

APPENDIX 9

ENVIRONMENTAL ASSESSMENT GUIDE

A Strategy for "Excellent".





This guidance is based on the BREEAM Education 2008 environmental assessment method which awards credits in nine categories according to performance, with a tenth category providing additional credits and incentive for innovative design strategies. The awarded credits are then added together to produce an overall score on a scale of Pass, Good, Very Good, Excellent and Outstanding.

The guidance has been prepared by the Department of Education (DE) with the aim of providing design teams, consultants, contractors etc with a development strategy to achieve a BREEAM rating of Excellent for the design and construction of new build and Very Good for extend and refurbishment. (Primary Schools only)

At the outset of Stage C, once the design team have established their specific BREEAM strategy, it is recommended discussions take place with DE to confirm their project specific BREEAM target.

DE will require a copy of the BREEAM pre-assessment estimate report as part of any RIBA Stage C and D submission. Copies of the interim (design stage) and final (post-construction) BREEAM certificates will also be required when completed.

For Primary Schools in Northern Ireland the assessment categories provide a potential 132 credits (including 9 Innovation credits). Each category and the individual credits have been assessed by DE on the basis of achievability with the following outcome :-

<p>LEVEL 1 DE REQUIRED CREDITS 72 CREDITS AVAILABLE</p>		<p>These credits are available to all projects irrespective of size or location. Design teams, consultants, contractors etc will be expected to pursue/achieve these credits or provide DE with comment at RIBA Stage C and D explaining why they will not be achieved.</p>
<p>LEVEL 2 SITE SPECIFIC CREDITS 11 CREDITS AVAILABLE</p>		<p>These credits are site specific and cannot be assumed on all projects, however DE will expect them to be pursued/achieved where appropriate.</p>
<p>LEVEL 3a ENHANCED DESIGN CREDITS 13 CREDITS AVAILABLE</p>		<p>These credits should be available to most projects but require a design enhancement which may exceed DE cost targets and guidelines. These credits should be cost effective but will be reviewed by DE on a project by project basis to ensure value for money is being achieved.</p>
<p>LEVEL 3b ENHANCED DESIGN CREDITS 36 CREDITS AVAILABLE</p>		<p>These credits are the most difficult to achieve in terms of procedure, design, verification data and potential impact on DE cost targets. However careful selection can ensure a cost effective "excellent" rating remains achievable, DE will again review on a project by project basis.</p>

PROJECTS MUST MAXIMISE LEVEL 1, 2 & 3a CREDITS BEFORE EXPLORING LEVEL 3b CREDITS

The categorisation of credits relevant to the BREEAM Assessment tool is shown in the CREDIT SCORING MATRIX - TABLES 1-10 overleaf.

The CREDIT SCORING MATRIX identifies the BREEAM category and specific area for assessment together with the credits available, a short instruction on the relevant requirements (refer to BREEAM Assessment Tool for full Guidance), and category status for the credit.

The table below shows the allocation of all 132 credits across all 10Nr. BREEAM sections identified category specific.

BREEAM SCORING MATRIX	BREEAM ENVIRONMENTAL WEIGHTING	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS	TOTAL CREDITS
		LEVEL 1	LEVEL 2	LEVEL 3a	LEVEL 3b	
MANAGEMENT	12%	17	0	0	3	20
HEALTH & WELLBEING	15%	11	0	5	0	16
ENERGY	19%	11	0	1	11	23
TRANSPORT	8%	4	4	1	0	9
WATER	6%	7	0	0	1	8
MATERIALS	12.5%	7	2	0	6	15
WASTE	7.5%	3	0	3	1	7
LAND USE & ECOLOGY	10%	7	1	2	2	12
POLLUTION	10%	4	4	1	4	13
INNOVATION		1	0	0	8	9
TOTAL CREDITS		72	11	13	36	132
POTENTIAL BREEAM RATING		>58%	>65%	>75%		
		VERY GOOD	VERY GOOD	EXCELLENT		

NOTE

The POTENTIAL BREEAM RATING shown below the TOTAL CREDITS row indicates that the DE REQUIRED 72No. credits would achieve a BREEAM score of greater than 58%. If this is added to the maximum SITE SPECIFIC 11No. credits then a BREEAM score of greater than 65% is possible. If this is added to the maximum DESIGN (3a) 13No. credits then a BREEAM score of greater than 75% is possible.

