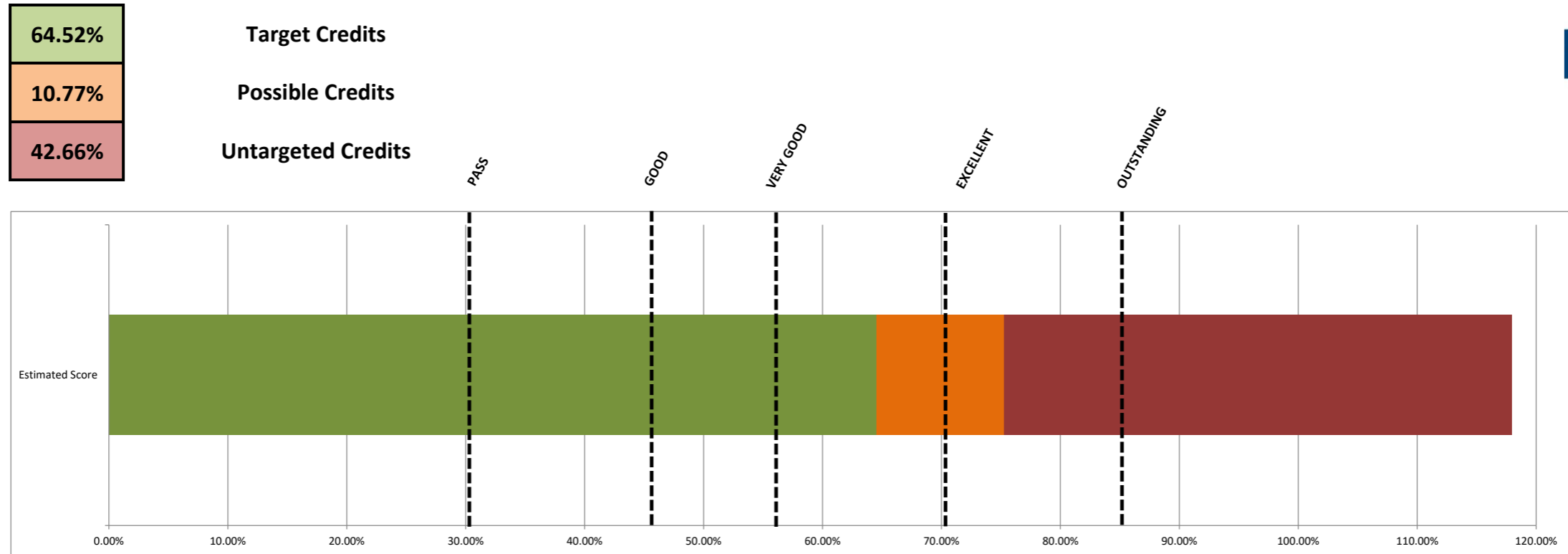


Shell & Core Industrial Units, Satellite Park, Wolverhampton - Industrial (Shell & Core) BREEAM 2018 Pre-assessment



Rev	Date	Notes
Rev 01	31/05/2022	Initial desktop pre-assessment to show route to Very Good. Target = 63.17%, Possibles = 8.84%.
Rev 02	13/06/2022	Updated pre-assessment following meeting 31/05/2022. Target = 64.62%, Possibles = 11.32%.
Rev 03	20/07/2022	Updated pre-assessment. Target = 64.62%, Possibles = 11.32%.
Rev 04	06/03/2024	Updated pre-assessment following meeting 04/03/2024. Target = 63.52%, Possibles = 11.77%.
Rev 05	20/03/2024	Updated pre-assessment. Target = 64.52%, Possibles = 10.77

