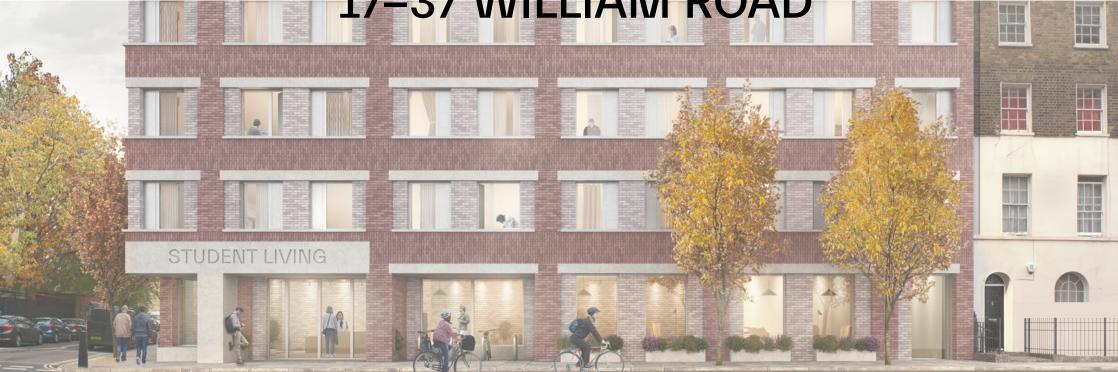
BREEAM Pre-Assessment

November 2020 Vitec Consult



17–37 WILLIAM ROAD





17 – 37 William Road – Student Accommodation

BREEAM Assessment Credit Tracker

Design Stage

05 Nov 2020

Introduction

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

Project Name	17-37 William Road
Version	BREEAM 2018 UK Non-Dom NC
Assessment stage	Design Stage
Lead Consultant	Wendy Lake
Targeted Score	76.47 %
Target Rating	Excellent (70%)
Current Score	14.76 %
Current Rating	Unclassified
Downloaded By	Wendy Lake
Download Date	05/11/20
Download Time	15:31:52 (GMT)

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

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

Minimum Standards

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

Issue	Awarded	Maximum Rating	Met
Man 03 - Responsible construction practices	0	Very Good	×
Man 04 - Commissioning and handover	0	Good	×
Man 04 - Commissioning and handover	0	Good	×
Man 05 - Aftercare	0	Very Good	×
Ene 01 - Reduction of energy use and carbon emissions	4	Excellent	>
Ene 02 - Energy monitoring	0	Good	×
Wat 01 - Water consumption	0	Pass	×
Wat 02 - Water monitoring	0	Pass	×
Mat 03 - Responsible sourcing of construction products	0	Unclassified	×
Wst 01 - Construction waste management	0	Excellent	>
Wst 03 - Operational waste	0	Very Good	×

If the required minimum standards are not met, then the target rating will not be achieved regardless of overall score.

Credit Progress Log

Managemen							
Man 01 - Pro	ject brief and design	1		1	1	1	
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Project delivery planning	1	0	1	0	RAME	
Credit 2	Stakeholder consultation (interested parties)	1	0	1	0	RAME	
Credit 3	BREEAM AP (concept design)	1	0	1	0	RAME	
Credit 4	BREEAM AP (developed design)	1	0	1	0	BREEAM AP RAME	
Man 02 - Life	e cycle cost and service planning					1	1
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Elemental LCC	2	0	2	0	Quantity Surveyor	
Credit 2	Component level LCC options appraisal	1	0	1	0	Quantity Surveyor	
Credit 3	Capital cost reporting	1	1	1	0	Quantity Surveyor	2020-09-22 Capital Cost GIFA Student Accommodation confirmed as £2,124.00/m2 - ref (4)
Man 03 - Res	sponsible construction practices					·	
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req 1	Prerequisite - Legally harvested and traded timber		×	~	×	RAME	
Credit 1	Environmental management	1	0	1	0	RAME	
Credit 2	BREEAM AP (site)	1	0	1	0	RAME	
Credit 3	Responsible construction management	2	0	2	0	RAME	
Credit 4	Monitoring of construction site impacts	2	0	2	0	RAME	
Credit e1	Responsible construction management	1	0	0	0		2020-08-03 Rev 0: Will the exemplary score for Considerate Construction be targeted (Value 1.00%)?

	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite (Very Good to Outstanding)		×	~	×	RAME	
Credit 1	Commissioning - testing schedule and responsibilities	1	0	1	0	RAME	
Credit 2	Commissioning - design and preparation	1	0	1	0	RAME	
Credit 3	Testing and inspecting building fabric	1	0	0	0		2020-08-03 Rev 0: The credit requires thermographic survey AND air tightness testing?
Credit 4	Handover	1	0	1	0	RAME	
Man 05 - Afte	ercare	- 4		1			1
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Aftercare support	1	0	1	0	RAME	2020-08-03 Aftercare Support: meeting with the building occupier/ management team - re: building user guide, key information, walk about of the building. First month of occupation: weekly attendance on site to support occupier. Plus at least 12 months of support via helpline, nominated individual or other appropriate system.
Credit 2	Commissioning - implementation	1	0	1	0	Services Engineer RAME	2020-08-03 Commissioning: Minimum of 12 months after occupation. Appointed specialist commissioning manager for complex systems, includes identifying changes made by the occupier, seasonal testing, monthly monitoring of sub-meters, identifying areas requiring improvement, re-commissioning
Credit 3	Post occupancy evaluation (POE)	1	0	1	0	Client RAME	2020-088-03 Requires Client to commit funds to pay for the POE in advance.
		21	1	20	0	Standard Managem	ent Credit Total
		1	0	0	0	Exemplary Manage	ment Credit Total
		11.44	0.52	10.40	0	% Management Tot	al (Standard + Exemplary)
Health & Wel	lbeing						
Hea 01 - Visu	ial comfort						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Control of glare from sunlight	1	0	1	0	Architect	

