



aaprojects

**BREEAM Pre-assessment
Report Rev A**

BREEAM 2018 NC Office

Union T2 St. Johns

for

**VITA, Select Property
Group**

March 2020

**vision into
reality**

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A BREEAM Pre-Assessment

1.0 Introduction

This report has been prepared by AA Projects Limited on behalf of VITA, Select Property Group for the construction of the Union T2, St. Johns. The scheme is only assessing the Co-work offices and does not consider the rest of the building residential areas. It is being assessed under BREEAM 2018, Offices and is aiming to achieve a Very Good rating.

The report provides the design & construction team with key actions to be undertaken to ensure certification is achieved. The team should review this report and associated documentation including BREEAM 2018 NC Manual to ensure relevant procedures are put in place to ensure the full BREEAM requirements are incorporated.

We recommend that a 5% contingency above the level threshold should credits be lost unexpectedly.

It may be the case that some of the items listed within this report are currently outside the scope of the design team's package. As such, it is important that the team review and incorporate additional criteria into their specifications.

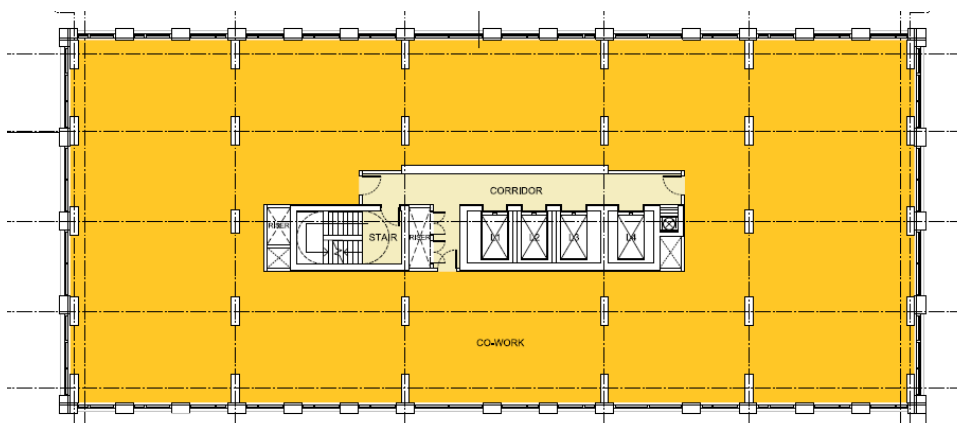
2.0 Meeting and Attendees

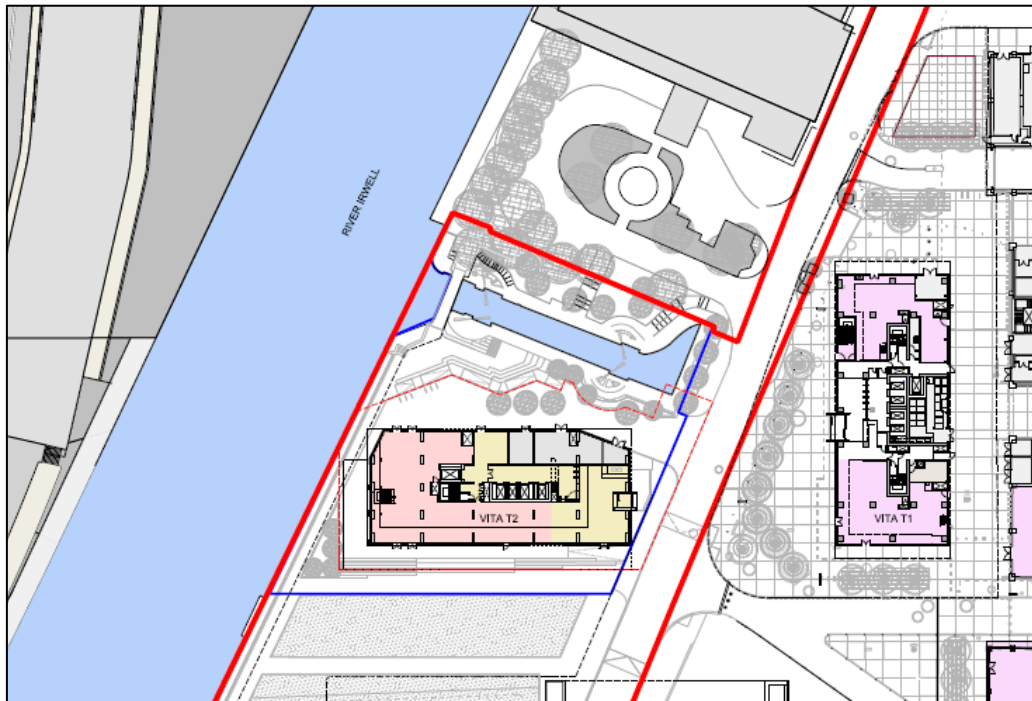
A BREEAM Pre-assessment workshop was held at Futureserv Offices on 16.03.20, during RIBA Stage 2 and was attended by:

- Ralph Pedersen, VITA - Client
- David Cleary, Futureserv – Building Services Consultant
- Gareth Webb, Futureserv – Building Services Consultant
- Paul Harris, BAM Construction – Main Contractor
- Chris Edwards, BAM Construction – Main Contractor
- Rory Baker, AA Projects Ltd – BREEAM Assessor & Accredited Professional

3.0 Project Description

The project comprises of the construction of a 36 Storey building which will house co-work and co-living facilities. The BREEAM assessment is only applicable for the Co-work office areas which cover three floors within the overall building. The building is next to the River Irwell and will have outdoor areas for building users.