CREDIT SCORING MATRIX - TABLE 1

MANAGEMENT		BREEAM ENVIRONMENTAL WEIGHTING - 12%					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER		
BREEAM REF	SECTIONS	AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS									
MAN 1	COMMISSIONING	2	1				M1	Identify Project Personnel to Monitor Commissioning.			Be Aware	Action	Commitment		
			1				M2	Seasonal commissioning for one year, post construction			Be Aware	Action	Commitment		
MAN 2	CONSIDERATE CONSTRUCTORS	2	1				M3	Contractor to comply with best practice site management principles eg Considerate Constructors Scheme score between 24 and 31.5			Be Aware	Be Aware	Commitment		
			1			1	M4	As above but with score between 32 and 35.5			Be Aware	Be Aware	Commitment		
MAN 3	CONSTRUCTION SITE IMPACTS	4	1				M5	Comply with 2 of 7 Breeam requirements			Be Aware	Be Aware	Commitment		
			1				M6	Comply with 4 of 7 Breeam Requirments			Be Aware	Be Aware	Commitment		
						1	M7	Comply with 6 of 7 Breeam Requirments			Be Aware	Be Aware	Commitment		
						1	M8	80% site timber responsibly sourced and 100% legally sourced			Be Aware	Be Aware	Commitment		
MAN 4	BUILDING USER GUIDE	1	1				M9	Commission a simple Building User Guide			Be Aware	Be Aware	Commitment		
MAN 5	SITE INVESTIGATION	1	1				M10	Carry out detailed site investigations of the selected site including - A. Topographical Survey B. Geotechnical Survey The following surveys are also required in relation to other credits - C. Site Acoustic Survey (ref POL8) D. Ecological Survey (ref LE3) E. Flood Risk Assessment Report (ref POL5)			Action	Action	Commitment		
MAN 6	CONSULTATION	2	1				M11	Relevant stakeholders to be involved in design process including feedback			Action	Action	Commitment		
			1				M12	Formal DQI process to be implemented using 3rd party DQI facilitator			Action	Action	Commitment		
MAN 7	SHARED FACILITIES	2	1				M13	Shared facilities provided as a consequence of feedback		Be Aware	Action	Action	Commitment		
			1				M14	Facilities can be accessed without compromise of safety and security		Be Aware	Action	Action	Commitment		
MAN 8	SECURITY	1	1				M15	Liaise with PSNI Architectural Liaison Officer and implement recommendations			Action	Action	Commitment		
MAN 9	PUBLICATION OF BUILDING INFO.	1	1				M16	Publication of enviromental performance			Be Aware	Be Aware	Commitment		
MAN 10	DEVELOPMENT AS A LEARNING RESOURCE	1	1				M17	The building/landscape design aids enviromental understanding in the school curriculum			Action	Action	Commitment		
MAN 11	EASE OF MAINTENANCE	1	1				M18	Demonstration that the specification has considered ease of maintenance in line with best practice		Be Aware	Action	Action	Commitment		
MAN 12	LIFE CYCLE COSTING	2	1				M19	Life Cycle Cost analysis based on Feasibility Study at a strategic and system level			Be Aware	Action	Commitment		
			1				M20	Demonstrate that results of the above study have been implemented in the project			Be Aware	Action	Commitment		
TOTALS		20	17	0	0	3	85.00%								