Credit 2	Daylighting (building type dependent)	2	0	0	0		2020-08-03 Daylighting not achievable due to some 'relevant areas' being internal.
Credit 3	View out	1	0	0	0		2020-08-03 View out not achievable due to some 'relevant areas' being internal.
Credit 4	Internal and external lighting levels, zoning, and control	1	0	1	0	Architect Vitec	
Credit e1	Daylighting (building type dependent)	1	0	0	0		
Credit e2	Internal and external lighting levels, zoning, and control	1	0	1	0	Vitec	
Hea 02 - Indo	oor air quality						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite - Indoor air quality (IAQ) plan		×	~	×	Architect Vitec	Requires the preparation of an Internal Air Quality Plan.
Credit 1	Ventilation	1	0	1	0	Vitec	2020-08-03: Rev 0: Ventilation: Provide fresh air, pathways are designed to minimise the ingress and build-up of air pollutants, HVAC incorporates suitable filters to minimise external air pollution (SUP2), areas subject to large and unpredictable or variable occupancy patterns have CO2 or air quality sensors. Mechanical systems provide demand- controlled ventilation
Credit 2	Emissions from building products	2	0	1	0	Architect	2020-08-03 Low/ Zero VOC: All products meet the emission requirement requirements for 2 credits (1 credit = 3 of 5 product types).
Credit 3	Post-construction indoor air quality measurement	1	0	1	0	RAME	2020-08-03 Post Construction Air Measurement - Credit could be targeted?
Credit e1	Minimising sources of air pollution - Emissions from building products	1	0	0	0		2020-08-03 Exemplary Indoor Air Quality: Might be achieved through careful specification.
Hea 04 - The	rmal comfort			1			1
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Thermal modelling	1	0	1	0	Vitec	
Credit 2	Design for future thermal comfort	1	0	1	0	Vitec	

Credit 3	Thermal zoning and controls	1	0	1	0	Vitec		
Hea 05 - Aco	ustic performance							
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Acoustic performance	4	0	4	0	Acoustician	 2020-08-03 Rev 0: Note: Currently confirmed as 'Criteria performance requirements', however if 'bespoke' requirements' are applicable this can be changed? Sound insulation: between rooms and other occupied areas complies with Section 7 of BS8233:2014 (or best practice) Indoor ambient noise levels: comply with Section 7 of BS8233:2014. Room acoustics: Sound absorption and reverberation times comply with Section 7 of BS 8233:2014. 1st credit for sound insulation requires airborne at least 3dB higher and impact at least 3dB lower. 2nd credit for sound insulation requires airborne at least 5dB higher and impact at least 5dB lower. 	
Hea 06 - Sec	-	A	Accessed	Tanatad	Detential	Deeneneikiikiee	- Ocumenta	
-	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Security of site and building	1	0	1	0	Architect Security Consultant		
Credit e1	Security of site and building	1	0	0	0			
Hea 07 - Safe	e and healthy surroundings							
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Safe access	1	0	1	0		2020-08-03 Rev 0: Will there be any outside areas?	
Credit 2	Outside space	1	0	1	0			
		19	0	15	0	Standard Health &	Wellbeing Credit Total	
		4	0	1	0	Exemplary Health & Wellbeing Credit Total		
		16.79	0	11.68	0	% Health & Wellbei	ing Total (Standard + Exemplary)	
Energy			·	·	·	·		
Ene 01 - Red	uction of energy use and carbon emis	sions						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Energy performance	9	4	4	0	Vitec	2020-08-03 Rev 0: Energy performance: Up to 9 credits - 4 credits =	

							min requirement for Excellent rating.
							2020-09-22 4 credits awarded
Credit 2	Prediction of operational energy consumption	4	0	0	0		2020-08-03 Four credits: prediction of operational energy consumption: requires energy design workshop, completion of risk assessment highlighting significant design, technical and process risks, and additional energy modelling (maybe 7-9 additional models)
Credit e1	Beyond zero net regulated carbon	3	0	0	0		
Credit e2	Post-occupancy stage - Exemplary level criteria	2	0	0	0		
Ene 02 - Ene	ergy monitoring					·	
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Sub-metering of end use categories	1	0	1	0	Vitec	2020-08-03 Energy sub-meters for at least 90% of estimated annual energy consumption of each fuel. Areas greater than 1,000m2 by end-use category must have energy monitoring management systems (BEMS), Building users must be able to identify the end use.
Ene 03 - Ext	ernal Lighting						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	External lighting	1	0	1	0	Vitec	2020-08-03 Rev 0: Average luminous efficacy not less than 70 luminaire lumens per circuit Watt Automatic control to prevent operation during daylight hours Presence detection in areas of intermittent pedestrian traffic.
Ene 04 - Lov	v carbon design				<u>.</u>		
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Passive design	2	0	1	0	Vitec	 2020-08-03 Rev 0: Passive design analysis identifies opportunities for passive design measures which will be implemented to reduce total heating, cooling, mechanical vent, lighting loads and energy consumption. Quantify the reduced energy demand and CO2 emissions resulting from the measures. Free cooling: include a free cooling analysis within the passive design analysis and implement.