4.0 Project Programme

The scheme is currently at RIBA Stage 2 with the outline planning application being prepared. The proposed programme is still being finalised, but it is anticipated works would start on late 2020/early 2021 and complete in 2023.

5.0 Background to Sustainability & BREEAM

Sustainability is defined as the ability to meet the needs of today, without compromising the ability of future generations to provide for the needs of tomorrow. It should consider environmental, financial and social issues with neither aspect being prioritized can be described as the equilibrium between environmental and financial considerations, and the needs of the community.

BREEAM (Building Research Establishment's Environmental Assessment Method) 2018 is a voluntary scheme which aims to benchmark the sustainability of a new building against a number of different categories.

BREEAM 2018 assessments can be either undertaken in two stages:

- Firstly, the design stage, which leads to an Interim BREEAM certified rating; and secondly the post construction stage, which leads to a Final BREEAM certified rating
- Or as a single Post Construction Assessment which leads to a Final BREEAM certified rating.



BREEAM Section	% Weighting
Management	12%
Health & Wellbeing	15%
Energy	15%
Transport	9%
Water	7%
Materials	13.5%
Waste	8.5%
Land Use & Ecology	10%
Pollution	10%

6.0 RIBA Stage Associated Credits

There are various BREEAM credits which have to be executed during specific RIBA Stages. In order to maximise the possible score for a scheme it is crucial that these actions are not missed. The table below outlines all relevant credits, associated timescales and the discipline responsible.

BREEAM Credit	Requirement	Responsibility
RIBA Stage 2		
Man 01 – Project Brief and Design – Stakeholder Consultation	Meeting of project stakeholders to define roles & responsibilities	Denton Corker Marshall
Hea 06 – Safety and Security	Appoint 'Security specialist' (Police Architectural Liaison Officer) to carry out 'Security Analysis' and implement.	Denton Corker Marshall
Ene 04 – Low Carbon Design - Low Zero Carbon Technologies	Produce LZC study recommending the most appropriate technology	Futureserv
Tra 05 – Travel Plan	Produce/Update Travel Plan	VITA / Vectos
Wst 05 – Adaptation to Climate Change	Produce 'Climate Change Adaptation Strategy Appraisal'	Denton Corker Marshall/ Curtins
Wst 06 – Functional Adaptability	Produce 'Building Functional Adaptation Study'	Denton Corker Marshall/ Curtins
RIBA Stage 3		
Mat 05 – Designing for Durability and Resilience	Carry out 'Material Degradation Review'	Denton Corker Marshall/ Curtins
Pol 03 – Surface Water run-off	Produce Flood Risk Assessment	Curtins
RIBA Stage 4		
Man 04 – Commissioning and Handover	Conduct 'Commissioning Design Review' (<i>using a Specialist Commissioning Agent</i>)	Futureserv

Hea 02 – Indoor Air Quality	Develop 'Indoor air Quality Plan'	Futureserv
Hea 04 – Thermal Comfort	Produce a CIBSE AM11 compliant 'Thermal Model' including 'Projected Climate Change' allowance.	Futureserv
Wst 01 – Construction Waste Management	Carry out 'Pre Demolition Audit'	BAM/Demolition Contractor
Wst 06 - Functional Adaptability	Implement 'Building Functional Adaptation Study'	Denton Corker Marshall/ Curtins

7.0 Potential Credits

The following credits are potentially achievable however require further investigation by the design team.

The table below outlines all relevant credits, the requirement and the discipline responsible:

BREEAM Credit	Requirement	Responsibility
Man 01 – Project Brief and Design – Stakeholder Consultation (Third Party)	Carry out stakeholder consultation in line with BREEAM requirements.	Denton Corker Marshall
Man 02 – Life Cycle Cost and Service Life Planning	Carry out 'Elemental Life Cycle Analysis' Plus 'Design options Appraisal'	Cost Consultant
Man 03 – Responsible Construction Practices – BREEAM AP Site	BREEAM Advisory Professional to be appointed for the construction period	BAM Construction
Man 05 – Aftercare - Post-Occupancy Evaluation	Appoint independent 3 rd Party to carry out Post-Occupancy Evaluation	VITA
Hea 01 – Visual Comfort – Daylighting	Carry out daylight modelling on the office areas	Denton Corker Marshall/ Futureserv
Hea 01 – Visual Comfort – View Out	Need confirmation that 95% of offices will have adequate view out, to be confirmed as design progresses	Denton Corker Marshall
Ene 01 - Reduction of Energy Use & Carbon Emissions	Current BRUKL is only achieving 2 credits therefore improvements would be required to gain additional credits (4 Mandatory for Excellent)	Futureserv/Denton Corker Marshall
Mat 02 - Environmental Impacts from Construction Products - Environmental Product Declarations (EPDs)	Need to specify materials with EPD certification	Denton Corker Marshall/BAM Construction

Wst 02 - Use of Recycled and Sustainably Sourced Aggregates	Required to meet the recycled aggregate content for various elements	BAM Construction
LE01 – Site Selection – Contaminated Land	To be determined whether land is classed as contaminated	VITA
Pol 01 – Impact of Refrigerants – Leak Detection	Requires a leak detection for refrigerant systems in line with BREEAM criteria	Futureserv

8.0 Summary and Recommendations

It is recommended that the development seeks to achieve a BREEAM rating of 'Very Good' as this is most appropriate for this development as it only concerns three floors of office.