BREEAM 2018 New Construction - Industrial (Shell & Core)									
Credit	Available Credits	Target Credits	Possible Credits	Untargeted Credits	Credit Information	Comments	Time Dependent	Responsibility	
Management									
Man 01	Project Brief and Design	1	1	0	0	Project Delivery Planning • 1 credit where by RIBA Stage 2 the design team have identified their roles and responsibilities through the construction process.	Requirements issued to Gavin Ritchie at Gent Visick 13/06/2022.	RIBA STAGE 2	PROJECT MANAGER
		1	0	0	1	Stakeholder Consultation (Interested Parties) • 1 credit where a plan is in place to consult and provide feedback on the design to the relevant stakeholders and bodies.		RIBA STAGE 2	-
		1	1	0	0	BREEAM AP (Concept Design) • 1 credit for appointment of BREEAM AP by RIBA Stage 1 to produce a BREEAM pre-assessment and help confirm the BREEAM target for the scheme.	Example letter issued to Gavin Ritchie at Gent Visick 13/06/2022. Confirmation letter received 15/03/2024, credit awarded.	RIBA STAGE 1	PROJECT MANAGER
		1	1	0	0	BREEAM AP (Developed Design) • 1 credit for appointment of a BREEAM AP to monitor and report progress against BREEAM targets by attending key Design Team meetings and producing a design stage report.	Example letter issued to Gavin Ritchie at Gent Visick 13/06/2022. Confirmation letter received 15/03/2024, credit awarded.		PROJECT MANAGER
Man 02	Life Cycle Cost & Service Life Planning	2	0	0	2	Elemental Life Cycle Cost (LCC) • 2 credits for undertaking a LCC analysis by RIBA Stage 2.		RIBA STAGE 2	SPECIALIST CONSULTANT
		1	0	0	1	Component Level LCC Plan • 1 credit where a component level LCC plan has been produced by the end of RIBA Stage 4.		RIBA STAGE 4	SPECIALIST CONSULTANT
		1	1	0	0	Capitol Cost Reporting • 1 credit where the capital cost of the building in £/m2 is reported via the BREEAM monitoring tool.	Example letter issued to Gavin Ritchie at Gent Visick 13/06/2022. Confirmation letter received 15/03/2024, credit awarded.		PROJECT MANAGER/ QS

Man 03	Responsible Construction Practices	-	-	-	-	Legally Harvested and Traded Timber • A mandatory pre-requisite for the all the timber and timber-based products used are legally harvested and traded timber.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
		1	1	0	0	Environmental Management • 1 credit for the main contractor operating a EMS (ISO14001) covering their main operations and follows best practice pollution guidelines.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
		1	1	0	0	BREEAM AP (Site) • The BREEAM AP is appointed to monitor and report ongoing compliance of the project against relevant sustainability performance criteria during the construction, handover and close out stages.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
		2	2	0	0	Responsible Construction Management • 1 credit for achieving the minimum responsible construction management items outlined in the BREEAM Manual. • 2 credits for achieving the minimum responsible construction management items along with six additional items outlined in the BREEAM Manual.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
		1	1	0	0	Utility Consumption • 1 credit for the monitoring, recording and reporting of on-site energy/carbon and water used during construction.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
		1	1	0	0	Transport of Construction Material • 1 credit for the monitoring, recording and reporting of transport carbon emissions for the materials and waste.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
Man 04	Commissioning and Handover	1	1	0	0	Commissioning - Testing Schedule and Responsibilities • 1 credit for undertaking monitoring, programming, pre-commissioning, commissioning and re-commissioning for non-complex building services, control systems and testing & inspecting of building fabric.	MANDATORY: (1 credit) for Very Good. Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
		1	1	0	0	Commissioning - Design and Preparation • 1 credit for undertaking monitoring, programming, pre-commissioning, commissioning and re-commissioning for building services and specialist systems.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
		1	0	0	1	Testing & Inspecting Building Fabric • 1 credit for air tightness testing and a thermographic study post-construction to confirm continuity of insulation, avoidance of excessive thermal bridging, air leakage paths and any remediation required.			MAIN CONTRACTOR
		1	1	0	0	Handover • 1 credit for the production of both a technical and non-technical building user guide. The guide covers all functions and uses of the building, ensuring building occupants can use the building effectively.	MANDATORY: (Criterion 11 only) Creation of a building user guide. To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
Man 05	Aftercare					Aftercare Support • 1 credit for Post Occupancy Evaluation of systems for 12 months from handover, including the collection of water and energy data and comparisons are made with what was expected. • A contract is in place to provide aftercare support to building users.	Not included in Shell & Core.		
						Commissioning - Implementation • 1 credit for undertaking post-completion seasonal commissioning of complex and simple systems for up to 12 months following completion.	Not included in Shell & Core.		
						Post Occupancy Evaluation • 1 credit where an independent 3rd party Post Occupancy Evaluation is undertaken 12 months after occupation. This includes a review of design & construction process, feedback from building users and sustainability performance is undertaken. The client will disseminate this information to share good practice and lessons learned.	Not included in Shell & Core.		
Category score		18	13	0	5				
Category Weighting		11.00%							
% Score		11.00%	7.94%	0.00%	3.06%				

Health & Wellbeing									
Hea 01	Visual Comfort					Glare Control • 1 credit where all relevant areas have the potential for disabling glare through building layout, building design, brise soleil or bioclimatic design.	Not included in Shell & Core.		
		1	0	0	1	Daylighting • 1 credit where 80% of the other occupied spaces have a daylight factor of at least 2%. In addition uniformity, view of sky and room depth criteria must be satisfied.			-