study by the end of stage 2, implement, and quantify the reduction on regulated CO2.	Credit 2 Low and z	ero carbon technologies	1	0	1	0	Vitec	2020-08-03 Rev 0: LZCT: An energy specialist conducts a feasibility study by the end of stage 2, implement, and quantify the reduction on regulated CO2.
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	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Energy consumption	1	0	1	0	Architect Vitec	2020-08-03 Rev 0: Undertake a lift traffic analysis to determine optimum number and size of lifts, calculate consumption for either at least two options for each type (Hydraulic, traction or machine room less OR at least two options considering different system arrangements and control strategies. Consider use of regenerative drives. Specify lowest energy consumption.	
Credit 2	Energy efficient features	1	0	1	0	Architect Vitec	2020-08-03 Rev 0: Specify standby condition for off-peak loads, lighting (lift car and displays) average luminous efficacy of >70 lm/(circuit)W, use driver controller of variable speed, variable voltage and variable frequency (VVVF) and specify regenerative drive where their use demonstrates an energy saving.	
Ene 08 - Ene	ergy efficient equipment							
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Energy efficient equipment	2	0	2	0	Client Architect RAME		
	-	22	4	12	0	Standard Energy C	redit Total	
		5	0	0	0	Exemplary Energy Credit Total		
		19.44	2.88	8.64	0	% Energy Total (St	andard + Exemplary)	
Transport			•	1				
Tra 01 - Trar	nsport assessment and travel plan							
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Travel plan	2	2	2	0	Transport Consultant	2020-08-03 Rev 0: Has a specific travel assessment been undertake yet? A travel plan will be required? Credit is required to be awarded, to enable any credits under Tra02 to be awarded.	

Tra 02 - Susta	ainable transport measures						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments

Credit Pre- req	Pre-requisite		~	~	×	BREEAM AP	2020-09-29 Transport assessment/ statement and Travel Plan required to confirm prerequisite.
Credit 1	Transport options implementation	10	10	10	0	BREEAM AP	 2020-08-03 Option 1: existing AI for public transport services - 1 point Option 2: demonstrate increase of AI through negotiation etc 0 points Option 3: provide a public transport information system - Live feed system which could also include sign-posting to public, cycling and walking infrastructure or local amenities 0 point Option 4: provide electric charging points - 0 points Option 5: set up car sharing group - 0 points Option 6: consultation with LA and implement improvement to local cycling/ walking facilities 0 points Option 7: install compliant cycle storage - 1 point Option 8: provide at least two cyclists' facilities (showers, changing facilities, lockers, drying space) - 1 point Option 10: provide 1 new amenity - 2 points (gym) Option 11: n/a - 0 points o/a = 6 points = 10 credits (but requires existing AI to be calculated) AI equal to or greater than 40 (metropolitan centre locations)
		12	12	12	0	Standard Transpor	t Credit Total
		0	0	0	0	Exemplary Transpo	ort Credit Total
		9.96	9.96	9.96	0	% Transport Total (Standard + Exemplary)	
Water							
Wat 01 - Wate	er consumption						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Water consumption	5	0	2	0	Architect	2020-08-03 Rev 0: Requires confirmation/ review of sanitary specification. Additional credits maybe available.
-							
Credit e1	Water consumption	1	0	0	0		

	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite (Good to Outstanding)		×	<	×	Vitec	
Credit 1	Water monitoring	1	0	1	0	Vitec	2020-08-03 Rev 0: Pulsed water meter to mains supply, easily accessible pulsed sub-meters or monitoring equipment connected to BMS
Wat 03 - Wat	er leak detection				•		
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Leak detection system	1	0	1	0	Vitec	2020-08-03 Rev 0: Leak detection system: major water leak - inside building and outside of building to utilities meter. Must be permanent automated system that alerts occupants or inbuilt automated diagnostic procedure.
Credit 2	Flow control devices	1	0	1	0	Vitec	2020-08-03 Rev 0: Flow control devices are only required to WC's within 'public areas'.
		8	0	5	0	Standard Water Cre	edit Total
		1	0	0	0	Exemplary Water C	redit Total
		7.83	0	4.35	0	% Water Total (Star	ndard + Exemplary)
Materials							
Mat 01 - Env	ironmental impacts from construction produ	cts - Building	life cycle ass	essment (LC	A)		
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Superstructure	6	0	3	0	Architect LCA Assessor	2020-08-03 Requires a full building materials Life cycle Assessment for more than 1 credit.
Credit 2	Substructure and hard landscaping options appraisal during Concept Design (all building types)	1	0	0	0		
Credit e1	Core building services options appraisal during Concept Design (all building types)	1	0	0	0		
Credit e2	LCA and LCC alignment (all building types)	1	0	0	0		
Credit e3	Third party verification (all building types) - Exemplary level criteria	1	0	0	0		
Mat 02 - Mat	02 Environmental impacts from construction	n products - E	invironmental	Product Dec	larations (EF	PD)	
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Specification of products with a recognised environmental product declaration (EPD)	1	0	1	0	Architect BREEAM AP	2020-08-03 Specify construction products with Environmental