Following a BREEAM Pre-assessment workshop meeting a target of 63.2% has been established which is outlined within Appendix A.

The current target shows a healthy Very Good target however this is still someway off the threshold of Excellent at 70% bearing in mind a 5% buffer is generally advised to ensure the rating is achieved at Post-construction stage.

Section 7 outlines potential credits which with further design development may be achievable, however the current Ene 01 rating of 2 credits is the main barrier to achieving Excellent as 4 credits are required as a minimum standard.

All BREEAM requirements should, where possible be incorporated into the relevant contractual, sub-contractual and specification documentation.

Ideally the information should be submitted for certification as early as possible. Certification can be achieved once evidence into credit achievement has been incorporated into the contract documentation. This can be done using drawings, specifications, contract preliminaries etc.

There are certain studies/calculations that must be completed during specified RIBA stages or before the design is complete. These are highlighted in Section 6.

APPENDIX A

BREEAM Pre-Assessment

BREEAM Pre-assessment Report

VITA Union T2 St. Johns

Targeted
63.2
Very Good
Potential Score
73.3
Excellent

BREEAM 2018 Office						
Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
Actions required to secure the points given in the assessment				10.15%	142	85
Management		Weighting:	0.110	3.14%	21	15
Man 01	Project Brief and Design					
	Project Delivery Planning	VITA / DCM	At Stage 1, Project Brief and project meeting minutes outlining roles/ responsibilities/ contributions and showing how each one of the following have been considered: end user requirements, aims of the design/ strategy, installation and construction requirements/ limitations, occupiers' budget and technical expertise in maintaining proposed systems, maintainability and adaptability of proposals, operational energy, requirements for the production of the project, end user documentation, requirements for commissioning, training and aftercare support. Show how the project delivery stakeholders contributions and their consultation has influenced: Initial Project Brief, Project Execution Plan, Communication Strategy, Concept Design.		1	1
	Stakeholder Consultation (interested parties)	VITA / DCM	Consultation plan showing scope and process Documentation (e.g. meeting minutes, responsibilities schedule) confirming: - Collaboration began prior to end of RIBA Stage 2. - Roles and responsibilities have been defined, covering all points in Criterion 2. - Comments from consultations have influenced the initial project brief.	1	1	0
	Pre-Requisite: BREEAM AP	VITA	Evidence/Letter confirming a BREEAM Advisory Professional was appointed to formally agree strategic performance targets early in the design process		N/A	Y
	BREEAM AP (Concept Design)	AAP	Evidence/Letter confirming a BREEAM Advisory Professional was appointed for RIBA stage 2. Meeting minutes / BREEAM trackers showing BREEAM AP contribution and feedback during Concept Design. Pre-assessment report showing targets and design advice to achieve targets		1	1
	BREEAM AP (Developed Design)	AAP	Previous credits are achieved Evidence confirming the sustainability champion has been appointed for RIBA Stages 2-4. Meeting minutes / BREEAM trackers showing BREEAM AP contribution and feedback during Developed Design.		1	1
Man 02	Life Cycle Cost (LCC) and Service Life Planning					
	Elemental LCC Plan	Cost Consultant	A competent person (see Definitions on the facing page) carries out an outline, entire asset LCC plan at Process Stage 2 (equivalent to Concept Design - RIBA Stage 2) together with any design options appraisals in line with 'Standardised method of life cycle costing for construction procurement' PD 156865: 2008(6). The elemental LCC plan: 2.a Provides an indication of future replacement costs over a period of analysis as required by the client (e.g. 20, 30, 50 or 60 years); 2.b Includes service life, maintenance and operation cost estimates. 3 Demonstrate, using appropriate examples provided by the design team, how the elemental LCC plan has been used to influence building and systems design and specification to minimise life cycle costs and maximise critical value	2	2	0

