



Consulting Engineers

BLOCKS 1-3 CRAMIC WAY, PORT TALBOT

BREEAM New Construction 2014: Commercial - Offices (Shell Only)
Design Stage Credit Tracker

17th January 2020/ Revision 2.0

Legacy: McCann Sustainability - McCann and Partners

Project Reference:	6176
Assessment Date:	13 th November 2014
Report Issue Date:	17 th January 2020
Revision:	2.0
BRE Reference:	BREEAM-0056-8451

Disclaimer: This report is made on behalf of McCann and Partners. By receiving this report and acting on it, the Client and/ or any third party relying on it, accepts that no individual is personally liable in contract, tort or breach of statutory duty (including negligence).

Copyright: Copyright exists on the McCann and Partners and BRE Global logos and these may not be used or reproduced for any purpose with out consent.



BREEAM 2014 New Construction: Commercial - Offices (Shell Only)

Performance Summary:

Required Score:	70.00	'Excellent'
Targeted Score:	75.58	'Excellent'
Current Score:	22.97	'Unclassified'

The project comprises the development of an office development upon land at Cramic Way in Port Talbot, which is required to achieve a BREEAM 'Excellent' rating.

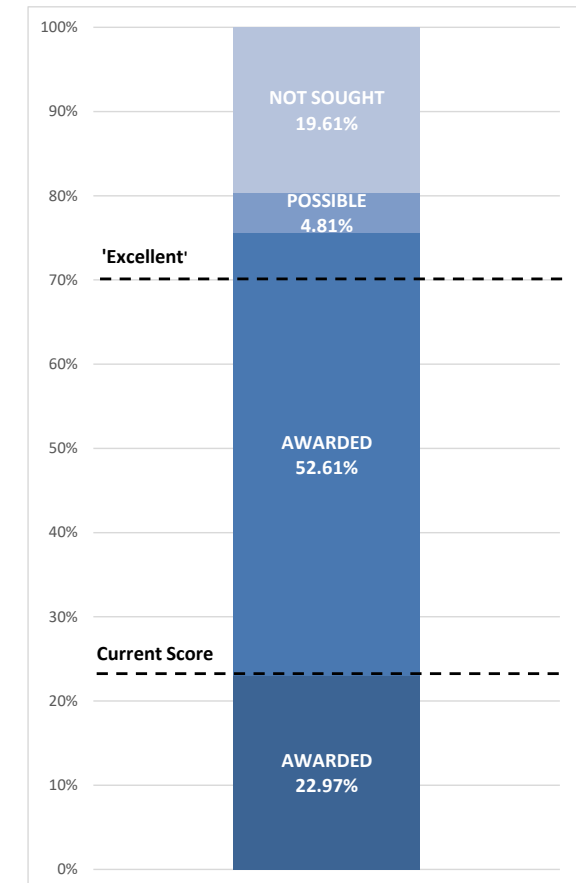
The design stage assessment is being conducted by Michael Davey (Legacy: McCann Sustainability - McCann and Partners), who is a licenced BREEAM Assessor and Sustainability Champion.

An 'Excellent' rating has been identified as being achievable with a predicted score of 75.58%, which is 5.58% above the 'Excellent' threshold. With this in mind, the development could achieve one, or a combination of, 'possible' credits depending on the outcome of information provided.

A score of 22.97% ('Unclassified') is currently being achieved.

Credit Summary:

SECTION	TOTAL CREDITS	WEIGHTING (%)	VALUE (%)	AWARDED	TARGETED	POSSIBLE	NOT SOUGHT
				SCORE (%)	SCORE (%)	SCORE (%)	SCORE (%)
Management	16	12.0	0.75	5.25	3.00	0.00	3.00
Health and Wellbeing	7	15.0	2.14	0.00	10.71	2.14	2.14
Energy	16	15.0	0.94	0.00	7.50	0.00	7.50
Transport	9	9.0	1.00	4.00	3.00	0.00	2.00
Water	2	7.0	3.50	0.00	7.00	0.00	0.00
Materials	13	13.5	1.04	2.08	7.27	0.00	4.15
Waste	8	8.5	1.06	5.31	2.13	0.00	1.06
Land Use and Ecology	10	10.0	1.00	3.00	6.00	1.00	0.00
Pollution	6	10.0	1.67	3.33	5.00	1.67	0.00
Innovation	10	10.0	1.00	0.00	1.00	0.00	14.00
Total	97	110.0	-	22.97	52.61	4.81	33.86



AWARDED	Credits that require no further evidence - information provided demonstrates compliance with the credit criteria
TARGETED	Credits that have been agreed - evidence to follow
POSSIBLE	Credits that require further investigation - some may have a risk, cost and/ or requirement for changes to the design associated with them
NOT SOUGHT	Credits that have been deemed unachievable
NOT APPLICABLE	Credits or criteria that are deemed not applicable to the scheme in question