							Product Declarations to achieve a point score of a least 20.
Mat 03 - Res	ponsible sourcing of construction products			•			
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite		×	~	×	Architect BREEAM AP	
Credit 1	Credit 1 Enabling sustainable procurement		0	1	0	Architect BREEAM AP	2020-08-03 Rev 0: 1 credit - Prepare a Sustainable Procurement Plat before Stage 2. looks at local policies, and procurement from local area where possible. Requires procedures to check/ verify the implementation of the plan.
Credit 2	BREEAM AP Up to 3 credits - Response FSC,PEFC, BES6001, IS to superstructure and rec 2nd credit adds in interna structure/ hard landscapi 3rd credit takes the 2nd of		Up to 3 credits - Responsible Sourcing to FSC,PEFC, BES6001, ISO 14001. 1st credit refers to superstructure and requires at least 10% RSM, 2nd credit adds in internal finishes and sub- structure/ hard landscaping of at least 20% RSM, 3rd credit takes the 2nd credit to at least 30%. Exemplary credit adds in core building services of				
Credit e1	Measuring responsible sourcing	1	0	0	0		
Mat 05 - Des	igning for durability and resilience					·	
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1 Protecting vulnerable parts of the building from damage/material degradation		1	0	1	0	Architect Services Engineer	2020-08-03 Rev 0: Vulnerable parts: protects against: negative impacts of high user numbers (corridors, stairs, doors etc.), damage from vehicle/ trolley movements in kitchens, corridors etc. external damage to building from a vehicle. Malicious damage. Material degradation: key exposed building elements designed and specified to limit long and short-term degradation due to environmental factors (by a recognised quality standard or detailed assessment).
Mat 06 - Mate	erial efficiency	-	-	1			
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Material efficiency	1	0	1	0	Structural Engineer Architect RAME Vitec	2020-08-03 Rev 0: Set targets and report on opportunities and methods to optimise the use of materials during RIBA stages 1, 2, 3, 4 and 5. Develop and record

							implementation during stages 3, 4, and 5. Report targets and actual material efficiencies achieved.
		14	0	9	0	Standard Materials	·
		4	0	0	0	Exemplary Materia	Is Credit Total
		19.26	0	9.63	0	% Materials Total (Standard + Exemplary)
Waste		1		1		1	
Wst 01 - Cor	struction waste management						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Pre-demolition audit	1	0	1	0	Contractor RAME	2020-08-03 Rev 0: Pre-assessment assumes that demolition will be required? Complete Pre-demolition audit during Stage 2. Use to guide the design, consider materials for re- use (recycling opportunities) and set targets for waste management.
Credit 2	Construction resource efficiency	3	0	1	0	Contractor RAME	2020-08-03 Prepare Resource Management Plan (RMP), covering non-hazardous waste materials, including demolition and excavation waste; and on-site construction, off-site construction/ fabrication. Keep accurate records on waste arisings and waste management routes, meet or improve upon waste benchmarks. 2 credits: less than 6.5 tonnes/ 100m2 GIFA. 3 credits: less than 3.2 tonnes/ 100m2 GIFA, Exemplary: less than 1.9 tonnes/ 100m2 GIFA. Diversion from landfill: 1 credit (with demolition) 90%.
Credit 3	Diversion of resources from landfill	1	0	1	0	Contractor RAME	2020-08-03 Diversion from landfill: 1 credit (with demolition) 90%.
Credit e1	Construction resource efficiency/Diversion of resources from landfill	1	0	0	0		
Wst 02 - Use	of recycled and sustainably sourced aggree	gates					
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite		×	~	×	Contractor RAME	
Credit 1	Project Sustainable Aggregate points	1	0	1	0	Contractor RAME	2020-08-03 If waste from demolition is crushed and used on site this will likely achieve this credit? Also looks at locally sourced sustainable new aggregate, exemplary performance may be possible?

Credit e1	Project Sustainable Aggregate points	1	0	0	0			
Wst 03 - Ope	erational waste							
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Operational waste	1	0	1	0	Architect	2020-08-03 Rev 0: Will organic waste be collected from student kitchens to meet local requirements (space will be required for storage before collection?)	
Wst 05 - Ada	ptation to climate change							
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1 Resilience of structure, fabric, building services and renewables installation		1	0	1	0	Architect Vitec	2020-08-03Rev 0: Systematic risk assessment to identify the impact of extreme weather conditions arising from climate change on the building over its projected life cycle. The assessment covers installation of building services and renewable systems, structural and fabric resilience. Develop recommendations before or during Stage 2, to mitigate the impact. Update during technical design (Stage 4), justify any omissions.	
Credit e1	Responding to climate change	1	0	0	0		2020-08-03 Exemplary: meet credits requirements of Hea04, Ene01 (6 credits), Ene04 (passive design analysis), Wat02 (min of 3 credits), Mat05 (criteria 2-4), and Pol03 (Flood resilience 1 credit, surface water run-off 2 credits).	
Wst 06 - Des	ign for disassembly and adaptability							
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments	
Credit 1	Design for disassembly and functional adaptability -recommendations	1	0	1	0	Structural Engineer Architect Vitec	2020-08-03 Rev 0: Recommendations: Conduct study to explore the ease of disassembly and the functional adaptation potential of different design scenarios, develop recommendations and/ or solutions before end of Stage 2.	
Credit 2	Disassembly and functional adaptability – implementation	1	0	0	0		2020-08-03 Implementation: update recommendations during technical design, confirm how implemented where practical and cost effective. Produce a guide to communicate to tenant (could be included as a section within the BUG) Not currently targeted	
		10	0	7	0	Standard Waste Cre	edit Total	
		10 3	0 0	7 0	0 0	Standard Waste Cre Exemplary Waste C		

Land Use &	Ecology						
LE 01 - Site s	selection						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Previously occupied land	1	0	1	0	Client RAME	
Credit 2	Contaminated land	1	0	0	0		
LE 02 - Ecolo	ogical risks and opportunities						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite - Statutory obligations		×	~	×	Ecologist	
Credit 1	Survey and evaluation/Determining ecological outcomes	2	0	2	0	Ecologist	
Credit e1	Wider site sustainability - Exemplary level criteria	1	0	0	0		
LE 03 - Mana	aging impacts on ecology						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite – Ecological risks and opportunities		×	~	×	Ecologist	
Credit 1	Planning and measures on-site	1	0	1	0	Ecologist	
Credit 2	Managing negative impacts	2	0	2	0	Ecologist	
LE 04 - Ecolo	ogical change and enhancement				1	1	
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit Pre- req	Prerequisite - Managing negative impacts on ecology		×	~	×	Ecologist	
Credit 1	Change and enhancement of ecology / Ecological enhancement	1	0	1	0	Ecologist	
Credit 2	Change and enhancement of ecology	3	0	3	0		
Credit e1	Change and enhancement of ecology - Exemplary level criteria	1	0	0	0		
LE 05 - Long	term ecological management and maintena	ince					
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments

Credit Pre- req	Prerequisite - Statutory obligations, planning and site implementation		×	~	×	Ecologist	
Credit 1	Management and maintenance throughout the project / Landscape and ecology management plan	2	0	1	0	Ecologist	
		13	0	11	0	Standard Land Use	& Ecology Credit Total
		2	0	0	0	Exemplary Land Us	se & Ecology Credit Total
		15	0	11	0	% Land Use & Ecol	ogy Total (Standard + Exemplary)
Pollution							
Pol 01 - Impa	act of refrigerants	-		-			
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Impact of refrigerants	3	0	1	0	Vitec	2020-09-30 Requires completed 'template' letter and confirmation of requirement 7.
Pol 02 - Loca	al air quality	-		-	-		
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Local air quality	2	2	1	0	BREEAM AP Vitec	2020-08-03Rev 0: Using the uk-air.defra.gov.uk mapping site confirms the location as 'high pollution' for NOx >15 g m-3 (Site = Max. 79.60 g m-3) and PM10 >10 g m-3 (Site = Max. 20.78 g m-3), therefore 1 credit gas boiler NOx 27 mg/kWh, 2 credits gas boiler NOx 24 mg/kWh. Specification requires for Gas fired boilers: 27mg/kWh = 1 credit or 24mg/kWh = 2 credits.
Pol 03 - Floo	d and surface water management						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Flood resilience	2	0	2	0	Drainage / Flood Risk Consultant	2020-08-03 Rev 0: The Environment Agency Flood Map confirms that the site (NW1 3ER) is in a low flood risk area (Zone 1), Surface water flooding is: Low Flooding from reservoirs, canals etc. is: Very Low Tidal flooding is: Very Low Checks required for Groundwater and sewers.
Credit 2	Surface water run-off	2	0	2	0	Drainage / Flood Risk Consultant	2020-08-03 Surface water run-off design solutions must be bespoke, i.e. they must take account of the specific site requirements and natural or man- made environment of and surrounding the site. The priority levels detailed in the Methodology must be followed, with justification given by the

							appropriate consultant where water is allowed to leave the site. For brownfield sites, drainage measures are specified so that the peak rate of run-off from the site to the watercourses (natural or municipal) shows a 30% improvement for the developed site compared with the predeveloped site. This should comply at the 1-year and 100-year return period events. Calculations include an allowance for climate change. Flooding of property will not occur in the event of local drainage system failure (caused either by extreme rainfall or a lack of maintenance)
Credit 3	Minimising watercourse pollution	1	0	1	0	Civil Engineer Drainage / Flood Risk Consultant	2020-08-03 Areas with a low risk source of watercourse pollution, an appropriate level of pollution prevention treatment is provided, using appropriate SuDS techniques.
Pol 04 - Redu	uction of night time light pollution	1	T	T	I	1	
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Reduction of night time light pollution	1	0	1	0	Services Engineer	 2020-08-03 Rev 0: The external lighting strategy has been designed in compliance with Table 2 (and its accompanying notes) of the Institution of Lighting Professionals (ILP) Guidance notes for the reduction of obtrusive light, 2011. 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 Table 2 of the ILP guidance notes. Illuminated advertisements are designed in compliance with ILP PLG05 The Brightness of Illuminated Advertisements.
POI 05 - Redu	action of noise pollution	A	A	Tenceter	Detertial	Deenenglikilitige	Commonte
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit 1	Reduction of noise pollution	1	0	1	0	Acoustician	2020-08-03 Where there are noise-sensitive areas within the

							Must be at least 5dB lower than the background noise throughout the day and night
	· ·	12	2	9	0	Standard Pollution	Credit Total
		0	0	0	0	Exemplary Pollution	n Credit Total
		7.92	1.32	5.94	0	% Pollution Total (S	Standard + Exemplary)
Innovation		·					
AI - Approve	ed Innovation						
	Credit	Available	Awarded	Targeted	Potential	Responsibilities	Comments
Credit e1	Approved innovations	1	0	0	0		
	· ·	0	0	0	0	Standard Innovatio	n Credit Total
		1	0	0	0	Exemplary Innovati	ion Credit Total
		1	0	0	0	% Inneviation Total	(Standard + Exemplary)



Euston One – Affordable Office Workspace, William Road

BREEAM Design Stage Assessment (Credit Tracker)

Design Stage

04 Nov 2020

1.0 Introduction

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

Project Name	Euston One - Offices
BREEAM Version	BREEAM 2014 Non-Dom RFO
Assessment Stage	Design Stage
Lead Assessor	Wendy Lake
Targeted Score	70.22
Target Rating	Excellent (70%)
Current Score	12.42
Current Rating	Unclassified
Downloaded By	Wendy Lake
Download Date	04/11/20
Download Time	18:59:32 (GMT)

Please note that this is an uncontrolled copy and is for information only. Formal progress reports will be issued by your licensed assessor at key stages of the project. If you have any queries on the content of this report or the award of any of the credits, please contact your licensed assessor as noted above.