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Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
	Component Level LCC Plan	Cost Consultant	A competent person develops a component level LCC options appraisal by the end of Process Stage 4 (equivalent to Technical Design – RIBA Stage 4) in line with PD 156865: 2008. The component level LCC includes (where present): 4.a Envelope, e.g. cladding, windows, or roofing 4.b Services, e.g. heat source, cooling source, or controls 4.c Finishes, e.g. walls, floors or ceilings 4.d External spaces, e.g. alternative hard landscaping, boundary protection. Demonstrate, using appropriate examples provided by the design team, how the component level LCC options appraisal has been used to influence building and systems design and specification to minimise life cycle costs and maximise critical value.	1	1	0
	Capital Cost Reporting	Cost Consultant	Confidential capital cost reporting to the BRE (data is anonymised by the BRE and used to inform performance benchmarking). Evidence showing the predicted capital cost for the building in £k/ m².		1	1
Man 03	Responsible Construction Practices					
	Pre-requisite: Legally Harvested and Traded Timber	Main Contractor	Letter/Supplier Certificates confirming all timber will comply with the UK Government Timber Procurement Policy		N/A	Y
	Environmental Management	Main Contractor	Copy of the contractor's ISO14001 Cert		1	1
	Pre-Requisite: BREEAM AP		Client and main contractor to formally agree performance targets - letter or specification required		N/A	N
	BREEAM AP (Site)	Main Contractor	BREEAM Advisory Professional to be appointed for the construction period. Spec or letter confirming an AP has been appointed to monitor the project to ensure ongoing compliance with the criteria. Evidence confirming the sustainability champion has been appointed for RIBA Stages 2-4. Meeting minutes / BREEAM trackers showing BREEAM AP contribution and feedback during Construction	1	1	0
	Responsible Construction Management	Main Contractor	Main contractor to achieve items listed as required plus 6 additional items in Table 4.1 (categories are: vehicle movement, pollution management, tidiness, health and wellbeing, security processes, training, awareness and feedback, monitoring and reporting). CCS score will contribute towards this - item g also required 'ensure clear and safe access in and around the buildings at the point of handover		2	2
	Monitoring of Construction Site Impacts: Utility Consumption	Main Contractor	Site monitoring and target setting for energy consumption and reporting on total CO2/ project value. Site monitoring and target setting for water consumption and reporting on total net water consumption m3.		1	1
	Monitoring of Construction Site Impacts: Transportation	Main Contractor	Site monitoring and target setting for transportation movements and impacts from the delivery of the majority of construction materials to site and construction waste from site. Reporting in kg CO2 equivalent plus total distance travelled (km)		1	1
Man 04	Commissioning and Handover					
	Commissioning: Testing Schedule and Responsibilities	Main Contractor	Spec or letter confirming commissioning responsibilities, commissioning testing schedule, and relevant codes to be adhered to. A copy of the main contractors programme of works confirming commissioning has been accounted for.		1	1
	Commissioning: Design and Preparation	Main Contractor	During the design stage, the client or main contractor needs to appoint a project team member (who is not involved in the general installation works for the building services systems) with responsibility for undertaking design reviews, commissioning management etc. For buildings with complex building services and systems this requires a specialist commissioning manager.		1	1
	Commissioning: Testing and Inspecting Building Fabric	Main Contractor	Project programme of works to confirm thermographic survey, airtightness testing and inspection has been accounted for. Copy of appointment letter or similar for surveyor		1	1

BREEAM Pre-assessment Report

VITA Union T2 St. Johns

Targeted

63.2

Very Good

Potential Score

73.3

Excellent

BREEAM 2018 Office						
Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
	Handover	Main Contractor	Letter or Spec confirming commitment to produce Building User Guides and contents. One technical BUG required for Facilities Manager, one non-technical required BUG for building occupiers. Draft copy to be developed and discussed with users first where building occupants are known Two handover training schedules required: one non-technical (to include an introduction to the non-technical BUG), one technical (to include an introduction to the technical BUG). Letter/spec/programme confirming occupier training		1	1
Man 05	Aftercare					
	Aftercare Support	Main Contractor	Evidence or Letter confirming a commitment to provide compliant aftercare support including an initial meeting with the management team, on-site facilities management training, plus energy and water monitoring for 12 months		1	1
	Commissioning: Implementation	Main Contractor	Spec or letter confirming commissioning extends to seasonal commissioning - to include interviews with building occupants, monthly reports comparing sub-metered energy performance to predicted.		1	1
	Post-Occupancy Evaluation	VITA	Would require a letter of commitment signed and dated by client/developer to carry out an independent one year post occupancy evaluation review. The client or building occupier needs to commit funds to pay for the POE in advance. Evidence of appointment is required and a schedule of responsibilities provided.	1	1	
Health and Wellbeing		Weighting:	0.140	2.33%	18	14
Hea 01	Visual Comfort					
	Control of Glare from Sunlight	DCM	Drawings/Spec confirming glare has been designed out or controlled, e.g. brise soleil, blinds. Check transmittance value of blind specification.		1	1
	Daylighting	DCM	Not targeted - review once daylight modelling calculations are completed	2	2	0
	View Out	DCM	Not targeted - but keep under review, may be achievable	1	1	0
	Internal and External Lighting	Futureserv	Copy of spec/Letter confirming adherence to relevant codes Drawings showing internal lighting zones Drawings showing external lighting		1	1
Hea 02	Indoor Air Quality					
	Pre-requisite: Indoor Air Quality (IAQ) Plan	Futureserv	Copy of the compliant indoor air quality plan.		N/A	Y
	Ventilation		Not targeted as required air intakes and extracts to be 10m from each other and sources of pollution e.g. roads/car parks.		1	0
	Emissions from Construction Products	DCM / Main Contractor	NBS Spec or letter confirming the relevant products will meet the testing standards set out in Table 18		2	2
	Post-construction Indoor Air Quality Measurement	Main Contractor	Requires physical VOC and formaldehyde level testing after painting is completed but prior to handover.		1	1
Hea 04	Thermal Comfort					
	Thermal Modelling	Futureserv	Copy of the thermal modelling results Where relevant, including the PMV and PPD values		1	1
	Design for Future Thermal Comfort	Futureserv	Re-run of the thermal model with the 2030 weather file. Evidence confirming the building will or can be adapted to withstand effects of climate change Where relevant, the PMV and PPD values for the climate change scenario		1	1
	Thermal Zoning and Controls	Futureserv	Copy of the compliant thermal comfort strategy Design drawings showing heating zones		1	1