CREDIT SCORING MATRIX - TABLE 2

HEALTH & WELLBEING		BREEAM ENVIROMENTAL WEIGHTING - 15%					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER
BREEAM REF	SECTIONS	AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS							
HEA 1	DAYLIGHTING	1	1				H1	Demonstrate at least 80% floor area in each occupied space is adequately daylight	Be Aware	Action	Action	Commitment	
HEA 2	VIEW OUT	1	1				H2	Demonstrate all relevant building areas have an adequate view out	Be Aware	Action	Action	Commitment	
HEA 3	GLARE CONTROL	1	1				H3	Demonstrate an occupant controlled shading system is fitted in relevant building areas	Be Aware	Action	Action	Commitment	
HEA 4	HIGH FREQUENCY LIGHTING	1	1				H4	Demonstrate high frequency ballasts are installed on all fluorescent lights	Be Aware	Be Aware	Be Aware	Commitment	
HEA 5	INTERNAL & EXTERNAL LIGHTING LEVELS	1	1				H5	External and internal lighting illuminance levels to the current CIBSE Guidance	Be Aware	Be Aware	Be Aware	Commitment	
HEA 6	LIGHTING ZONES & CONTROLS	1	1				H6	Design for lighting to be appropriately zoned and controllable by occupants	Be Aware	Be Aware	Be Aware	Commitment	
HEA 7	POTENTIAL FOR NATURAL VENTILLATION	1			1		H7	Demonstrate fresh air is capable of being delivered to occupied spaces via a natural ventilation strategy	Be Aware	Action	Action	Commitment	
HEA 8	INDOOR AIR QUALITY	1			1		H8	Air intakes to avoid major sources of external pollution	Be Aware	Action	Action	Commitment	
HEA 9	VOLATILE ORGANIC COMPOUNDS	1	1				H9	Demonstrate emission of VOC's from key internal surfaces to comply with best practice levels	Be Aware	Action	Action	Commitment	
HEA 10	THERMAL COMFORT	1	1				H10	Demonstrate thermal comfort in occupied spaces assessed at design stage ensuring comfort in use	Be Aware	Be Aware	Action	Commitment	
HEA 11	THERMAL ZONING	1			1		H11	Demonstrate local occupant control of temperature adjustment in occupied spaces	Be Aware	Be Aware	Action	Commitment	
HEA 12	MICROBIAL CONTAMINATION	1	1				H12	Design demonstrates the risk of waterborne and airborne legionella contamination minimised	Be Aware	Be Aware	Action	Commitment	
HEA 13	ACOUSTIC PERFORMANCE	3	1				H13	Demonstrate compliance with BB93 recommendations for indoor ambient noise levels and reverberation times	Be Aware	Action	Action	Commitment	
					1		H14	Improvements on BB93 in the Multi-Purpose Hall - airborne insulation value 5db higher and impact insulation value 5db lower	Be Aware	Action	Action	Commitment	
					1		H15	Increased indoor ambient noise level during heavy rain does not exceed levels defined in Table 1.1 BB93 by < 20db	Be Aware	Action	Action	Commitment	
HEA 16	DRINKING WATER	1	1				H16	Demonstrate mains fed point of use water coolers provided	Be Aware	Action	Action	Commitment	
TOTAL		16	11	0	5	0							

68.75%

CREDIT SCORING MATRIX - TABLE 3

WASTE		BREEAM ENVIROMENTAL WEIGHTING - 7.5%					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER
BREEAM REF	SECTIONS	AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS							
WST1	CONSTRUCTION SITE WASTE MANAGEMENT	4	1				WS1	Demonstrate that the amount of non-Hazardous waste is the same as best practice	Be Aware	Action	Action	Commitment	
					1		WS2	Demonstrate that the amount of non-Hazardous waste is better than best practice - SEE BREEAM EXPLANATION NOTES	Be Aware	Action	Action	Commitment	
					1		WS3	Demonstrate that the amount of non-Hazardous waste is much better than best practice - SEE BREEAM EXPLANATION NOTES	Be Aware	Action	Action	Commitment	
						1	WS4	Demonstrate that significant amount of non-hazardous material will be diverted from landfill and re-used and/or recycled	Be Aware	Action	Action	Commitment	
WST2	RECYCLED AGGREGATES	1			1		WS5	Demonstrate that significant use of recycled or secondary aggregates in "high grade" building aggregate uses	Be Aware	Action	Action	Commitment	
WST3	RECYCLABLE WASTE	2	1				WS6	Provide a central dedicated space for storage of building recyclable waste streams	Be Aware	Action	Action	Commitment	
			1				WS7	Project must include school endorsed policies on the collection and recycling of consumables	Be Aware	Action	Action	Commitment	
	STORAGE												
TOTAL		7	3	0	3	1							