DESIGN STAGE SUMMARY

CREDIT		
ID	TITLE	STATUS
Man 01	Consultation (Project Delivery)	
	Consultation (Third Party)	
	Sustainability Champion (Design)	
	Sustainability Champion (Monitoring)	
Man 02	Life Cycle Cost (LCC) - Elemental	
	LCC - Component	
	LCC - Capital Cost	
Man 03	Pre-requisite 1	
	Environmental Management	
	Sustainability Champion (Construction)	
	Considerate Constructors Scheme (CCS)	
	Pre-requisite 2	
	Utility Consumption	
	Transport	
	Innovation (CCS)	
Man 04	Testing Schedule	
	Services Testing	
	Thermographic Survey/ Air Tightness Test	
	Building User Guide	
Man 05	Aftercare	
	Seasonal Testing	
	Post Occupancy Evaluation	
	Innovation (Aftercare)	
Hea 01	Glare Control	
	Daylighting	
	View Out	
	Internal and External Lighting	
Hea 02	Innovation (Daylighting)	
	IAQP	
	Ventilation	
	VOC Specification	
	VOC Testing	
	Natural Ventilation	
Hea 03	Innovation (VOC Testing)	
	Containment Devices	
Hea 04	Containment Level	
	Thermal Model	
Hea 04	Climate Change Adaptability	
	Temperature Control	

CREDIT		
ID	TITLE	STATUS
Hea 05	Acoustics	
Hea 06	Safe Access	
	Security	
Ene 01	Energy Performance	
	Innovation	
Ene 02	Energy Metering	
	Area Metering	
Ene 03	External Lighting	
	Passive Design	
Ene 04	Free Cooling	
	LZC Technology	
Ene 05	Refrigeration Energy	
	Indirect Greenhouse Gas emissions	
Ene 06	Transportation Energy	
	Efficient Features	
Ene 07	Lab Specification	
	Lab Energy Efficiency	
Ene 08	Energy Efficient Equipment	
	Drying Space	
Tra 01	Public Transport	
	Local Amenities	
Tra 02	Cycle Storage	
	Cyclist Facilities	
Tra 03	Car Parking Capacity	
	Travel Plan	
Wat 01	Water Efficiency	
	Innovation	
Wat 02	Water Meter	
	Major Leak Detection	
Wat 03	Flow Control	
	Unregulated Water	
Mat 01	Materials Specification	
	Innovation	
Mat 02	Hard Landscaping/ Boundary Protection	
	Pre-requisite	
Mat 03	Procurement Plan	
	Responsible Sourcing	
Mat 04	Innovation	
	Insulation	

CREDIT		
ID	TITLE	STATUS
Mat 05	Designing for Robustness and Resilience	
Mat 06	Material Efficiency	
Wst 01	Construction Waste Management	
	Diverting from Landfill	
Wst 02	Innovation	
	Recycled Aggregates	
Wst 03	Operational Waste	
Wst 04	Floor/ Ceiling Finishes	
Wst 05	Adaptation to Climate Change	
	Innovation	
Wst 06	Functional Adaptability	
LE 01	Previously Developed	
	Contaminated Land	
LE 02	Ecological Value of Site	
	Ecological Protection	
LE 03	Minimising Ecological Impact	
LE 04	Ecologist's Recommendations	
LE 05	Increase in Ecological Value	
	Long Term Impact on Biodiversity	
Pol 01	Refrigerant Impact	
Pol 02	NOx Emissions	
Pol 03	Flood Risk	
	Peak Rate Reduction	
	Discharge Limitation	
Pol 04	Watercourse Pollution	
	Night Time Light Pollution	
Pol 05	Noise Attenuation	

	Awarded
	Targeted/ Possible
	Further Evidence Required
	Not Sought
	Not applicable