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Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
Hea 05 Acoustic Performance						
	Acoustic Performance	Acoustician/ Main Contractor	A Suitably Qualified Acoustician to be appointed to define a bespoke set of performance requirements based on sound insulation, indoor ambient noise level, and reverberation times, including the testing regime required. Acoustician to confirm whether third credit is available		3	3
Hea 06 Security						
	Security of Site and Building	DCM / Security Consultant	Correspondence from Security Consultant Design drawings showing implementation of recommendations		1	1
Hea 07 Safe and Healthy Surroundings						
	Safe Access	DCM	Requires safe access in line with BREEAM guidance including (but not limited to) the following: Dedicated and safe cycle paths are provided from the site entrance to any cycle storage, and connect to offsite cycle paths where applicable. 2 Dedicated and safe footpaths are provided on and around the site providing suitable links for the following: 2.a The site entrance to the building entrance 2.b Car parks (where present) to the building entrance 2.c The building to outdoor space 2.d Connecting to off-site paths where applicable. 3 Pedestrian drop-off areas are designed off, or adjoining to, the access road and should provide direct access to other footpaths. Delivery access also required to meet criteria, please refer to full BREEAM manual		1	1
	Outside Space	Landscape Architect	Design drawings showing an external amenity area for building users that is non-smoking, has seating and avoids areas that have disturbances from noise.		1	1
Energy		Weighting:	0.160	1.39%	23	10
Ene 01 Reduction of Energy Use & Carbon Emissions						
	Energy Performance	Futureserv	2 credits targeted (minimum requirement for an Excellent rating is 4 credits) Copy of the design stage .inp file Output from assessor's calculator	2	9	2
	Prerequisite: Preliminary Design Workshop		Prior to Concept Design relevant members of the design team hold a preliminary design workshop focussing on operational energy performance. Meeting agenda/ minutes required.		N/A	N
	Prediction of Operational Energy Consumption		Undertake additional energy modelling during the design and post construction stage to generate predicted operational energy consumption figures. Report predicted energy consumption targets by end use, design assumptions and input data. Carry out a risk assessment to highlight any significant design, technical and process risks that should be monitored and measured during construction and commissioning.		4	0

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Ene 02	Energy monitoring					
	Sub-metering of End-use Categories	Futureserv	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 2 Meter the energy consumption in buildings according to the total useful floor area: - If the area is greater than 1,000m², by end-use category with an appropriate energy monitoring and management system. - If the area is less than 1,000m², use either: - i an energy monitoring and management system or separate accessible energy sub-meters with pulsed or other open protocol communication outputs, for future connection to an energy monitoring and management system 3 Building users can identify the energy consuming end uses, for example through labelling or data outputs.		1	1
	Sub-metering of High Energy Load and Tenancy Areas	Futureserv	Monitor a significant majority of the energy supply with: 4.a An accessible energy monitoring and management system for: 4.a.i tenanted areas or 4.a.ii relevant function areas or departments in single occupancy buildings.		1	1
Ene 03	External lighting					
	Luminous Efficiency and Lighting Control	Futureserv	No external lighting (which includes lighting on the building, at entrances and signs). OR 2 External light fittings within the construction zone with: 2.a Average initial luminous efficacy of not less than 70 luminaire lumens per circuit Watt 2.b Automatic control to prevent operation during daylight hours 2.c Presence detection in areas of intermittent pedestrian traffic.		1	1
Ene 04	Low Carbon Design					
	Passive Design Analysis		Hea 04 first credit has been awarded. Copy of the analysis results and evidence confirming it is compliant, and was completed at RIBA Stage 2. Report needs to quantify the reduced total energy demand and CO2 emissions resulting from the passive design measures.		1	0
	Free Cooling		Not targeted due to mechanical cooling		1	0
	Low Zero Carbon Technologies	Futureserv	Copy of the feasibility report at RIBA Stage 2		1	1
Ene 06	Energy efficient transportation systems					
	Energy efficient transportation systems	Main Contractor	Carry out transport analysis for likely life usage. Undertake energy assessment for at least two types of lift and specify the most energy efficient lift. Incorporate a number of energy saving measures into lift specification.		2	2

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Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
Ene 08	Energy Efficient Equipment					
	Reduction of Unregulated Loads	Futureserv	The building's unregulated energy consuming loads are identified and their contribution to the total annual unregulated energy consumption is estimated. Examples of significant contributors are: Small power & plug-in equipment Swimming pool Communal laundry Data centres IT intensive areas Residential areas with white goods Healthcare Kitchen & catering facilities - For the systems/ processes that use a significant proportion of the total annual unregulated energy consumption, demonstrate a meaningful reduction in the total annual unregulated energy consumption by design, specification or operation		2	2
Transport		Weighting:	0.100	0.00%	12	12
Tra 01	Travel Plan					
	Travel Assessment and Travel Plan	Vectos	Travel plan to be produced during the feasibility and design stages and be based on a site specific travel assessment or statement. Must cover disabled access. If the occupier is known, they need to be involved in the development of the travel plan.		2	2
Tra 02	Sustainable Transport Measures					
	Pre-requisite: Tra 01 Achieved	Vectos	Copy of the travel plan/ survey		N/A	Y
	Transport Options Implementation	AAP	Public transport measures, private transport measures (including electric recharging stations), active travel measures (including cycle racks), alternative transport measures, Public transport timetables. Specification and marked up drawings for private/ active/ alternative transport measures. Safe pedestrian route of less than 500m shown on a scale drawing for all relevant amenities.		10	10