42.86%

CREDIT SCORING MATRIX - TABLE 4

ENERGY												BREEAM ENVIROMENTAL WEIGHTING - 19%				
BREEAM REF	SECTIONS	CREDIT SCORING MATRIX					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER			
		AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS										
ENE 1	REDUCTION IN CO2 EMISSIONS	15	6				E1-6	Demonstrate an improvement in energy efficiency of the building fabric, 6 Credits is the min. requirement for EXCELLENT Rating		Be Aware	Action	Action	Commitment			
							E7-15	Strategy for capturing additional credits to be included in RIBA Stage C submission to DE		Be Aware	Action	Action	Commitment			
ENE 2	SUB-METERING OF ENERGY USES	1	1				E16	Demonstrate provision of direct sub-metering of energy uses within the building		Be Aware	Action	Action	Commitment			
ENE 4	EXTERNAL LIGHTING	1	1				E17	Design includes energy-efficient external lighting and all light fittings controlled for the presence of daylight		Be Aware	Action	Action	Commitment			
ENE 5	LOW CARBON TECHNOLOGIES	3	1				E18	Demonstrate that a feasibility study considering local low or zero carbon technologies has been carried out and results implemented		Be Aware	Action	Action	Commitment			
							E19	The Strategy identified contributes to 10% CO2 Reduction		Be Aware	Action	Action	Commitment			
							E20	The Strategy identified contributes to 15% CO2 Reduction								
		1	1				E21	Analysis of transport demand and patterns to optimise lift design (not applicable to single storey construction)		Be Aware	Action	Action	Commitment			
ENE 8	LIFTS	1	1				E22	Lift design to include 3 of 4 energy saving features (not applicable to single storey construction)		Be Aware	Action	Action	Commitment			
ENE 10	FREE COOLING	1			1		E23	Free cooling strategy to replace mechanical cooling. Must be gained in tandem with H11 Thermal Zoning		Be Aware	Action	Action	Commitment			
TOTAL		23	11	0	1	11										

47.83%

CREDIT SCORING MATRIX - TABLE 5

TRANSPORT												BREEAM ENVIROMENTAL WEIGHTING - 8%				
BREEAM REF	SECTIONS	CREDIT SCORING MATRIX					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER			
		AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS										
TRA 1	PUBLIC TRANSPORT PROVISION	3		3			T1-3	Credits awarded on sliding scale based on accessibility to public transport	Be Aware	Be Aware	Action	Action	Commitment			
TRA 2	PROXIMITY TO AMENITIES	1		1			T4	Demonstrate accessibility to local amenities	Be Aware	Be Aware	Action	Action	Commitment			
TRA 3	CYCLIST PROVISION	2	1				T5	Covered secure and well-lit cycle storage facilities for all building users		Be Aware	Action	Action	Commitment			
					1		T6	Provide adequate changing and shower facilities for all users		Be Aware	Action	Action	Commitment			
TRA 4	PEDESTRIAN & CYCLE SAFETY	1	1				T7	Demonstrate site layout designed in accordance with best practice for safe pedestrian and cycle access		Be Aware	Action	Action	Commitment			
TRA 5	TRAVEL PLAN	1	1				T8	Demonstrate that a travel plan has been developed for specific needs of building users		Be Aware	Action	Action	Commitment			
TRA 8	DELIVERIES & MANOEUVRING	1	1				T9	Demonstrate best practice design of vehicle manoeuvring areas		Be Aware	Action	Action	Commitment			
TOTALS		9	4	4	1	0										

