detection	1	0	-	All systems are hermetically sealed or only use environmentally benign refrigerants OR Where the systems are not hermetically sealed, they have a permanent automated refrigerant leak detection system capable of continuously monitoring for leaks OR an inbuilt automated diagnostic procedure for detecting leakage is enabled. In the event of a leak, the system must be capable of automatically responding and managing the remaining refrigerant charge to limit loss of refrigerant. (not currently assumed)	Datasheet(s) of the refrigerant(s). Drawings, specification and datasheets for the leak detection system.	Refrigerant leak detection, pump down and containment system.	M&E consultant	
POL02 NOx Emissions	Local air quality	3	3	-	Where the plant installed to meet the building's delivered heating and hot water demand has, under normal operating conditions, a NOx emission level (measured on a dry basis at 0% excessO ₂) as follows: - 1 credit: <100 mg/kWh - 2 credits: <70 mg/kWh - 3 credits: <40 mg/kWh Assume existing gas boilers will be replaced with low NOx gas boilers meeting 3 credits.	Specification and datasheets of space heating and domestic hot water plant.	Low NOx boiler.	M&E consultant	
POL03 Flood risk management and reducing surface water runoff	Flood risk management	2	2	-	2 credits: Where flood maps from the appropriate statutory body confirm the scheme is situated in a flood zone that is defined as having a low annual probability of flooding. Flood map for planning shows site to be in area of low flood risk.	Site specific FRA and any associated flood levels and floor level drawings.	No significant items	BREEAM Assessor	
	Surface water runoff	2	1	TBC – None if no drainage consultant appointed	<u>1 credit:</u> There is no increase in the impermeable surfaces as a result of the refurbishment works. OR	Site plan prior to refurbishment and after refurbishment. Where relevant:	Additional surface water attenuation provision, and	Drainage consultant + Architect	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					If there is an increase in the impermeable surface as a result of the refurbishment works then the following to be met: - Hard standing areas - where there is an extension or increase in the hardstanding areas and hence an increase in the total impermeable area as a result of the refurbishment works, the hardstanding area must be permeable or be provided with on-site SuDS to allow full infiltration of the additional volume, to achieve the same end result. The permeable hardstanding must include all pavements and public rights of way, car parks, driveways and non-adoptable roads, but exclude footpaths that cross soft landscaped areas which will drain onto a naturally permeable surface. - Building extension - where there is an increase in building footprint, extending onto any previously permeable surfaces, the additional run-off caused by the area of the new extension must be managed on-site using an appropriate SuDS technique for rainfall depths up to 5mm. Assume no increase in impermeable surface as a result of refurbishment works. <u>2 Credits:</u> There is a decrease in the impermeable area by 50% or more, from the pre-existing impermeable hard surfaces; OR Where run-off as a result of the refurbishment is managed on-site using source control achieving the following requirements: - The peak rate of run-off as a result of the refurbishment for the 1 in 100 year event has been reduced by 50% from the existing site. - The total volume of run-off discharged into the watercourses and sewers as a result of the refurbishment, for a 1 in 100 year event of 6 hour duration has been reduced by 50%. An allowance for climate change must be included for all of the above calculations; this should be made in accordance with current best practice planning guidance.	SuDs Strategy report. Calculation results for the pre- and post-development peak rate and volume of run-off. Information showing the proposed drainage solution, system failure flood flow routes, potential flood ponding levels and ground floor levels. Calculation results for the limiting discharge where relevant. Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified SuDS.	report if 2nd credit targeted.		
	Minimising watercourse pollution	1	0	TBC – None if no drainage consultant appointed	No discharge from the developed site for rainfall up to 5mm. Pollution prevention measures are put in place (or already exist) for the different sources of pollution present on the assessed site. A comprehensive and up to date drainage plan of the site to be made available for the building or site occupiers. Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified SuDS to be in place. (not currently assumed)	Calculation of the 5mm rainfall event from the relevant areas. Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified SuDS.	Additional surface water pollution measures.	Drainage consultant	
POL04 Reduction of night time light pollution	External lighting	1	1	0	External lighting pollution has been eliminated through effective design that removes the need for external lighting. This should not adversely affect the safety and security of the site and its users. OR The external lighting strategy has been designed in compliance with Table 2 of ILP Guidance notes for the reduction of obtrusive light. All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00. If safety or security lighting is provided and will be used between 23:00 and 07:00, this part of the lighting system complies with the lower levels of lighting recommended during these hours in the ILP guidance. Illuminated advertisements are designed in	Drawings, specifications, datasheets on external lighting design and control strategy.	External lighting controls.	Architect + M&E consultant	

Assessment Issue	Credit	Credit(s) available	Credit(s) targeted	Potential optional credit(s)	Criteria	Actions/evidence required	Cost Item(s)	Responsibility	Team feedback
					compliance with ILP PLG05 The Brightness of Illuminated Advertisements.				
POL05 Reduction of noise pollution	Reduction of noise pollution	0 -NA if no external plant	1	0	Where there are noise-sensitive areas within the assessed building or noise-sensitive areas within 800 m radius of the assessed site, a noise impact assessment compliant with BS 4142:2014 by a suitably qualified acoustic consultant is commissioned. The noise level from the assessed building, as measured in the locality of the nearest or most exposed noise-sensitive development, must be at least 5dB lower than the background noise throughout the day and night. If noise levels are exceeded, measures are to be installed to attenuate the noise to enable compliance. No	Acoustic report at design stage. Measurements and testing report at post construction.	Acoustic report and onsite pre-completion testing.	Acoustic consultant	No external plant
Innovation	(none targeted)								