Hea 01	Visual Comfort	1	0	0	1	View Out • 1 credit where 95% of the relevant building areas are within 8m of a suitably sized window that provides an adequate view out.	Details included in Architect Requirements document issued to AEW 13/06/2022. Credit removed - cannot be achieved due to the internal office area.		-	
		1	1	0	0	External Lighting • 1 credit for specification of external lighting levels in line with CIBSE guidance and British Standards.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E	
Hea 02	Indoor Air Quality	-	-	-	-	Indoor Air Quality Plan • Mandatory pre-requisite site-specific indoor air quality plan is produced.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E	
		1	1	0	0	Ventilation • 1 credit where intakes and extracts are a sufficient distance apart and any area subject to unpredictable occupancy is linked to CO ₂ sensors.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E	
						Emissions From Construction Products • 1 credit for 3 out of the 5 product specifications of internal finishes have met the testing requirements and emission levels for Volatile Organic Compounds (VOCs). • 2 credits where all product specifications of internal finishes have met the testing requirements and emission levels for Volatile Organic Compounds (VOCs).	Not included in Shell & Core.			
						Post-Construction Indoor Air Quality Measurement • 1 credit where the formaldehyde concentration level and other airborne VOC concentration levels are measured post-construction and the levels meet the BREEAM standards.	Not included in Shell & Core.			
Hea 04	Thermal Comfort	1	1	0	0	Thermal Modelling • 1 credit where a dynamic thermal analysis has been undertaken to ensure CIBSE comfort levels are met and the building complies with the relevant 'Time out of Range' metric.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022. Hydrock have provided a fee to complete 06/03/2024.		M&E	
		1	1	0	0	Design For Future Thermal Comfort • 1 credit for providing evidence through the thermal modelling how passive design features of the building have been included and how these influence thermal comfort future levels.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022. Hydrock have provided a fee to complete 06/03/2024.		M&E	
						Thermal Zoning and Controls • 1 credit for appropriate zoning of heating controls in line with the thermal modelling analysis.	Not included in Shell & Core.			
Hea 05	Acoustic Performance	1	0	0	1	Internal Indoor Ambient Noise Level; - One credit: Indoor ambient noise levels comply with the design ranges in Section 7 of BS 8233:2017.	Credit requirements issued to Gavin Ritchie at Gent Visick 13/06/2022. Decision to be made as to whether to pass to Main Contractor, or appoint acoustician now. Credit removed - due to potentially onerous requirements.		-	
Hea 06	Safety & Security	1	1	0	0	Security of the Site and Building • 1 credit for consultation with a 'Suitably Qualified Security Consultant' at Stage 2 on the design, confirming compliance with 'Secured by Design' principles and incorporating any recommendations. A Security Based Needs assessment must be produced.	Credit requirements issued to AEW 13/06/2022. AEW to chase whether updated report is required due to changes to the design.	RIBA STAGE 2	ARCHITECT/ SECURITY CONSULTANT	
Hea 07	Safe & Healthy Surrounding	1	0	0	1	Safe Access • 1 credit where safe access requirements for pedestrians and cyclists have been incorporated into the external design.			-	
		1	0	0	1	Outside Space • 1 credit for an outside space providing building users with an external amenity area.			-	
Category score		10	5	0	5					
Category Weighting		8.00%								
% Score		8.00%	4.00%	0.00%	4.00%					

Energy									
Ene 01	Reduction of Energy Use & Carbon Emissions	9	2	1	6	Energy Performance • Up to 9 credits awarded based on the Part L analysis and the reduction in Energy Demand, Energy Consumption and Building Emission Rate.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022. Initial model by Hydrock to inform.		M&E
		4	4	0	0	Prediction of Operational Energy Consumption • Mandatory pre-requisite that the design team hold preliminary design workshop to discuss operational energy performance. • 4 credits where additional energy modelling during design and post-construction stages to generate predicted energy consumption under differing scenarios.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022. Hydrock have provided a fee to complete 06/03/2024.		M&E
Ene 02	Energy Monitoring	1	1	0	0	Sub-metering of End-Use Categories • 1 credit for energy metering of major energy consuming systems through accessible energy sub-meters with a pulsed output.	MANDATORY: (1 credit) for Very Good. Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E