MANAGEMENT									
Man 01	Project Brief and Design	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Stakeholder Consultation (Project Delivery)	Project delivery stakeholders have met to identify and define their roles, responsibilities and contributions for each of the key phases of project delivery (must be before RIBA Stage 2)	All	1	0.75		1			
	Project delivery stakeholders and outcomes of the consultation process have influenced or changes the initial Project Brief (including the Project Execution Plan, Communication Strategy and the Concept Design, where applicable)	Downs Merrifield Architects							
Credit 2 - Stakeholder Consultation (Third Party)	All relevant third parties have been consulted with on the minimum consultation content (prior to the end of the Concept Design Stage, RIBA Stage 2)	-	1	0.75				1	
	The project demonstrates how consultation has influenced the Initial Project Brief and Concept Design								
	Consultation feedback has been provided (prior to the end of the Technical Design Stage, RIBA Stage 4)								
Credit 3 - Sustainability Champion (Design)	A sustainability champion has been appointed during the preparation and brief stage (RIBA Stage 1)	McCanns (Legacy)	1	0.75		1			Role ongoing - will be awarded in full on completion of the design stage assessment
	The BREEAM performance target has been contractually agreed between the client and design team (no later than the Concept Design Stage)								
	Completed design stage BREEAM report								
Credit 4 - Sustainability Champion (Monitoring Progress)	Credit 3 has been achieved	McCanns (Legacy)	1	0.75		1			As above
	A sustainability champion has been appointed to monitor progress against the BREEAM target throughout the design process and progress is formally reported throughout each stage								
Man 02	Life Cycle Cost and Service Life Planning	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credits 1 and 2 - Elemental Life Cycle Costs (LCC)	Elemental Life Cycle Cost (LCC) has been carried out at RIBA Stage 2 together with any design option appraisals in line with 'Standardised Method of Life Cycle Costing for Construction Procurement' PD 156865: 2008	-	2	1.50				1	
	The LCC analysis shows an outline LCC plan based on the buildings basic structure and envelope over the 20, 30, 50+ years								
	The LCC analysis shows the fabric and servicing strategy outlining services components and fit-out options over a 15 year period, in the form of an 'Elemental LCC Plan'								
Credit 3 - Component Level LCC Plan	LCC Plan developed at the end of RIBA Stage 4 in line with PD 156865: 2008 and covers the required component types	-	1	0.75				1	
	Examples have been provided demonstrating how the component level LCC plan has been used to influence building and systems design/ specification								
Credit 4 - Capital Cost Reporting	The predicted capital cost for the building in pounds per square metre (£/m ²) is reported	Roger North Long and Partners	1	0.75		1			

BREEAM New Construction 2014: Commercial - Offices (Shell Only)
Blocks 1 to 3 Cramic Way, Port Talbot

Ref: 5917

Man 03	Responsible Construction Practices	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Pre-requisite	All site timber is sourced in accordance with the UK Government's Timber Procurement Policy	-	Pre-requisite						
Credit 1 - Environmental Management	Principal contractor is ISO 14001 certified or equivalent OR	-	1	0.75	1				n/a
	Have a structure in accordance with BS 8555: 2003 and has reached phase four of the implementation stage, 'implementation and operation of the environment management system', and has completed phase audits 1-4, as defined in BS 8555	n/a							
	Best practice pollution prevention policies and procedures in accordance with PPG6 (Working at Construction and Demolition Sites) are implemented	-							
Credit 2 - Sustainability Champion (Construction)	A sustainability champion has been appointed to monitor progress against the BREEAM target throughout the construction, handover and close out stages	-	1	0.75				1	Can be revisited is further credits are required
	The required BREEAM rating is a contractual requirement on the contractor								
	Completed post construction BREEAM report								
Credits 3 and 4 - Considerate Construction	The contractor uses a recognised considerate construction scheme and performance against the scheme is confirmed by independent assessment and verification: 1 Credit: CCS score ≥25-34 with at least 5 points awarded in each section; 2 Credits: CCS score ≥35-39 with at least 7 points awarded in each section	-	2	1.50	2				
Pre-requisite	Responsibility has been assigned to an individual (with appropriate authority and responsibility) for monitoring, recording and reporting energy use, water consumption and transport data resulting from on-site construction process (and off-site where possible)	-	Pre-requisite						
Credit 5 - Utility Consumption	Monitor and record energy consumption in kWh and litres of fuel (where applicable) as a result of construction activities and site accommodation	-	1	0.75	1				
	Report total carbon dioxide emissions (total kgCO ₂ / project value)								
	Monitor and record potable water consumption in m ³ as a result of construction activities and site accommodation								
	Report total net water consumption (m ³)								
Credit 6 - Transport of Construction Materials and Waste	Monitor and record transport movements and impacts resulting from the delivery of construction materials to and construction waste from site	-	1	0.75	1				
	Report (for materials and waste separately) total fuel consumption (litres) and total carbon dioxide emissions (kgCO ₂ eq) and total distance travelled (km)								

Minimum Standard Check - Credit 1: Timber requirement must be met for 'ANY' rating	
Minimum Standard Check - Credits 3 and 4: One credit required for 'EXCELLENT' rating	
Minimum Standard Check - Credits 3 and 4: Two credits required for 'OUTSTANDING' rating	Note: Scheme currently targeting 'Excellent'