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Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
Water		Weighting:	0.070	0.00%	8	6
Wat 01	Water Consumption					
	Water Consumption Reduction	DCM / Main Contractor	It is assumed that a 40% improvement in water consumption over the notional baseline will be achieved through the specification of the following: ◦ 4/2.6 l dual flush WCs/4.5l flush disabled WCs ◦ Wash hand basin taps flow rate limited to 3 l/min ◦ Kitchen taps flow rate limited to 4l/min ◦ Low flow / waterless urinals ◦ No showers/baths/waste disposal unit ◦ No domestic sized dishwashers ◦ No domestic sized washing machines Rainwater harvesting system may be needed to achieve four credits		5	3
Wat 02	Water Monitoring					
	Prerequisite: Water Meter on the Mains Water Supply	Futureserv	Drawings showing location of meters. Copy of spec/metering schematics confirming what has been metered, and that meters are labelled and connected to BMS		N/A	Y
	Appropriate Sub-Meters	Futureserv	Drawings showing location of meters. Copy of spec/metering schematics confirming what has been metered, and that meters are labelled and connected to BMS		1	1
Wat 03	Water Leak Detection					
	Leak Detection System	Futureserv / Main Contractor	Technical details of the leak detection system to be installed, confirming that it is programmable by the user, designed to avoid false alarms, and confirming when and how it is activated		1	1
	Flow Control Devices	Futureserv / Main Contractor	Design drawings showing type and location of flow control devices and sensors.		1	1
Materials		Weighting:	0.150	1.07%	14	6
Mat 01	Environmental Impacts from Construction Products - Building Life Cycle Assessment (LCA)					
	Superstructure	DCM	Copy of building life cycle assessment at Concept Design. A copy of the Mat 01 Results submission tool needs to be submitted to the BRE at the end of Concept Design and before Planning permission is applied for. A copy of the Mat 01 Results submission tool needs to be submitted to the BRE at the end of Technical Design.		6	2
	Substructure and Hard Landscaping Options Appraisal during Concept Design		Not undertaken at RIBA Stage 1 therefore not achievable		1	0
Mat 02	Environmental Impacts from Construction Products - Environmental Product Declarations (EPDs)					
	Specification of Products with a Recognised EPD	DCM	Potential credit. Copy of construction product EPDs. A total EPD points score of at least 20 is needed to achieve the credit.	1	1	0

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Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
Mat 03	Responsible Sourcing of Construction Products					
	Pre-requisite: All timber used on the project is 'Legally harvested and traded timber'.	Main Contractor	Letter/Supplier Certificates confirming all timber will comply with the UK Government Timber Procurement Policy		N/A	Y
	Enabling Sustainable Procurement	Main Contractor	A sustainable procurement plan must be used by the design team to guide specification towards sustainable construction products and needs to be in place before Concept Design . It should include sustainability aims, objectives and strategic targets, including a requirement for assessing the potential to procure construction products locally, and procedures to check and verify the effective implementation of the plan. If organisational or covering several sites then additional measures are required.		1	1
	Measuring Responsible Sourcing	Main Contractor	Applicable building materials to be responsibly sourced by main contractor. 1 credit for 10% superstructure. 2 credits also requires 20% internal finishes plus substructure and hard landscaping. 3 credits also requires 30% internal finishes plus substructure and hard landscaping. A copy of the Mat03 calculator Plan/spec/letter detailing the materials making up each building element A copy of the responsible sourcing scheme certificates for each material's manufacturer OR - if materials/manufacturers are not know - a letter of intent confirming the percentage of construction products will be sourced from responsible suppliers to achieve the above		3	2
Mat 05	Designing for Durability and Resilience					
	Protecting from Degradation and Damage	DCM	Drawings (internal and external) showing areas where vehicles, pedestrians and trolley movements occur. Design drawings/spec confirming durability measures which will be implemented. Evidence confirming how each applicable building element is protected from potential environmental degradation (including roof and facade) and how convenient access to the roof and facade is achieved. Marked up drawings/ specification and/ or written report required.		1	1
Mat 06	Material Efficiency					
	Target, Report and Implement Material Efficiency Opportunities		Requires a report at each RIBA stage , plus letter/spec confirming designing for materials efficiency in accordance with BS 8895 &/or WRAP		1	0
Waste		Weighting:	0.060	0.55%	11	9
Wst 01	Construction Waste Management					
	Pre-demolition Audit	Main Contractor	Requires a Pre-demolition audit to be undertaken		1	1
	Construction Resource Efficiency	Main Contractor	2 credit targeted for a compliant site Resource Management Plan with target of less than 7.5m3 (actual not bulk volume) or 6.5 tonnes of non-hazardous waste (from on-site construction and dedicated off-site manufacture) per 100m2 GIFA.		3	2
	Diversion of Resources from Landfill	Main Contractor	1 credit targeted for non-hazardous construction waste diverted from landfill: non-demolition waste 70% by volume/ 80% tonnage; demolition waste 80% by volume/ 90% tonnage. Excavation waste is excluded.		1	1
Wst 02	Use of Recycled and Sustainably Sourced Aggregates					
	Project Sustainable Aggregate Points	Curtins	Not targeted. Would require Sustainable Aggregate points to be determined	1	1	0