		1	1	0	0	Sub-metering by Tenant/Building Function Areas • 1 credit for energy metering of tenant/building function areas.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
Ene 03	Energy Efficient External Lighting	1	1	0	0	External Lighting • 1 credit where the building is designed to operate without the need for external lighting or alternatively, where the building does have external lighting, the average initial luminous efficacy of the external lighting fittings is no less than 70 luminaire lumens per circuit Watt and all external fittings are appropriately controlled.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
Ene 04	Low Carbon Design	1	0	1	0	Passive Design Analysis • 1 credit where passive design solutions are incorporated by RIBA Stage 2 to reduce energy consumption of building services resulting in a >5% reduction in the total energy demand.		RIBA STAGE 2	M&E
		1	0	0	1	Free Cooling • 1 credit where a free cooling strategy has been incorporated into the building design, or the building does not require any form of cooling.			-
		1	0	1	0	Low Zero Carbon Feasibility Study • 1 credit for production of a compliant LZC feasibility study by an Energy specialist.		RIBA STAGE 2	M&E
Ene 06	Energy Efficient Transportation System					Transportation System Analysis • 1 credit where a transportation system analysis is carried out to determine and specify the optimum number, size and type of lifts that is most energy efficient.	Discussed at meeting 31/05/2022 and credits removed for the moment. Charlotte Fuller at AEW to confirm if lifts are to be installed.		LIFT MANUFACTURER
						Energy Efficient Features • 1 credit where the relevant energy-efficient features criteria are met.	Discussed at meeting 31/05/2022 and credits removed for the moment. Charlotte Fuller at AEW to confirm if lifts are to be installed.		LIFT MANUFACTURER
Ene 08	Energy Efficient Equipment					Energy Efficient Equipment • 2 credits where the majority of unregulated energy are specified in line with BREEAM standards.	Not included in Shell & Core.		
Category score		19	9	3	7				
Category Weighting		14.00%							
% Score		14.00%	6.63%	2.21%	5.16%				

Transport									
Tra 01	Transport Assessment & Travel Plan	2	2	0	0	Travel Plan • 1 credit where a travel plan based on a site and building specific transport assessment has been produced, which influences the development design.	Requirements issued to Jacky Thomas and Shazad Khan at AMA 13/06/2022. Confirmation email from Jacky Fitzpatrick 14/06/2022 confirms they'll incorporate within their documents.	RIBA STAGE 1	TRANSPORT CONSULTANT/ ARCHITECT
Tra 02	Sustainable Transport Measures	10	3	3	5	Transport Options Implementation • Mandatory pre-requisite to achieve the Tra 01 credits. • Up to 10 credits dependant upon the number of transport options implemented in line with the BREEAM requirements.	Discussed at meeting 31/05/2022, summary as below: Targeted credits: 4. EVCP: One Credit targeted. 5. Car Share: One Credit targeted. 7. Cycle Spaces: One Credit targeted, occupancy OFFPAT figures emailed to AEW 13/06/2022. Potential credits: 2. Public Transport: Query sent to AMA 13/06/2022. 8. Cyclist Facilities: One Credit potential. 9. Amenities: One Credit potential. Not achievable:6. Footpath/ Cycle path Improvement: Query sent to AMA 13/06/2022. Confirmed via email 14/06/2022 not achievable.		ARCHITECT/ DESIGN TEAM
Category score		12	5	3	5				
Category Weighting		11.50%							
% Score		11.50%	4.79%	2.88%	4.79%				

Water									
Wat 01	Water Consumption	5	2	1	2	Sanitary Fittings and Grey/Rainwater • 1 credit for reducing potable water consumption by 12.5% over standard. • 2 credits for reducing potable water consumption by 25% over standard. • 3 credits for reducing potable water consumption by 40% over standard. • 4 credits for reducing potable water consumption by 50% over standard. • 5 credits for reducing potable water consumption by 55% over standard.	MANDATORY: (1 credit) for Very Good. Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022. Details included in Architect Requirements document issued to AEW 13/06/2022.		ARCHITECT
Wat 02	Water Monitoring	1	1	0	0	Water Metering • 1 credit for installation of a main water meter and sub-meters in areas with over 10% of building water demand. All meters must have a pulsed output.	MANDATORY: (criterion 1 only) A water meter is specified on the mains water supply to each building. Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E

Wat 03	Water Leak Detection and Prevention	1	1	0	0	Leak Detection System • 1 credit for installation of a programmable water leak detection unit within the building and between the building and utilities water meter.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
		1	1	0	0	Flow Control Devices • 1 credit for installation of flow-control devices to each WC area/facility to ensure water is only supplied when needed and prevent minor leaks.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
Wat 04	Water Efficient Equipment	1	1	0	0	Unregulated Water • 1 credit where the unregulated water demands have been identified and reduced. This can be through either good practice design or specification to achieve a meaningful water demand reduction.	Details included in Architect Requirements document issued to AEW 13/06/2022.		CLIENT
Category score		9	6	1	2				
Category Weighting		7.00%							
% Score		7.00%	4.67%	0.78%	1.56%				