Man 04	Commissioning and Handover	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Testing and Inspecting Building Fabric	Building fabric integrity is assessed via a thermographic survey and/ air tightness testing and inspection	-	1	0.75	1				
	Any defects are rectified prior to building handover and close out								
Credit 2 - Handover	A building user guide is developed prior to handover	-	1	0.75	1				
	A compliant training schedule is developed (covering the required content)								

Minimum Standard Check - Credit 4 (Building User Guide) required for 'EXCELLENT' and 'OUTSTANDING' ratings	
--	--

TOTAL CREDITS	16	-	7	4	0	4
SCORE EQUIVALENT (%)	12.00	-	5.25	3.00	0.00	3.00

HEALTH AND WELLBEING									
Hea 01	Visual Comfort	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Daylighting	The applicable daylighting criteria has been met (average daylight factor of 2% for at least 80% of the floor area) in all occupied areas AND	McCanns (MEP)	1	2.14		1			
	A uniformity ratio of at least 0.3 or a minimum point factor of at least 0.3 times the average daylight factor above OR								
	At least 80% of the room has a view of sky from desk height (0.7m) AND the room depth criterion is satisfied								
	Alternatively: The average and minimum daylight illuminance criteria have been met (an average illuminance of 300 lux for 2,000 hours per annum and a minimum illuminance of at least 90 lux for 2,000 hours per annum) for at least 80% of the floor area)								
Credit 2 - View Out	95% of floor space in relevant building areas is within 7m of a wall within window/ permanent opening providing an adequate view out	Downs Merrifield Architects	1	2.14		1			
	The window or permanent opening is >20% of the surrounding wall area								
Credit 3 - External Lighting and Controls	External lighting is designed in accordance with BS5489-1: 2013 Lighting of Roads and Public Amenity Areas and BS EN 12464-2: 2014: Light and Lighting - Lighting of Workplaces - Part 2: Outdoor Work Places	McCanns (MEP)	1	2.14		1			
Hea 02	Indoor Air Quality	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Potential for Natural Ventilation	Occupied spaces are designed to provide fresh air through a natural ventilation strategy	Downs Merrifield Architects	1	2.14			1		To be investigated further
	Natural ventilation strategy provides two levels of user control								
Hea 05	Acoustic Performance	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Indoor Ambient Noise	Indoor ambient noise levels in accordance with Section 7 of BS 8233: 2014 are achieved	Acoustician (TBC)	1	2.14		1			Contractor responsible for appointment
Hea 06	Safety and Security	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Safe Access	Cycle lanes are provided and are designed to Department of Transport/ National Cycle Network requirements and connect to off-site routes (where applicable)	-	1	2.14				1	
	Cycle lanes provide direct access to cycle storage facilities								
	Footpaths provide direct access to site and connect to off site pedestrian footpaths								
	Where provided, drop off areas designed next to access road and give direct access to pedestrian footpaths								
	Pedestrian crossings of vehicle roads are provided at pavement level								
	For large developments, signposting provided								
	Lighting of access roads, pathways and cycleways meets levels set out in BS5489-1: 2013								
	Delivery areas are not accessed through parking								
	Separate parking/ waiting area provided for goods vehicles away from delivery area								
	Parking/ turning areas designed for simple manoeuvring								
Credit 2 - Security of Site and Building	Dedicated space for refuse skips/ pallets is away from delivery area	n/a							n/a
	Suitably Qualified Security Consultant (SQSC) conducts an evidence based Security Needs Assessment during/ prior to RIBA Stage 2	South Wales Police/ Downs Merrifield Architects	1	2.14		1			Security needs assessment
	SQSC provides recommendations/ solutions to ensure the design minimises crime/ fear of crime; threats/ issues identified in the SNA; the relevant security standards/ schemes are met during/ prior to RIBA Stage 2	-							
	SQSC completes a post construction site visit to confirm the implementation of their recommendations	McCanns (MEP)/ Downs Merrifield Architects							
TOTAL CREDITS			7	-	0	5	1	1	
SCORE EQUIVALENT (%)			15.00	-	0.00	10.71	2.14	2.14	