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

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

Minimum Standards

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

Issue	Awarded	Maximum Rating	Met
Man 03 - Responsible construction practices	0	Very Good	No
Man 04 - Commissioning and handover	0	Very Good	No
Ene 01 - Reduction of energy use and carbon emissions	8	Excellent	Yes
Ene 02 - Energy Monitoring	0	Good	No
Wat 01 - Water Consumption	0	Pass	No
Wat 02 - Water Monitoring	0	Pass	No
Mat 03 - Responsible Sourcing of Materials	0	Unclassified	No
Wst 01 - Construction Waste Management	0	Excellent	No
Wst 03 - Operational Waste	0	Very Good	No

If the required minimum standards are not met, then the target rating will not be achieved regardless of overall score.

Numbers after the '+' are exemplary/innovation credits.

2.0 - Credit Summary

		Available	Targeted	Potential	Awarded	Responsibility
Manage Man 01		4	4	0	0	lask MaEarlana Mika Eard, las Jamas Wandul aka
	Project brief and design Life cycle cost and service life	4	•	-	0	Jack McFarlane, Mike Ford, Joe James, Wendy Lake
Man 02	planning	4	4	0	1	Ryan Jones
Man 03	Responsible construction practices	6 +1	6	0	0	Jack McFarlane, Mike Ford, Joe James
Man 04	Commissioning and handover	4	3	0	0	Joe James, Jack McFarlane, Mike Ford
		18 + 1	17	0	1	
	Wellbeing					
Hea 01	Visual Comfort	7 +1	2	0	0	Tania Marques-perez, A Carroll, Ben Myers, F Naydler, J Ridealgh
Hea 02	Indoor Air Quality	5 +2	3	0	0	Architect, Services Engineer, Mechanical Engineer, Air Quality Consultant
Hea 04	Thermal comfort	3	3	0	0	Colin Maggs, Geraint Harris
Hea 05	Acoustic Performance	3 1	3	0 0	0 0	D Stuart Tonio Marguae perez, A Carrell, E Novellar, Dan Muara, I Didealah, Mika Ford, Jap. James, Jack McFerland,
Hea 06	Safety and Security	19 + 3	1 12	0	0	Tania Marques-perez, A Carroll, F Naydler, Ben Myers, J Ridealgh, Mike Ford, Joe James, Jack McFarlane
Energy		19 + 3	12	U	U	
	Reduction of energy use and					
Ene 01	carbon emissions	15 +5	8	0	8	Services Engineer, Mechanical Engineer
Ene 02	Energy Monitoring	2	2	0	0	Geraint Harris, Colin Maggs, Shaun Davies
Ene 03	External Lighting	1	1	0	0	Geraint Harris, Shaun Davies
Ene 04	Low carbon design	3	2	0	0	Geraint Harris, Colin Maggs
_		21 + 5	13	0	8	
Transpo		0		•	2	
Tra 01	Public Transport Accessibility	3	3	0	3	Wendy Lake
Tra 02	Proximity to amenities	1	1	0 0	1 0	Wendy Lake
Tra 03 Tra 05	Cyclist facilities Travel Plan	2 1	2 1	0	0 1	Wendy Lake D R
114 05		7	7	0	5	
Water		•	,	Ū	5	
Wat 01	Water Consumption	5 +1	3	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh
Wat 02	Water Monitoring	1	1	0	0	Geraint Harris, Colin Maggs
Wat 03	Leak Detection	2	2	0	0	Geraint Harris, Colin Maggs
		8 + 1	6	0	0	
Material	s					
Mat 01	Life Cycle Impacts	6 +1	3	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Wendy Lake
Mat 03	Responsible Sourcing of Materials	4 +1	3	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Wendy Lake
Mat 04	Insulation	1	1	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Colin Maggs, Geraint Harris
Mat 05	Designing for durability and resilience	1	1	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Colin Maggs, Geraint Harris, Daniel Miller
Mat 06	Material efficiency	1	1	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Colin Maggs, Geraint Harris, Daniel Miller, Mike Ford, Joe James, Jack McFarlane
		13 + 2	9	0	0	
Waste Wst 01	Construction Waste Management	7 +1	3	0	0	Mike Ford, Joe James, Jack McFarlane

Wst 03	Operational Waste	1	1	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh
Wst 04	Speculative Floor and Ceiling Finishes	1	1	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Mike Ford, Joe James, Jack McFarlane
Wst 05	Adaptation to climate change	1 +1	1	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Mike Ford, Joe James, Jack McFarlane, Geraint Harris, Colin Maggs, Shaun Davies, Daniel Miller
Wst 06	Functional adaptability	1	1	0	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Mike Ford, Joe James, Jack McFarlane, Geraint Harris, Colin Maggs, Shaun Davies, Daniel Miller
		11 + 2	7	0	0	
Pollutio	'n					
Pol 01	Impact of Refrigerants	3	1	0	1	Geraint Harris, Colin Maggs
Pol 02	NOx emissions	3	0	0	0	Geraint Harris, Colin Maggs, Wendy Lake
Pol 03	Surface Water Run Off	5 +1	4	0	0	Drainage / Flood Risk Consultant, Civil Engineer
Pol 04	Reduction of Night-Time Light Pollution	1	1	0	0	Geraint Harris, Shaun Davies
Pol 05	Noise Attenuation	1	1	0	0	Geraint Harris, Shaun Davies
		13 + 1	7	0	1	
Innovat	ion					
AI	Approved Innovation	1	0	0	0	
		1	0	0	0	