Materials									
Mat 01	Building Life Cycle Assessment	7	5	0	2	Building Life Cycle Assessment (LCA) • Up to 6 credits where an LCA on the superstructure is carried out at both Concept Design and Technical Design. • 1 credit where an LCA on the substructure and hard landscaping is carried out at Concept Design.	Credit requirements issued to AEW to provide a fee. Mat 01 results confirming 3 credits, plus 1 innovation for Core Building Services received 20/07/2022. The accompanying report also includes the 3rd party verification. Emailed to BRE 04/08/2022, may need to replace when scheme updated. Updated Mat 01 results confirming 3 credits, plus 1 innovation for Core Building Services received 04/03/2024. The accompanying report is missing 3rd party verification however.	RIBA STAGE 2 & RIBA STAGE 4	SPECIALIST CONSULTANT
Mat 02	Environmental Product Declarations	1	1	0	0	Specification of Products With a Recognised Environmental Product Declaration • Construction products with an EPD achieve a combined point score of at least 20 calculated in line with BREEAM requirements.	To be included in Main Contractor Clauses for inclusion in ERs. Proforma issued to AEW 13/06/2022.		MAIN CONTRACTOR
Mat 03	Responsible Sourcing	1	1	0	0	Enabling Sustainable Procurement • 1 credit for producing a documented sustainable procurement plan.	MANDATORY: (criterion 1 only) All timber and timber based products used on the project are 'Legally harvested and traded timber'. SPP requirements issued to Gavin Ritchie at Gent Visick 13/06/2022.	RIBA STAGE 2	CLIENT/ DESIGN TEAM/ MAIN CONTRACTOR
		3	2	0	1	Measuring Responsible Sourcing • Up to 3 credits for selection of materials whose manufacture and production processes have been certified through an EMS (Environmental Management System) process.	To be included in Main Contractor Clauses for inclusion in ERs. Proforma issued to AEW 13/06/2022.		MAIN CONTRACTOR
Mat 05	Designing for Durability and Resilience	1	1	0	0	Internal and External Protection Measures • 1 credit for specifying suitable protection measures to areas vulnerable to high pedestrian traffic, internal vehicular/trolley movement and external vehicle collision. Also building elements are designed to limit degradation due to environmental factors.	Details included in Architect Requirements document issued to AEW 13/06/2022.		ARCHITECT
Mat 06	Material Efficiency	1	0	0	1	Optimise Material Efficiency • 1 credit where opportunities have been identified, investigated and implemented to optimise the materials through procurement, construction, maintenance and end-of-life.		PREPARATION AND BRIEF	ARCHITECT
Category score		14	10	0	4				
Category Weighting		17.50%							
% Score		17.50%	12.50%	0.00%	5.00%				

Waste									
Wst 01	Construction Waste Management	1	1	0	0	Pre-Demolition Audit • 1 credit where a pre-demolition audit of any existing elements is carried out at concept design in line with BREEAM requirements.	To be included in Main Contractor Clauses for inclusion in ERs. Potentially separate Main Contractor, emailed credit requirements to Gavin Ritchie 06/03/2024.	RIBA STAGE 2	MAIN CONTRACTOR
		3	3	0	0	Construction Resource Efficiency • 1 credit for the reduction of non-hazardous waste to be $\leq 13.3m^3$ or ≤ 11.1 tonnes per $100m^2$ gross internal floor area. • 2 credits for the reduction of non-hazardous waste to be $\leq 7.5m^3$ or ≤ 6.5 tonnes per $100m^2$ gross internal floor area. • 3 credits for the reduction of non-hazardous waste to be $\leq 3.4m^3$ or ≤ 3.2 tonnes per $100m^2$ gross internal floor area.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR
		1	1	0	0	Diversion of Resources from Landfill • 1 credit where 70% (volume) or 80% (mass) of non-hazardous non-demolition construction waste & 80% (volume) or 90% (mass) of non-hazardous demolition waste are diverted from landfill.	To be included in Main Contractor Clauses for inclusion in ERs.		MAIN CONTRACTOR