ENERGY									
Ene 01	Reduction of Energy Use and Carbon Emissions	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 to 12 - Energy Performance	Confirm likely carbon reduction of the building above Building Regulation Part L requirements using the Energy Performance Ratio for New Construction (EPR _{NC})	McCanns (MEP)	12	11.25		5		7	
Minimum Standard Check - Five credits required for 'EXCELLENT' rating									
Minimum Standard Check - Eight credits required for 'OUTSTANDING' rating			Note: Scheme currently targeting 'Excellent'						
Ene 03	External Lighting	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Energy Efficient Light Fittings	No external lighting (building mounted, signs or at entrances) OR	n/a	1	0.94		1			n/a
	Average initial luminous efficacy is no less than 60 luminaire lumens per circuit Watt								
	External light fittings controlled via time switch or daylight sensor AND presence detection in areas of intermittent pedestrian traffic	McCanns (MEP)							
Ene 04	Low Carbon Design	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Passive Design Analysis	First credit under Hea 04: Thermal Comfort has been achieved	McCanns (MEP)/ Downs Merrifield Architects	1	0.94		1			
	A building analysis has been undertaken to identify opportunities for the implementation of passive design solutions (before the end of RIBA Stage 2)								
	Passive design measures are used to reduce total heating, cooling, mechanical ventilation and lighting demand								
Credit 2 - Free Cooling	Credit 1 has been achieved	McCanns (MEP)	1	0.94		1			
	The above analysis includes an analysis of free cooling and identify opportunities for the implementation of a free cooling strategy								
	Building utilises a free cooling strategy								
Credit 3 - Low and Zero Carbon Technologies	Feasibility study (undertaken by an energy specialist) to identify most appropriate LZC technology (on/ near site) for the development (by close of RIBA Stage 2)	-	1	0.94				1	
	LZC technology (in accordance with the above) has been specified								
TOTAL CREDITS			16	-	0	8	0	8	
SCORE EQUIVALENT (%)			15.00	-	0.00	7.50	0.00	7.50	

TRANSPORT									
Tra 01	Public Transport Accessibility	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credits 1 to 3 - Proximity to Public Transport	Awarded on the basis of the schemes Accessibility Index (AI) as follows: - 1 Credit: ≥ 2 - 2 Credits: ≥ 4 - 3 Credits: ≥ 8	-	3	3.00	2			1	
	Dedicated bus service provided at the start/ end of each shift/ day (only available when the AI is too low to score as per the above)	n/a							n/a
Tra 02	Proximity to Amenities	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credits 1 and 2 - Access to Local Facilities	Building is in close proximity (500m) of 3 (including 2 core) of the following amenities: - Food outlet (core); - Access to cash (core); - Outdoor space; - Access to recreation/ leisure facility (core); - Postal facility; - Community facility; - Pharmacy; - Child care facility or school	-	1	1.00	1				
Tra 03	Cycle Facilities	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credits 1 to 2 - Cycle Storage and Facilities	Compliant facilities will be provided as follows: - 1 to 200 users: 1 space for every 10 users; - 201 to 300 users: 1 space for every 15 users; - 301 to 400 users: 1 space for every 20 users; - 401+ users: 1 space for every 25 users	Downs Merrifield Architects/ McCanns (MEP)	1	1.00		1			
	Credit 1 has been achieved 2 of 4 compliant facilities provided as follows: - Showers: 1 for every 10 cycle racks; - Changing facilities: Adequate space, seating, facilities to hang clothes etc.; - Lockers: Equal to the amount of cycle racks provided; - Drying space: Space with adequate heating/ ventilation	-	1	1.00				1	
Tra 04	Maximum Car Parking Capacity	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Reducing Emissions and Promoting Public Transport	Number of car parking spaces meet the BREEAM criteria, where the AI is <4 (refer to Tra 01): - 1 Credit: 1 space per 3 building users; - 2 Credits: 1 space per 4 building users	Downs Merrifield Architects	2	2.00		2			
Tra 05	Travel Plan	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Provision of Suitable Transport Options	Travel plan developed as part of the feasibility and design stage	-	1	1.00	1				
	Travel plan structured to meeting the needs to the site and addresses BREEAM requirements (through the use of a site specific travel assessment/ statement)								
	Range of measures implemented in the building aimed at reducing car based travel								
	Occupant confirms they will implement the travel plan (where the occupier is known)	n/a							n/a

TOTAL CREDITS	9	-	4	3	0	2
SCORE EQUIVALENT (%)	9.00	-	4.00	3.00	0.00	2.00

WATER									
Wat 02	Water Monitoring	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Potable Water Consumption Monitoring	Specification of a water metering on incoming mains	McCanns (MEP)	1	3.50		1			
	Where areas consume >10% sub-meters must be fitted (or have integral metering)								
	Meters must be able to connect to a BMS or to a site wide existing BMS								
Minimum Standard Check - Water meter must be fitted to achieve a 'GOOD' and 'ABOVE'									
Wat 03	Water Leak Detection and Prevention	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Leak Detection	Leak detection system fitted to mains water supply	McCanns (MEP)	1	3.50		1			
	Leak detection system meets specific credit requirements								
TOTAL CREDITS			2	-	0	2	0	0	
SCORE EQUIVALENT (%)			7.00	-	0.00	7.00	0.00	0.00	