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73.3

Excellent

BREEAM 2018 Office						
Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
Wst 03	Operational Waste					
	Operational Waste	DCM / Main Contractor	Dedicated recyclable waste storage area to be provided at a rate of 2m2 per 1,000m2 of net floor area for buildings <5,000m NIFA. A minimum of 10m2 for buildings >5,000m2. Marked up to scale drawing to be provided showing recyclable waste storage area in m2 plus separate area for general waste storage. Recyclable waste stream labelling required - to be confirmed on drawing or by email.		1	1
Wst 04	Speculative finishes					
	Speculative finishes	VITA	For tenanted areas, where the future occupant is not known and carpets or other floor or ceiling finishes are installed, these must be limited to a show area only OR confirmed that tenants will not be able to make any changes.		1	1
Wst 05	Adaptation to Climate Change					
	Resilience of Structure, Fabric, Building Services, and Renewables Installation	DCM / Curtins	Climate change adaptation strategy appraisal, including building services and renewable systems, structural and fabric resilience aspects, during Concept Design . To be updated at Technical Design demonstrating how the recommendations/ solutions proposed have been implemented.		1	1
Wst 06	Design for Disassembly and Adaptability					
	Recommendations	DCM / Curtins	Study to explore the ease of disassembly and the functional adaptation potential of different design scenarios at Concept Design .		1	1
	Implementation	DCM / Curtins	Update of study at Technical Design demonstrating how the recommendations/ solutions proposed have been implemented. Production of a building adaptability and disassembly guide for prospective tenants.		1	1
Land Use and Ecology		Weighting:	0.130	1.00%	13	6
LE 01	Site Selection					
	Previously Occupied Land	DCM	Marked up to scale drawing showing before/ after are of development footprint on previously occupied land. 75% to be shown as previously occupied to achieve credit.		1	1
	Contaminated Land		Site investigation, risk assessment and appraisal to have deemed the land within the site to be significantly affected by contamination. Client or main contractor required to confirm that remediation of the site will be carried out in accordance with the remediation strategy and its implementation plan as recommended by the contaminated land professional. Potential credit tbc in October once borehole results known	1	1	0
LE 02	Identifying and Understanding the Risks and Opportunities for the Project					
	Determining the Ecological Outcomes for the Site	Design Team/ Ecologist/ Client/ Main Contractor	BREEAM Guidance Note GN34 BREEAM Ecological Risk Evaluation Checklist to be completed. Client or main contractor to confirm compliance is monitored against all relevant UK legislation relating to the ecology of the site. 1 credit for site survey and evaluation 1 credit for determining the ecological outcomes for the site.		2	1

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VITA Union T2 St. Johns

Targeted

63.2

Very Good

Potential Score

73.3

Excellent

BREEAM 2018 Office						
Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
LE 03	Managing Negative Impacts on Ecology					
	Pre-requisite: LE02 is achieved	Ecologist	BREEAM Guidance Note GN34 BREEAM Ecological Risk Evaluation Checklist to be completed. Client or main contractor to confirm compliance is monitored against all relevant UK legislation relating to the ecology of the site.		N/A	Y
	Planning, Liaison, Implementation and Data	Ecologist	Roles and responsibilities to have been clearly defined. Site preparation and construction works to have been planned for and implemented at an early project stage. Project team to have liaised and collaborated with relevant stakeholder and selected appropriate solutions, during site preparation and construction works.		1	1
	Managing Negative Impacts of the Project	Ecologist	Negative impacts from site preparation works have been managed accordingly and the loss of ecological value has been limited as far as possible (1 credit) no overall loss of ecological value has occurred (2 credits).		2	1
LE 04	Change and Enhancement of Ecological Value					
	Pre-requisite: LE03 is achieved and additional requirements met	Ecologist	BREEAM Guidance Note GN34 BREEAM Ecological Risk Evaluation Checklist to be completed. Client or main contractor to confirm compliance is monitored against all relevant UK legislation relating to the ecology of the site. Roles and responsibilities to have been clearly defined. Site preparation and construction works to have been planned for and implemented at an early project stage.		N/A	Y
	Liaison, Implementation and Data Collection	Ecologist	The project team liaising and collaborating with representative stakeholders have implemented the solutions/ measure to enhance ecological value (a) on site (b) off site where this is not feasible		1	0
	Enhancement of Ecology	Ecologist/ Landscape Architect	Up to 3 credits are available based on the change in ecological value.		3	1
LE 05	Long Term Ecology Management and Maintenance					
	Pre-requisite: Roles and Responsibilities, Implementation, Statutory Obligations	Ecologist	BREEAM Guidance Note GN34 BREEAM Ecological Risk Evaluation Checklist to be completed. Client or main contractor to confirm compliance is monitored against all relevant UK legislation relating to the ecology of the site. Roles and responsibilities to have been clearly defined. Site preparation and construction works to have been planned for and implemented at an early project stage. (if achieving via Route 2: at least 1 credit has been achieved for LE 04)			Y
	Planning, Liaison, Data, Monitoring and Review Management and Maintenance	Ecologist/ Landscape Architect	The project team liaising and collaborating with representative stakeholders have (a) monitored and reviewed the implementation of the measures and their effectiveness (b) develop and review management and maintenance solutions, actions or measures. Inclusion of a section on Ecological and Biodiversity as part of the tenant/ building owner information.		1	1
	Landscape and Ecology Management Plan Development	Ecologist/ Main Contractor	5 year landscape and ecology management plan, to include actions and responsibilities for relevant individuals.		1	