Wst 02	Recycled & Sustainably Sourced Aggregates	1	0	0	1	Project Sustainable Aggregate Points • 1 credit where details of the appropriate aggregates identified are used to calculate project sustainable aggregate points between 3.5 - 6 in line with the BREEAM requirements.			MAIN CONTRACTOR	
Wst 03	Operational Waste	1	1	0	0	Recyclable Waste Storage/ Compactor/ Composting • 1 credit where adequate storage space is provided for the expected general and recyclable waste streams operated on-site.	Details included in Architect Requirements document issued to AEW 13/06/2022.		ARCHITECT	
Wst 05	Adaptation to Climate Change	1	1	0	0	Structural and Fabric Resilience • 1 credit where, by RIBA Stage 2, a climate change adaptation strategy appraisal for structural and fabric resilience	Details included in Architect Requirements document issued to AEW 13/06/2022.	RIBA STAGE 2	ARCHITECT/ STRUCTURAL	
Wst 06	Design for Disassembly & Adaptability	2	1	0	0	Design for Disassembly & Adaptability - Recommendations • 1 credit where a building specific functional adaptation strategy is undertaken by RIBA Stage 2 which includes recommendations to facilitate future adaptation.	Details included in Architect Requirements document issued to AEW 13/06/2022.	RIBA STAGE 2	ARCHITECT	
			0	1	0	Design for Disassembly & Adaptability - Implementation • 1 credit where updates during Technical Design on the recommendations provided have been implemented. A guide is produced outlining the functional adaptability and disassembly to future tenants.	Details included in Architect Requirements document issued to AEW 13/06/2022.	RIBA STAGE 4	ARCHITECT	
Category score		10	8	1	1					
Category Weighting		7.00%								
% Score		7.00%	5.60%	0.70%	0.70%					

Land Use & Ecology									
LE 01	Site Selection	1	1	0	0	Previously Occupied Land • 1 credit awarded where 75% of the developments footprint is on an area of previously developed land for industrial, commercial or domestic purposes in the last 50 years.	Details included in Architect Requirements document issued to AEW 13/06/2022.		-
		1	0	1	0	Contaminated Land • 1 credit where the site is deemed contaminated and appropriate remediation has been undertaken.	Report to be sent for Hydrock to review.		-
LE 02	Identifying & Understanding the Risks & Opportunities for the Project	1	1	0	0	Survey & Evaluation • 1 credit where an appropriate individual is appointed, survey and evaluation is carried out to determine the ecological baseline of the site, this data is shared with the project team to influence site preparation, design and construction.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.	RIBA STAGE 1/2	ECOLOGIST/ MAIN CONTRACTOR
		1	1	0	0	Determining Ecological Outcomes for the Site • 1 credit where representative stakeholders have been consulted to identify and consider the ecological outcome for the site which is then adopted.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.		ECOLOGIST/ MAIN CONTRACTOR
LE 03	Managing Negative Impacts on Ecology	-	-	-	-	Identification and Understanding the Risks & Opportunities for the Site • Mandatory pre-requisite LE 02 credit requirements achieved. • Mandatory pre-requisite that the client/contractor confirms compliance is monitored against all relevant UK/EU/International legislation regarding the ecology of the site.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.		ECOLOGIST/ MAIN CONTRACTOR
		1	1	0	0	Planning, Liaison, Implementation and Data • 1 credit where roles and responsibilities have been clearly identified at an early project stage to adopt the ecological outcome chosen for the site. Preparation of the site has been implemented early applying appropriate recommendations provided by the representative stakeholders.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.	RIBA STAGE 1/2	ECOLOGIST/ MAIN CONTRACTOR
		2	1	1	0	Managing Negative Impacts of the Project • Negative impacts from the site preparation and construction works have been managed in line with the BREEAM requirements. • 1 credit awarded where loss of ecological value has been limited. • 2 credits awarded where no overall loss of ecological value has occurred.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.		ECOLOGIST/ MAIN CONTRACTOR
LE 04	Change & Enhancement of Ecological Value	-	-	-	-	Identification and Understanding the Risks & Opportunities for the Site • Mandatory pre-requisite LE 03 credit requirements achieved. • Mandatory pre-requisite that the client/contractor confirms compliance is monitored against all relevant UK/EU/International legislation regarding the ecology of the site.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.		ECOLOGIST/ MAIN CONTRACTOR
		1	1	0	0	Liaison, Implementation and Data Collection • 1 credit where solutions and measures identified to enhance ecological value have been implemented both on site, and if applicable, within the zone of influence.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.	RIBA STAGE 1/2	ECOLOGIST/ MAIN CONTRACTOR
		3	1	1	1	Enhancement of Ecology • Up to 3 credits awarded based on a calculation of the change in ecological value occurring as a result of the project.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.		ECOLOGIST/ MAIN CONTRACTOR
LE 05	Long Term Ecology Management & Maintenance	-	-	-	-	Identification and Understanding the Risks & Opportunities for the Site • Mandatory pre-requisite LE 04 credit requirements achieved. • Mandatory pre-requisite that the client/contractor confirms compliance is monitored against all relevant UK/EU/International legislation regarding the ecology of the site.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.		ECOLOGIST/ MAIN CONTRACTOR
		1	1	0	0	Planning, Liaison, Date, Monitoring & Review Management & Maintenance • 1 credit where the project team liaise with representative stakeholders to develop solutions and measures to monitor, review and develop management and maintenance solutions for the ecology of the site.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.	RIBA STAGE 1/2	ECOLOGIST/ MAIN CONTRACTOR