44.44%

CREDIT SCORING MATRIX - TABLE 6

WATER												BREEAM ENVIROMENTAL WEIGHTING - 6%				
BREEAM REF	SECTIONS	CREDIT SCORING MATRIX					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER			
		AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS										
WAT 1	WATER CONSUMPTION	3	1				W1	Potable water consumption of taps, urinals, WC's, showers etc to be equivalent to 4.5 - 5.5m ³ per person per year		Be Aware	Action	Action	Commitment			
			1				W2	Potable water consumption of taps, urinals, WC's, showers etc to be equivalent to 1.5 - 4.4m ³ per person per year		Be Aware	Action	Action	Commitment			
						1	W3	Potable water consumption of taps, urinals, WC's, showers etc to be less than 1.5m ³ per person per year		Be Aware	Action	Action	Commitment			
WAT 2	WATER METER	1	1				W4	Water meter with a pulsed output will be installed on the mains supply		Be Aware	Action	Action	Commitment			
WAT 3	MAJOR LEAK DETECTION	1	1				W5	Leak detection system is installed on the buildings water supply		Be Aware	Action	Action	Commitment			
WAT 4	SANITARY SUPPLY SHUT-OFF	1	1				W6	Proximity detection shut-off is provided to the water supply of all toilet areas		Be Aware	Action	Action	Commitment			
WAT 5	WATER RECYCLING	1	1				W7	Installation of rainwater harvesting system/greywater for WC and urinal flushing purposes		Be Aware	Action	Action	Commitment			
WAT 6	IRRIGATION SYSTEMS	1	1				W8	Low-water irrigation strategy/system or planting is irrigated via rainwater or re-claimed water		Be Aware	Action	Action	Commitment			
TOTALS		8	7	0	0	1										

87.50%

CREDIT SCORING MATRIX - TABLE 7

MATERIALS		BREEAM ENVIROMENTAL WEIGHTING - 12.5%					DE	ACTION REQUIRED (IN BRIEF)	RIBA STAGE	RIBA STAGE	RIBA STAGE	RIBA STAGE	RIBA STAGE
BREEAM REF	SECTIONS	AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS	Ref Nr		A INCEPTION	B FEASIBILITY	C CONCEPT	D SCHEME	F&G TENDER
MAT 1	MATERIALS SPECIFICATION (BUILDING ELEMENTS)	6	4				MT1-4	Design must demonstrate that specification includes BRE A rated materials for at least 2 major building elements	Be Aware	Action	Action	Commitment	
						1	MT5	Design must demonstrate that specification includes BRE A rated materials for at least 3 major building elements	Be Aware	Action	Action	Commitment	
						1	MT6	Design must demonstrate that specification includes BRE A rated materials for at least 4 major building elements	Be Aware	Action	Action	Commitment	
MAT 2	HARD LANDSCAPING	1				1	MT7	Demonstrate that 80% of the combined area of external hard landscaping and boundary protection specification achieves A or A+ rating	Be Aware	Action	Action	Commitment	
MAT 3	RE-USE OF BUILDING FACADE	1		1			MT8	Design must re-use 50% of existing facade by area or 80% by in-situ re-used materials	Be Aware	Be Aware	Action	Action	Commitment
MAT 4	RE-USE OF BUILDING STRUCTURE	1		1			MT9	Where at least 80% of the existing primary structure is reused or in refurbishment 50% is re-used	Be Aware	Be Aware	Action	Action	Commitment
MAT 5	RESPONSIBLE SOURCING OF MATERIALS	3	1				MT10	Evidence provided that 80% of materials have been sourced responsibly	Be Aware	Be Aware	Be Aware	Commitment	
						1	MT11	Additional credits dependant on level of custody demonstrated by the Contractor	Be Aware	Be Aware	Be Aware	Commitment	
						1	MT12	Additional credits dependant on level of custody demonstrated by the Contractor	Be aware	Be Aware	Be Aware	Commitment	
MAT 6	INSULATION	2	1				MT13	Insulation has low embodied impact relative to thermal properties as determined by the BRE Green Guide	Be Aware	Action	Action	Commitment	
						1	MT14	Demonstrate insulation products have been responsibly sourced	Be Aware	Action	Action	Commitment	
MAT 7	DESIGNING FOR ROBUSTNESS	1	1				MT15	Demonstrate that vulnerable parts of the building have adequate protection from pedestrian traffic, trolleys etc	Be Aware	Action	Action	Commitment	
TOTALS		15	7	2	0	6							