3.0 - Credit Progress Log

		Available	Targeted	Achieved	Action	Status	Information Outstanding / Comments
Managem	nent						
Man 01	Project brief and design	4	4	0	Jack McFarlane, Mike Ford, Joe James, Wendy Lake		Credit 1: Stakeholder consultation (project delivery) Outstanding Requirements: 1, 2, 3, 4. Credit 2: Stakeholder consultation (third party) Outstanding Requirements: 5, 6, 7, 8. Credit 3: Sustainability Champion (design) Outstanding Requirements: 9, 10, 11. Credit 4: Sustainability Champion (monitoring progress) Outstanding Requirements: 12, 13. Comments:
Man 02	Life cycle cost and service life planning	4	4	1	Ryan Jones		Comments: <u>2020-09-29</u> Capital Cost confirmed via MBU Euston Rev3_Issued - can be updated if required. Requires Elemental and Component level LCC to complete credit.
Man 03	Responsible construction practices	6 + 1	6	0	Jack McFarlane, Mike Ford, Joe James		Credit 0: Pre-Requisite Outstanding Requirement: 1. Credit 1: Environmental management Outstanding Requirements: 2, 3. Credit 2: Sustainability Champion (construction) Outstanding Requirements: 4, 5, 6. Credit 3: Considerate construction Outstanding Requirements: 7, 8. Credit 4: Monitoring of construction site impacts - Utility consumption Outstanding Requirements: 9, 10, 11, 12, 13, 14, 15. Credit 5: Monitoring of construction site impacts - Transport of construction materials & waste Outstanding Requirements: 16, 17, 18. Comments:
Man 04	Commissioning and handover	4	3	0	Joe James, Jack McFarlane, Mike Ford		Credit 0: Pre-Requisite (Excellent & Outstanding only) Outstanding Requirement: 0.

						Credit 1: Commissioning and testing schedule and responsibilities Outstanding Requirements: 1, 2, 3, 4. Credit 2: Commissioning building services Outstanding Requirements: 5, 6. Credit 4: Handover Outstanding Requirements: 9, 10. Comments:
Managem (+exempl	nent score ary/innovation)	18 + 1	17	1		
Health &	Wellbeing					
Hea 01	Visual Comfort	7 + 1	2	0	Tania Marques-perez, A Carroll, Ben Myers, F Naydler, J Ridealgh	Credit 1: Glare control Outstanding Requirements: 1, 2. Credit 4: Internal and external lighting levels, zoning and control Outstanding Requirements: 10, 11, 12, 13, 14, 15, 16. Comments:
Hea 02	Indoor Air Quality	5+2	3	0	Architect, Services Engineer, Mechanical Engineer, Air Quality Consultant	Credit 1: Indoor air quality (IAQ) plan Outstanding Requirement: 1. Credit 2: Ventilation Outstanding Requirements: 2, 3, 4, 5. Credit 3: Volatile organic compound (VOC) emission levels (products) Outstanding Requirements: 6, 7. Comments:
Hea 04	Thermal comfort	3	3	0	Colin Maggs, Geraint Harris	Credit 1: Thermal modelling Outstanding Requirements: 1, 2, 3, 4, 5. Credit 2: Adaptability - for a projected climate change scenario Outstanding Requirements: 6, 7, 8, 9. Credit 3: Thermal zoning and controls Outstanding Requirements: 10, 11, 12. Comments:
Hea 05	Acoustic Performance	3	3	0	D Stuart	Credit 1: Acoustic performance Outstanding Requirements: 1, 2, 3. Comments:

				1	1	ſ
Hea 06	Safety and Security	1	1	0	Tania Marques-perez, A Carroll, F Naydler, Ben Myers, J Ridealgh, Mike Ford, Joe James, Jack McFarlane	Credit 1: Security of site and building Outstanding Requirements: 1, 2, 3.
						Comments:
Health & (+exempl	Wellbeing score ary/innovation)	19 + 3	12	0		
Energy		1		l		
				1	1	1
Ene 01	Reduction of energy use and carbon emissions	15 + 5	8	8	Services Engineer, Mechanical Engineer	Comments: 2020-09-28 Credit complete
Ene 02	Energy Monitoring	2	2	0	Geraint Harris, Colin Maggs, Shaun Davies	Credit 1: Sub-metering of major energy consuming systems Outstanding Requirements: 1, 2, 3, 4.
						Credit 2: Sub-metering of high energy load and tenancy areas Outstanding Requirement: 5.
						Comments:
Ene 03	External Lighting	1	1	0	Geraint Harris, Shaun Davies	Credit 1: External lighting Outstanding Requirements: 1, 2, 3.
						Comments:
Ene 04	Low carbon design	3	2	0	Geraint Harris, Colin Maggs	Credit 1: Passive design - Passive design analysis Outstanding Requirements: 1, 2, 3.
						Credit 3: Low and zero carbon technologies - LZC feasibility study Outstanding Requirements: 7, 8.
						Comments:
Energy s (+exempl	core ary/innovation)	21 + 5	13	8		comments.
Transpor		1				
				1	1	
Tra 01	Public Transport Accessibility	3	3	3	Wendy Lake	Comments: 2020-10-05 Credit complete
Tra 02	Proximity to amenities	1	1	1	Wendy Lake	Comments: 2020-10-05 Credit complete
Tra 03	Cyclist facilities	2	2	0	Wendy Lake	Credit 1: Cycle storage Outstanding Requirement: 1.
						Credit 2: Cyclist facilities Outstanding Requirements: 2, 3.