		1	1	0	0	Landscape and Ecology Management Plan Development • 1 credit where a landscape and ecology management plan is developed in accordance with BS 42020:2013 and is in line with the relevant BREEAM requirements.	Ecology Requirements issued to Jennifer Britt at Delta Simons 13/06/2022. Site walkaround by the ecologist to be undertaken to check if changes/updates to the report is required.		ECOLOGIST/ MAIN CONTRACTOR
Category score		13	9	3	1				
Category Weighting		15.00%							
% Score		15.00%	10.38%	3.46%	1.15%				

Pollution									
Pol 01	Refrigerants	2	1	0	1	Refrigerants • 3 credits where no refrigerants are to be used. OR if refrigerants are to be used: • 2 credits where the direct effect life cycle CO ₂ emissions are <100kgCO ₂ /kW OR all refrigerants used have a Global Warming Potential ≤ 10. • 1 credits where the direct effect life cycle CO ₂ emissions are <1000kgCO ₂ /kW.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
		1	0	0	1	Leak Detection • 1 credit where compliant refrigerant detection and pump-down system is installed.			-
Pol 02	Local Air Quality	2	2	0	0	Local Air Quality • 2 credits where all heating and hot water is supplied by non-combustible systems, e.g. electric. OR • Up to 2 credits where the NOx emissions for the applicable appliance do not exceed the levels within the BREEAM requirements.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022. Confirmation the building is to be all electric therefore credits awarded by default.		M&E
Pol 03	Flood & Surface Water Management	2	2	0	0	Flood Risk • 2 credits for location of site within a low risk flood zone. • 1 credit for location of site within a medium/high risk flood zone with appropriate flood remediation measures.	Requirements issued to Gavin Ritchie at Gent Visick 13/06/2022 to pass to civils consultant.		CIVILS
		1	1	0	0	Surface Water Run-off Rate • 1 credit where the peak rate of surface water run-off is no greater for the developed than pre-developed site and it includes an allowance for climate change.	Requirements issued to Gavin Ritchie at Gent Visick 13/06/2022 to pass to civils consultant.		CIVILS
		1	0	1	0	Surface Water Run-off Volume, Attenuation and Limiting Discharge • 1 credit where flooding will not occur in the event of a local drainage system failure, and the post-development run-off volume is no greater than for the existing site.	Requirements issued to Gavin Ritchie at Gent Visick 13/06/2022 to pass to civils consultant.		CIVILS
		1	0	0	1	Minimising Watercourse Pollution • 1 credit where suitable watercourse pollution measures (SUDS or oil separators) are specified in line with Pollution Prevention Guidance 3 and the SUDS manual. In addition there is no discharge from site for rainfall up to 5mm.	Requirements issued to Gavin Ritchie at Gent Visick 13/06/2022 to pass to civils consultant.		-
Pol 04	Reduction of Night-Time Light Pollution	1	1	0	0	Light Pollution • 1 credit for the design of the external lighting strategy to reduce light pollution from the development. All external lighting is to be able to be switched off between 2300-0700 hours.	Requirements to be included in M&E Specification. Details included in M&E Requirements document issued to Hydrock 13/06/2022.		M&E
Pol 05	Reduction of Noise Pollution	1	1	0	0	External Noise Attenuation • 1 credit for appointing a 'Suitably Qualified Acoustician' to complete an external noise analysis to ensure building services plant will not disturb local noise-sensitive developments.	Credit requirements issued to Gavin Ritchie at Gent Visick 13/06/2022. Decision to be made as to whether to pass to Main Contractor, or appoint acoustician now. Development is located within 800m of residential buildings therefore criteria needs to be discussed.		ACOUSTICIAN
Category score		12	8	1	3				
Category Weighting		9.00%							
% Score		9.00%	6.00%	0.75%	2.25%				