46.67%

CREDIT SCORING MATRIX - TABLE 8

LAND USE AND ECOLOGY		BREEAM ENVIROMENTAL WEIGHTING - 10%					DE	ACTION REQUIRED (IN BRIEF)	RIBA STAGE	RIBA STAGE	RIBA STAGE	RIBA STAGE	RIBA STAGE
BREEAM REF	SECTIONS	AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS	Ref Nr		A INCEPTION	B FEASIBILITY	C CONCEPT	D SCHEME	F&G TENDER
LE 1	RE-USE OF LAND	1		1			L1	Demonstrate the majority of the footprint of the development falls within the boundary of the previously developed land	Be Aware	Be Aware	Action	Action	Commitment
LE 2	CONTAMINATED LAND	1				1	L2	Demonstrate that ths site has been defined as contaminated and undergone appropriate remedial action	Be Aware	Action	Action	Commitment	
LE 3	ECOLOGICAL VALUE OF THE SITE AND PROTECTION OF FEATURES	1	1				L3	Demonstrate that the site is of low ecological value and those features deemed of ecological value are protected	Be Aware	Action	Action	Commitment	
LE 4	MITIGATING ECOLOGICAL IMPACT	2	1				L4	Demonstrate that the impact on the Ecology of the site is minimal	Be Aware	Action	Action	Commitment	
						1	L5	Demonstrate there is no negative change in ecological value of the site following development	Be Aware	Action	Action	Commitment	
LE 5	ENHANCING SITE ECOLOGY	3	1				L6	Appoint a qualified ecologist to advise on site ecology and implement an action plan based on recommendations	Be Aware	Action	Action	Commitment	
			1				L7	Demonstrate a positive increase on ecological value of the site by up to 5 species	Be Aware	Action	Action	Commitment	
						1	L8	Demonstrate a positive increase on ecological value of the site by 6 or more species	Be Aware	Action	Action	Commitment	
LE 6	LONG TERM IMPACT ON BIODIVERSITY	2	1				L9	Client must commit to mandatory Breeam requirements and at least 2 additional requirements regarding biodiversity	Be Aware	Action	Action	Commitment	
						1	L10	Client must commit to mandatory Breeam requirements and at least 4 additional requirements regarding biodiversity	Be Aware	Action	Action	Commitment	
LE 7	CONSULTATION WITH STUDENT AND STAFF	1	1				L11	Record consultation workshops with the students and staff and inform them how their ideas shaped the school	Be Aware	Action	Action	Commitment	
LE 8	LOCAL WILD LIFE PARTNERSHIP	1	1				L12	Provide evidence that the design team set up a partnership with a local wildlife group	Be Aware	Action	Action	Commitment	
TOTALS		12	7	1	2	2							