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Name	Item	Responsibility	Comment/Action	Potential Additional	Available Credits	Targeted Credits
Pollution		Weighting:	0.080	0.67%	12	6
Pol 01	Impact of Refrigerants					
	Pre-requisite: All systems comply with BS EN 378:2008 & Institute of Refrigeration Ammonia Refrigeration Systems Code of Practice.		All systems (with electric compressors) must comply with the requirements of BS EN 378:2008 (parts 2 & 3) and where refrigeration systems containing ammonia are installed, the Institute of Refrigeration Ammonia Refrigeration Systems Code of Practice.		N/A	N
	Impact of Refrigerant	Futureserv	It is assumed that the building does not require any cooling OR: - The refrigerants specified will achieve Direct Effect Life Cycle CO2 equivalent emissions of 100kgCO2e/kW cooling capacity or less OR - The refrigerants have a Global warming potential <10		2	1
	Leak Detection	Futureserv	Not targeted as would required a refrigerant leak detection system	1	1	0
Pol 02	Local Air Quality					
	NOx, PM10 and VOC Emission of Heating Fuels		Not thought to be achievable as space heating provided by electric, NOx emissions for heating and hot water, and confirmation of whether the project is in a 'high pollution location' via DEFRA website.		2	0
Pol 03	Flood and Surface Water Management					
	Pre-requisite: Appropriate Consultant Engaged	Curtins	Appropriately qualified consultant is appointed		N/A	Y
	Flood Resilience	Curtins	1 credit targeted as site thought to be in a Medium or High flood risk zone		2	1
	Pre-requisite: Priority Levels are Followed to Create Bespoke Run-Off Solutions	Curtins	Surface water run-off design solutions must be bespoke i.e. must take account of the specific site requirements		N/A	Y
	Surface Water Run-Off: Rate	Curtins	Report/ letter/ micro drainage results should show that drainage measures are specified so that the peak rate of run-off from the site to the watercourses shows a 30% improvement for the developed site compared with the pre-developed site. This should comply with the 1 year and 100 year return periods. Calculations should include an allowance for climate change. Letter confirming that maintenance agreements for the ownership, long term operation and maintenance of all SUDS solutions are in place.		1	1
	Surface Water Run-Off: Volume	Curtins	Requires demonstration that flooding of property will not occur in the event of local drainage system failure AND drainage calcs for post-development run off volume		1	1
	Minimising Watercourse Pollution	Curtins	Would require no discharge from the developed site for rainfall up to 5mm, plus pollution prevention measures		1	0
Pol 04	Reduction of Night Time Light Pollution					
	Reduction of Potential Light Pollution	Futureserv / Main Contractor	External lighting drawings and specification, including confirmation regarding all external lighting switch off/ down level times.		1	1
Pol 05	Reduction of Noise Pollution					
	Reduction of Potential Noise Pollution	Acoustician/ Main Contractor	Background noise assessment and report by acoustician. Building services plant noise recommendations confirmed as implemented on letter from main contractor		1	1
Innovation		Maximum:	10	0.00%	10	1
Inn 01	Man 03 - Responsible Construction Practices - Responsible Construction Management	Main Contractor	Requires a score of 40 or more on the Considerate Constructors Scheme		1	1
	Hea 01 - Visual Comfort - Daylighting	N/A	Not targeted. Unlikely to be achievable		1	0
	Hea 02 - Indoor Air Quality - Emissions from Construction Products	N/A	Not targeted. Unlikely to be achievable		1	0
	Hea 06 - Security - Security Rating Scheme	N/A	Not targeted. Unlikely to be achievable		1	0
	Ene 01 - Reduction of Energy Use & Carbon Emissions - Beyond Zero Net Regulated Carbon or Carbon Negative	N/A	Not targeted. Not achievable		5	0
	Ene 01 - Reduction of Energy Use & Carbon Emissions - Post-occupancy Stage	N/A	Not targeted. Unlikely to be achievable		2	0



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	Wat 01 - Water Consumption - Reduction of 65+%	N/A	Not targeted. Unlikely to be achievable		1	0
	Mat 01 - Environmental Impacts - Core Building Services Option Appraisal	N/A	Not targeted. Unlikely to be achievable		1	0
	Mat 01 - Environmental Impacts - LCA and LCC Alignment	N/A	Not targeted. Unlikely to be achievable		1	0
	Mat 01 - Environmental Impacts - Third Party Verification	N/A	Not targeted. Not achievable without rainwater harvesting		1	0
	Mat 03 - Responsible Sourcing of Construction Products - Measuring Responsible Sourcing	N/A	Not targeted. Unlikely to be achievable		1	0
	Wst 01 - Construction Waste Management - Exceptional Resource Efficiency and Diversion from Landfill	N/A	Not targeted. Unlikely to be achievable		1	0
	Wst 02 - Use of Recycled and Sustainably Sourced Aggregates - Project Sustainable Aggregate Points	N/A	Not targeted. Not achievable		1	0
	Wst 05 - Adaptation to Climate Change - Responding to Climate Change	N/A	Not targeted. Unlikely to be achievable		1	0
	LE 02 - Identifying and Understanding the Risks and Opportunities for the Project	N/A	Not targeted. TBC by ecology report		1	0