MATERIALS									
Mat 01	Life Cycle Impacts	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 to 6 - Construction Material Impact	Credits awarded on green guide rating of the applicable major building elements	Downs Merrifield Architects	5	5.19		4		1	
Mat 02	Hard Landscaping and Boundary Protection	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Construction Material Impact	Where at least 80% of all external hard landscaping and boundary protection is 'A+' and/or 'A' rated	Downs Merrifield Architects	1	1.04		1			
Mat 03	Responsible Sourcing of Materials	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Mandatory	Confirmation that all timber used on the project is legally harvested and traded timber	-	Mandatory						
Credit 1 - Sustainable Procurement Plan	Principal contractor sources materials in accordance with a sustainable procurement plan	-	1	1.04	1				
Credits 2 to 4 - Responsible Sourcing	Credits are awarded dependent upon how they have been sourced	-	3	3.12				3	Can be revisited is further credits are required
Minimum Standard Check - Timber requirement must be met for 'ANY' rating									
Mat 04	Insulation	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Pre-requisite	Any new insulation specified for use within the external walls, ground floor, roof or building services must be assessed	Downs Merrifield Architects/ McCanns (MEP)	Pre-requisite						
Credit 1 - Embodied Impact	Embodied impact of the insulation is assessed and the Insulation Index for the building is ≥2.5		1	1.04		1			
Mat 05	Designing for Durability and Resilience	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Ensuring Material Longevity	Areas of building identified where vehicular, trolley and pedestrian movement occurs and the design incorporates suitable durability and protection measures. Relevant building elements incorporate appropriate design specification measures to limit material degradation due to environmental factors	Downs Merrifield Architects	1	1.04		1			
Mat 06	Material Efficiency	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Minimise Material Use and Waste	Opportunities have been identified and appropriate measures investigated and implemented to minimise the use of materials in building design, procurement, construction, maintenance and end of life for the end of RIBA Stages 1, 2, 3, 4 and 6	-	1	1.04	1				
TOTAL CREDITS			13	-	2	7	0	4	
SCORE EQUIVALENT (%)			13.50	-	2.08	7.27	0.00	4.15	

WASTE									
Wst 01	Construction Waste Management	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credits 1 to 3 - Construction Resource Efficiency	Where a Resource Management Plan (RMP) has been developed covering the non-hazardous waste related to on-site construction and dedicated off-site manufacture or fabrication (including demolition and excavation waste) generated by the building's design and construction	-	3	3.19	2			1	
	Where construction waste related to on-site construction and dedicated off-site manufacture/ fabrication meets the required benchmarks								
	A pre-demolition audit should be undertaken to identify key refurbishment/ demolition materials and any potential applications for reuse and recycling (where applicable)								
Credit 4 - Diversion of Resources from Landfill	Buildings construction meets or exceeds the diversion from landfill targets set out of demolition and non-demolition waste	-	1	1.06	1				
	Waste materials are sorted into separate waste groups either on or off site								
Minimum Standard Check - One credit required for 'OUTSTANDING' rating			Note: Scheme currently targeting 'Excellent'						
Wst 02	Recycled Aggregates	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Reducing Demand for Virgin Material	Total amount of recycled/ secondary aggregate is greater than 25% of the total high-grade aggregate specified for the building.	-	1	1.06	1				
	Individual aggregated uses (e.g. structural frame, floor slabs, pipe bedding etc.) meets an established recycled content								
	Aggregates are obtained on site or from a non-construction post-consumer industrial by-product source								
Wst 03	Operational Waste	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Diversion of Operational Waste from Landfill	Dedicated, adequately sized space provided to cater for recyclable wastes	Downs Merrifield Architects	1	1.06		1			
	Dedicated space is labelled, accessible to occupants and collections and is of an appropriate capacity								
	Where consistent generation of waste is likely to be produced appropriate facilities are provided for (e.g. compactor, baler, composting vessels, composting storage)	n/a						n/a	
Minimum Standard Check - One credit required for 'EXCELLENT' and 'ABOVE'									
Wst 05	Adaptation to Climate Change	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Withstanding Extreme Weather	A climate change adaptation strategy appraisal for structural and fabric resilience is completed (by the end of RIBA Stage 2) in accordance with BREEAM requirements	-	1	1.06	1				
Wst 06	Functional Adaptability	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Accommodation of Future Changes	A building specific functional adaptation strategy appraisal should be undertaken (by the end of RIBA Stage 2) in accordance with BREEAM requirements	Downs Merrifield Architects/ McCanns (MEP)	1	1.06		1			
	Functional adaptation measures have been implemented in accordance with the above (where practical and cost-effective) by RIBA Stage 4 (omissions must be justified in writing)								
TOTAL CREDITS				8	-	5	2	0	1
SCORE EQUIVALENT (%)				8.50	-	5.31	2.13	0.00	1.06