58.33%

CREDIT SCORING MATRIX - TABLE 9

POLLUTION		BREEAM ENVIROMENTAL WEIGHTING - 10%					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER
BREEAM REF	SECTIONS	AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS							
POL1	REFRIGERANT GWP BUILDING SERVICES	1	1				P1	Demonstrate that the use of refrigerants with GWP of less than 5 or no refrigerants at all are used		Be Aware	Action	Action	Commitment
POL2	PREVENTING REFRIG. LEAKS	1	1				P2	Demonstrate that refrigerant leaks can be detected or no refrigerants used in the project		Be Aware	Action	Action	Commitment
POL3	REFRIGERANT GWP COLD STORAGE	1				1	P3	Demonstrates the use of refrigerants within cold storage systems with a GWP of less than 5		Be Aware	Action	Action	Commitment
POL 4	Nox EMISSIONS FROM HEATING SOURCE (These Credits are Fuel)	3			1		P4	Demonstrate the dry NOx from space heating energy are ≤ 100mg/kWh (at 0% excess O ₂)		Be Aware	Action	Action	Commitment
							P5	Demonstrate the dry NOx from space heating energy are ≤ 70mg/kWh (at 0% excess O ₂)		Be Aware	Action	Action	Commitment
							P6	Demonstrate the dry NOx from space heating energy are ≤ 40mg/kWh (at 0% excess O ₂)		Be Aware	Action	Action	Commitment
POL 5	FLOOD RISK	4		2			P7	Demonstrate the site is defined as a low risk of annual flooding		Be Aware	Action	Action	Commitment
							P8	Demonstrate there is a medium to high flood risk but measures have been implemented to remediate risk	Be Aware	Be Aware	Action	Action	Commitment
							P9	Demonstrate surface water run off measures taken to minimise localised flood risk		Be Aware	Action	Action	Commitment
POL6	MINIMISING WATER COURSE POLLUTION	1	1				P10	Demonstrate that effective on-site treatment such as SUDS or oil seperators have been specified to reduce pollution risk		Be Aware	Action	Action	Commitment
POL7	REDUCTION IN NIGHT TIME LIGHT POLLUTION	1	1				P11	Demonstrate compliance of external lighting with Institution of Lighting Engineers guidance notes for reduction in obtrusive light 2005		Be Aware	Action	Action	Commitment
POL8	NOISE ATTENUATION	1		1			P12	Demonstrate that the project does not increase the ambient noise levels on site	Be Aware	Be Aware	Action	Action	Commitment
TOTALS		13	4	4	1	4							

30.77%

CREDIT SCORING MATRIX - TABLE 10

INNOVATION		ALL CREDITS SCORED EQUATE DIRECTLY TO A % INCREASE					DE Ref Nr	ACTION REQUIRED (IN BRIEF)	RIBA STAGE A INCEPTION	RIBA STAGE B FEASIBILITY	RIBA STAGE C CONCEPT	RIBA STAGE D SCHEME	RIBA STAGE F&G TENDER
BREEAM REF	SECTIONS	AVAILABLE CREDITS	DE REQUIRED CREDITS	SITE SPECIFIC CREDITS	DESIGN (3a) CREDITS	DESIGN (3b) CREDITS							
MAN2	CONSIDERATE CONSTRUCTORS	1				1	N1	Post construction a Considerate Constructors Scheme Certificate shows scheme achieved CCS Code of Considerate Practice Score ≥ 36		Be Aware	Action	Action	Commitment
HEA1	DAYLIGHTING	1				1	N2	Demonstrates that at least 80% of the floor area achieves average daylight factors of 3% for multi-storey and 4% for single storey		Be Aware	Action	Action	Commitment
ENE1	REDUCTION IN CO2 EMISSIONS	2				1	N3	Demonstrate scheme is Carbon neutral as defined by National Calculation Method		Be Aware	Action	Action	Commitment
						1	N4	Demonstrate scheme is true carbon zero for building services and operations		Be Aware	Action	Action	Commitment
ENE5	LOW OR ZERO CARBON TECHNOLOGIES	1				1	N5	Design must implement CO ₂ Reduction strategy identified in the renewable energy feasibility study to reduce CO ₂ emissions by 20%		Be Aware	Action	Action	Commitment
WAT2	WATER METER	1	1				N6	Additional sub-metering to allow individual water consuming plant and/or areas monitored ie Kitchens etc. Sub-meter must have pulsed output		Be Aware	Action	Action	Commitment
MAT1	MATERIAL SPECIFICATION	1				1	N7	Must score additional 2 points using BREEAM calculator above the best practice set by BREEAM when assessed over 4 building elements		Be Aware	Action	Action	Commitment
MAT5	RESPONSIBLE SOURCING OF MATERIALS	1				1	N8	95% of applicable materials must be responsibly sourced		Be Aware	Action	Action	Commitment
WST1	CONSTRUCTION SITE WASTE MANAGEMENT	1				1	N9	90% (by weight) of non hazardous construction waste material and 95% (by weight) demolition waste diverted from landfill		Be Aware	Action	Action	Commitment
TOTALS		9	1	0	0	8							

11.11%