						Comments:
Tra 05	Travel Plan	1	1	1	D R	Comments:
Transpo	rt score	7	7	5		
Water						
Wat 01	Water Consumption	5 + 1	3	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh	Credit 1: Water consumption Outstanding Requirements: 1, 2, 3, 4, 5, 6.
						Comments:
Wat 02	Water Monitoring	1	1	0	Geraint Harris, Colin Maggs	Credit 1: Water monitoring Outstanding Requirements: 1, 2, 3, 4, 5.
						Comments:
Wat 03	Leak Detection	2	2	0	Geraint Harris, Colin Maggs	Credit 1: Leak detection system Outstanding Requirement: 1.
						Credit 2: Flow control devices Outstanding Requirement: 2.
						Comments:
Water so	ore	8 + 1	6	0		
(+exemp	lary/innovation)					
Materials	5					
Mat 01	Life Cycle Impacts					
		6 + 1	3	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Wendy Lake	Credit 1: Life cycle impacts Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
		6 + 1	3	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Wendy Lake	Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9,
Mat 03	Responsible Sourcing of Materials	6 + 1 4 + 1	3	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Wendy Lake A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Wendy Lake	Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
Mat 03	Responsible Sourcing of		-		Ridealgh, Wendy Lake A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J	Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Comments: Credit 0: Pre-requisite
Mat 03	Responsible Sourcing of		-		Ridealgh, Wendy Lake A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J	Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Comments: Credit 0: Pre-requisite Outstanding Requirement: 1. Credit 1: Sustainable Procurement Plan
Mat 03	Responsible Sourcing of		-		Ridealgh, Wendy Lake A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J	Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Comments: Credit 0: Pre-requisite Outstanding Requirement: 1. Credit 1: Sustainable Procurement Plan Outstanding Requirement: 2. Credit 2: Responsible sourcing of materials (RSM) Outstanding Requirements: 3, 4.
Mat 03 Mat 04	Responsible Sourcing of		-		Ridealgh, Wendy Lake A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J	Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Comments: Credit 0: Pre-requisite Outstanding Requirement: 1. Credit 1: Sustainable Procurement Plan Outstanding Requirement: 2. Credit 2: Responsible sourcing of materials (RSM)
	Responsible Sourcing of Materials	4 + 1	3	0	Ridealgh, Wendy Lake A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Wendy Lake A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J	Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Comments: Credit 0: Pre-requisite Outstanding Requirement: 1. Credit 1: Sustainable Procurement Plan Outstanding Requirement: 2. Credit 2: Responsible sourcing of materials (RSM) Outstanding Requirements: 3, 4. Comments: Credit 1: Embodied impact

						building from material degradation
						Outstanding Requirements: 1, 2, 3, 4, 5.
						Comments:
Mat 06	Material efficiency	1	1	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Colin Maggs, Geraint Harris, Daniel Miller, Mike	Credit 1: Material efficiency Outstanding Requirements: 1, 2.
					Ford, Joe James, Jack McFarlane	Comments:
Materials score (+exemplary/innovation)		13 + 2	9	0		
Waste						
Wst 01	Construction Waste Management	7 + 1	3	0	Mike Ford, Joe James, Jack McFarlane	Credit 1: Pre-refurbishment audit Outstanding Requirement: 1.
						Credit 2: Reuse and direct recycling of materials Outstanding Requirements: 2, 3, 4.
						Credit 3: Construction resource efficiency Outstanding Requirements: 5, 6.
						Comments:
Wst 03	Operational Waste	1	1	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh	Credit 1: Operational waste Outstanding Requirements: 1, 2, 3, 4, 5, 6, 7.
						Comments:
Wst 04	Speculative Floor and Ceiling Finishes	1	1	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Mike Ford, Joe James, Jack McFarlane	Credit 1: Speculative floor and ceiling finishes Outstanding Requirements: 1, 2.
						Comments:
Wst 05	Adaptation to climate change	1+1	1	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Mike Ford, Joe James, Jack McFarlane, Geraint Harris, Colin Maggs, Shaun Davies, Daniel Miller	Credit 1: Adaptation to climate change – structura and fabric resilience Outstanding Requirement: 1.
						Comments:
Wst 06	Functional adaptability	1	1	0	A Carroll, Tania Marques-perez, Ben Myers, F Naydler, J Ridealgh, Mike Ford, Joe James, Jack McFarlane, Geraint Harris, Colin Maggs, Shaun Davies, Daniel Miller	Credit 1: Functional adaptability Outstanding Requirements: 1, 2.
Waste sc (+exempl	ore ary/innovation)	11 + 2	7	0		Comments:
Pollution	. ,	1 1				
Pol 01	Impact of Refrigerants	3	1	1	Geraint Harris, Colin Maggs	Comments: 2020-10-02

						Just requires Pol01 calc. tool to be replaced with the RFO14 tool
Pol 02	NOx emissions	3	0	0	Geraint Harris, Colin Maggs, Wendy Lake	Comments: <u>2020-10-02</u> Unfortunately the calculation confirms that no credits are achieved (3 credits lost) Requirement 2 reference for BREEAM scoring and reporting tool needs to be added when available (WaL)
Pol 03	Surface Water Run Off	5 + 1	4	0	Drainage / Flood Risk Consultant, Civil Engineer	Credit 1: Flood resilience Outstanding Requirements: 1, 2, 3, 4, 5, 6. Credit 2: Surface water run-off Outstanding Requirements: 7, 8, 9, 10. Credit 3: Minimising watercourse pollution Outstanding Requirements: 11, 12, 13, 14. Comments:
Pol 04	Reduction of Night-Time Light Pollution	1	1	0	Geraint Harris, Shaun Davies	Credit 1: Reduction of night time light pollution Outstanding Requirements: 1, 2, 3, 4, 5. Comments:
Pol 05	Noise Attenuation	1	1	0	Geraint Harris, Shaun Davies	Credit 1: Reduction of noise pollution Outstanding Requirements: 1, 2, 3, 4, 5. Comments:
Pollution (+exemp	score lary/innovation)	13 + 1	7	1		
Innovatio	on				·	
AI	Approved Innovation	1	0	0		Comments:
Innovatio	on score	1	0	0		