Innovation									
Man 03	Responsible Construction Practices	1	0	0	1	Responsible Construction Management • 1 credit for achieving all the responsible construction management items outlined in the BREEAM Manual.			MAIN CONTRACTOR
Hea 01	Visual Comfort	1	0	0	1	Daylighting • 1 credit where 80% of occupied spaces have a daylight factor of 3%+.			-
		-	-	-	-	Internal & External Lighting • Lighting in each zone can be manually dimmed by occupants down to 20% of the maximum light output.			-
Hea 02	Indoor Air Quality	-	-	-	-	Emissions From Construction Products • 1 credit for 3 out of the 5 product specifications of internal finishes have met the exemplary testing requirements and emission levels for Volatile Organic Compounds (VOCs).			-

Hea 06	Security	1	0	0	1	Risk Based Security Rating • A compliant risk based security rating scheme has been used and the performance has been confirmed by independent assessment and verification.			-
Ene 01	Reduction of Energy Use & Carbon Emissions	5	0	0	3	Zero Carbon to Carbon Negative • 3 credits where the building is carbon negative. • Up to 2 credits possible where a building achieves zero net CO ₂ emissions.			-
			0	0	2	Post Occupancy • Pre-requisite of achieving all available credits in Ene 02. • 2 credits where the client/building occupier commits funds to pay for post occupancy energy modelling based on the actual energy consumption compared with the targets set in the credit criteria.			-
Wat 01	Water Consumption	1	0	0	1	Potable Water Reduction • 1 credit for reducing potable water consumption by 65% over standard.			-
Mat 01	Building Life Cycle	3	1	0	0	Core Building Services • 1 credit where an LCA is carried out for core building services design options.	Updated Mat 01 results confirming 3 credits, plus 1 innovation for Core Building Services received 04/03/2024. The accompanying report is missing 3rd party verification however.	RIBA STAGE 2	SPECIALIST CONSULTANT
			0	0	1	LCA and LCC • Pre-requisite of achieving Elemental LCC plan and Component Level LCC credits of Man 02. • 1 credit where the LCA and LCC are aligned and incorporated within the design decision-making process.		RIBA STAGE 2	-
			1	0	0	Third Party Verification • 1 credit where a suitably qualified third party either carries out the LCAs or produces a report verifying the LCAs produced accurately represent the designs under consideration during Concept Design and Technical Design.	Updated Mat 01 results confirming 3 credits, plus 1 innovation for Core Building Services received 04/03/2024. The accompanying report is missing 3rd party verification however. Confirmation statement of Competent/3rd party verification received 08/03/2024.	RIBA STAGE 2	SPECIALIST CONSULTANT
Mat 03	Responsible Sourcing of Materials	1	0	0	1	Responsibly Sourced Materials • 1 credit based on the EMS certification of materials for their manufacture and supply chain processes such as production and abstraction, including building services.			-
Wst 01	Construction Waste Management	1	0	0	1	Site Waste Management Plan • 1 credit for the reduction of non-hazardous waste to be <1.6m ³ or 1.9 tonnes per 100m ² gross internal floor area. OR • 1 credit for 85% (volume) or 90% (mass) of non-hazardous construction waste is diverted from landfill.			-
Wst 02	Recycled Aggregates	1	0	0	1	Project Sustainable Aggregate Points • 1 credit where details of the appropriate aggregates identified are used to calculate project sustainable aggregate points greater than 6 in line with the BREEAM requirements.			-
Wst 05	Adaptation to Climate Change	1	0	0	1	Responding to Adaptation to Climate Change • 1 credit for achieving the following criteria points in addition to the standard Wst 05 requirements: - Criterion 6 of Hea 04 has been achieved, - At least 6 credits have been achieved under Ene 01, - The 'Passive Design Analysis' credit of Ene 04 has been achieved, - At least 3 credits have been achieved under Wat 01, - Criterion 2-4 of Mat 05 has been achieved, - At least 1 and 2 credits have been achieved under the 'Flood Risk' and 'Surface Water Run-off' requirements of Pol 03 respectively.			-
LE 02	Identifying & Understanding the Risks & Opportunities for the Project	1	0	0	1	Determine the Ecological Outcomes for the Site • 1 credit where the wider site sustainability-related activities are considered along with the potential for ecosystem service related benefits, in addition to; - The 2 credits of Hea 07 has been achieved, - Criteria 5-23 of Pol 03 has been achieved, - The 1 credit of Pol 05 has been achieved.			-
Category score		17	2	0	15				
Category Weighting		10.00%							
% Score		10.00%	2.00%	0.00%	15.00%				