LAND USE AND ECOLOGY									
LE 01	Site Selection	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Previously Occupied Land	At least 75% of development footprint is on previously developed land	-	1	A+C235	1				
Credit 2 - Contaminated Land	Site is deemed to be significantly contaminated and appropriate investigation has been undertaken	-	1	1.00		1			
	Client/ contractor confirms remediation has been undertaken in line with remediation strategy	RH Properties							Site investigation report
LE 02	Ecological Value of the Site and Protection of Ecological Features	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Ecological Value of Site	Land in the construction zone is of low ecological value (either defined by a Suitably Qualified Ecologist or through the use of Table 52 within the manual)	-	1	1.00	1				
Credit 2 - Protection of Ecological Features	Existing features of ecological value surrounding the construction zone and site boundary are adequately protected in line with BS42020: 2013	Wildwood Ecology	1	1.00		1			Completed Appendix F checklist
	Ecological protection measures are provided prior to construction starting								
LE 03	Minimising Impact on Existing Site Ecology	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credits 1 to 2 - Protection of Existing Ecology	Credits awarded based on change in ecological value of site: 1 Credit: -9 to <0 plant species; 2 Credits: ≥0 plant species	Wildwood Ecology/ Downs Merrifield Architects	2	2.00		2			
Minimum Standard Check - One credit required for 'VERY GOOD' and 'ABOVE'									
LE 04	Enhancing Site Ecology	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Ecologist's Report and Recommendations	Suitably Qualified Ecologist appointed by the end of RIBA Stage 1	-	1	1.00	1				
	General recommendations of the Ecologist are implemented	-							
Credit 2 - Increase in Ecological Value	Credit 1 has been achieved	-	1	1.00			1		
	The recommendations of ecological enhancement are implemented and the SQE confirms this will lead to an increase of ≥6 plant species	Wildwood Ecology/ Downs Merrifield Architects							To be investigated further
LE 05	Long Term Impact on Biodiversity	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credits 1 to 2 - Long Term Landscape and Habitat Management	SQE has been appointed prior to commencement of site activities	-							
	SQE confirms that all relevant legislation has been complied with during design and construction	Wildwood Ecology							
	A Landscape and Habitat Management plan has been produced (in accordance with BS 42020: 2013 Section 11.1)		2	2.00		2			
	Principal contractor nominates a biodiversity champion	-							
	Training on protection of ecology provided to site staff	-							
	Measures taken to protect ecology are recorded	-							
	New, ecological valuable, habitat created	n/a							
	The Contractor programmes site works to minimise disturbance to wildlife	-							
TOTAL CREDITS			10	-	3	6	1	0	
SCORE EQUIVALENT (%)			10.00	-	3.00	6.00	1.00	0.00	

POLLUTION									
Pol 03	Surface Water Run-off	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 and 2 - Flood Risk	2 Credits if low flood risk OR	-	2	3.33	2				
	1 Credit if medium/ high flood risk (and not in a functional flood plain; ground level and site access at least 600mm above design flood level OR appropriate consultant informs the design in accordance with BS8533: 2011, Section 5)	n/a							n/a
Pre-requisite	Appropriate Consultant appointed to assess following three credits	Austin Partnership	Pre-requisite						
Credit 3 - SW Runoff (Peak Rate Reduction)	Where peak rate of run off from site to watercourses is no greater for the developed site than the pre-developed site. This should be for 1 year and 100 year return periods (allowance for climate change must be included)	Austin Partnership	1	1.67		1			
	Relevant maintenance agreements for the ownership, long term operation and maintenance of all SUDS in place								
Credit 4 - SW Runoff (Discharge Limitation)	Flooding of property will not occur in the event of a local drainage system failure AND EITHER	Austin Partnership	1	1.67		1			
	- Post development run-off volume over development lifetime is no greater than it would have been prior to the assessed site's development for the 100 year 6 hour event;	n/a							n/a
	- And additional run-off for the 100 year, 6 hour return event must be prevented from leaving the site by infiltration or other SUDS techniques OR								
	- Justification provided by consultant stating why above criteria cannot be met;								
	- Post development run-off is reduced to a limited discharge								
	Relevant maintenance agreements for the ownership, long term operation and maintenance of all SUDS in place	Austin Partnership							
Credit 5 - Minimising Watercourse Pollution	All calculations required to include an allowance for climate change								
	Appropriate Consultant confirms that there is no discharge from site for rainfall up to 5mm	Austin Partnership	1	1.67			1		To be investigated further
	SUDS has been specified for relatively low risk areas								
	Oil/ petrol interceptors specified for areas where high risk of contamination/ spillage of hydrocarbons								As above
	Water pollution prevention systems designed in line with PPG3 and the SUDS manual								
	Drainage plan will be provided to occupants upon completion								
	Shut off valves provided where chemical/ liquid gas storage areas provided	n/a							n/a
	Relevant maintenance agreements for the ownership, long term operation and maintenance of all SUDS in place	Austin Partnership							As above
	External storage and delivery areas to be designed in accordance with current best practice planning guidance	n/a							n/a
Pol 04	Reduction of Night Time Pollution	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
Credit 1 - Reducing Energy Consumption and Nuisance	Where external lighting has been designed out without adversely affecting safety and security of the site and its users OR	n/a	1	1.67		1			n/a
	External lighting complies with Table 2 of the ILP Guidance Notes for the Reduction Obtrusive Light, 2011	McCanns (MEP)							
	External lighting can be switched off between 2300hrs and 0700hrs via a timer								
	Safety and Security lighting used between 2300 and 0700 hrs meets with lower levels of lighting set out in the ILE guidance note (e.g. by use of automatic switch to reduce lighting levels)								
	Illuminated advertisements must comply with ILE technical report 5	n/a							
TOTAL CREDITS			6	-	2	3	1	0	
SCORE EQUIVALENT (%)			10.00	-	3.33	5.00	1.67	0.00	

INNOVATION									
Man 03	Responsible Construction Practices	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	CCS Score ≥40 with at least 7 points awarded in each section	-	1	1.00				1	
Hea 01	Visual Comfort	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	The applicable daylighting criteria has been met (average daylight factor of 3% for at least 80% of the floor area) in all occupied areas	McCanns (MEP)	1	1.00		1			
	Where used, a minimum point factor of 1.2% OR 2.1% for spaces with glazed roofs	n/a							n/a
	Alternatively: The average and minimum daylight illuminance criteria have been met (an average illuminance of 300 lux for 2,650 hours per annum and a minimum illuminance of at least 90 lux for 2,650 hours per annum) for at least 80% of the floor area								
Hea 02	Indoor Air Quality	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	Of the 7 remaining product categories in Table 18, the VOC emission requirements are met	-	1	1.00				1	
	Measured formaldehyde emissions are ≤0.06mg/m ³								
EXEMPLARY	Of the 7 remaining product categories in Table 18 (where present), the VOC emission requirements are met	-	1	1.00				1	
	Measured formaldehyde emissions are ≤0.01mg/m ³								
Ene 01	Reduction of CO ₂ emissions	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	5 Credits: Building is Carbon Negative	-	5	5.00				5	
EXEMPLARY	Up to 4 credits: EPR _{NC} ≥0.9 and zero net regulated CO ₂ emissions achieved AND								
	Regulated operations energy consumption provided by carbon neutral on/ near site sources and used to meet demand from unregulated systems/ processes								
Mat 01	Life Cycle Impacts	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	Where a high proportion of materials are 'A+' and/ or 'A' rated (elemental approach)	-	1	1.00				1	
EXEMPLARY	Where the environmental impact of the building is measured using an IMPACT compliant software tool	-	2	2.00				2	
Mat 03	Responsible Sourcing of Materials	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	Where 70% of the available responsible sourcing points have been achieved.	-	1	1.00				1	
Wst 01	Construction Waste Management	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	Scheme achieves highest level of performance for resource efficiency and diversion from landfill	-	1	1.00				1	
Wst 02	Recycled Aggregates	Responsibility	Credits	Value (%)	Awarded	Targeted	Possible	Not Sought	Comments
EXEMPLARY	Total amount of recycled/ secondary aggregate is greater than 35% of the total high-grade aggregate specified for the building	-	1	1.00				1	
	Individual aggregated uses meets all the exemplary recycled content								
TOTAL CREDITS			10	-	0	1	0	14	
SCORE EQUIVALENT (%)			10.00	-	0.00	1.00	0.00	14.00	
OVERALL SCORE (%)			110.00	-	22.97	52.61	4.81	33.86	
PREDICTED SCORE (%)			75.58	'Excellent'					
CURRENT SCORE (%)			22.97	'Unclassified'					

The logo consists of a dark blue square with a rounded top-right corner. Inside the square, the text "McCann" is written in a large, bold, white sans-serif font, and "and partners" is written in a smaller, white sans-serif font directly below it.

McCann
and partners

Consulting Engineers

Cardiff Office:

Faraday House
Terra Nova Way
Penarth Marina
Cardiff
CF64 1SA

Tel: 029 2035 2450

Email: office@mccannp.com

mccannp.com