Scott White and Hookins

The Greenwood Centre
London

BREEAM Assessment

Design Stage

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1.0 Introduction

This report is intended as a summary of the formal assessment of Greenwood Place Centre under New Construction version at Interim (Design Stage).

The project has been submitted to BRE for Quality Assurance and Certification at a score of 71.2%, an Excellent rating.

The licenced assessor for this project is Ron Chan of Scott White and Hookins and the BRE registration number for the project is BREEAM-0068-2542.

Project Team

Developer	London Borough of Camden
Architect	PCKO Architects
Project Management	CPC Project Services
Building Service	Synergy Consulting Engineers Ltd
Structural Engineer	Campbell Reith
Fire Engineering	Bureau Veritas
Acoustics	Hann Tucker
MEPH Sub Contractor	LJJ

2.0 The BREEAM Standard

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's leading and most widely used environmental assessment method for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance.

2.1 Aims of BREEAM

- To mitigate the life cycle impacts of buildings on the environment
- To enable buildings to be recognised according to their environmental benefits
- To provide a credible, environmental label for buildings
- To stimulate demand for sustainable buildings

2.2 Objectives of BREEAM

- To provide market recognition of buildings with a low environmental impact
- To ensure best environmental practice is incorporated in building planning, design, construction and operation.
- To define a robust, cost-effective performance standard surpassing that required by regulations.
- To challenge the market to provide innovative, cost effective solutions that minimise the environmental impact of buildings.
- To raise the awareness amongst owners, occupants, designers and operators of the benefits of buildings with a reduced life cycle impact on the environment.
- To allow organisations to demonstrate progress towards corporate environmental objectives.

BREEAM has been developed to meet the following underlying principles:

- Ensure environmental quality through an accessible, holistic and balanced measure of environmental impacts.
- Use quantified measures for determining environmental quality.
- Adopt a flexible approach, avoiding prescriptive specification and design solutions.
- Use best available science and best practice as the basis for quantifying and calibrating a cost effective performance standard for defining environmental quality.
- Reflect the social and economic benefits of meeting the environmental objectives covered.
- Provide a common framework of assessment that is tailored to meet the 'local' context including regulation, climate and sector.
- Integrate construction professionals in the development and operational processes to ensure wide understanding and accessibility.
- Adopts third party certification to ensure independence, credibility and consistency of the label.
- Adopts existing industry tools, practices and other standards wherever possible to support developments in policy and technology, build on existing skills and understanding and minimise costs.
- Stakeholder consultation to inform ongoing development in accordance with the underlying principles and the pace of change in performance standards (accounting for policy, regulation and market capability).

2.3 BREEAM issues and credits

Tradable credits

Each environmental issue has a set number of 'credits' available and these credits are awarded where the building demonstrates that it complies with the requirements of that issue.

Minimum standards

A number of issues within a category have set minimum standards, i.e. a minimum number of credits that must be achieved in order for a particular BREEAM rating level to be met.

Innovation credits

Innovation credits provide additional recognition for a building that innovates in the field of sustainable performance, above and beyond the level that is currently recognised and rewarded by standard BREEAM issues. Innovation credits are awarded for either complying with pre-defined BREEAM issue exemplary level requirements, through the appointment of a BREEAM Accredited Professional or or via application to BRE Global to have a particular building feature, system or process approved as 'innovative'.

Environmental weightings, final score and BREEAM Rating

Once each BREEAM issues has been assessed the category percentage scores are determined (based on the number of credits achieved over those available within a category), and an environmental weighting applied (as shown below).

The weighted category scores are then totalled to give an overall score, and any additional score for innovation is added to give the final BREEAM score which is used to determine the BREEAM rating.

Environmental section	Issue weighting
Management	12%
Health & Wellbeing	15%
Energy	15%
Transport	9%
Water	7%
Materials	13.5%
Waste	8.5%
Land Use & Ecology	10%
Pollution	10%
Innovation	10%

3.0 Management

Management
Man 01 - Project brief and design

Number of credits available:	**4**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage an integrated design process that optimises building performance.

Credits

1 of 4 credits awarded.

	Credits awarded
Stakeholder consultation (project delivery)	1
Stakeholder consultation (third party)	0
Sustainability Champion (design)	0
Sustainability Champion (monitoring progress)	0

Assessor Comments / Notes

Credit 1 *Stakeholder consultation (project delivery):*

- Minutes of meetings demonstrating the types of discussions being had
- Copy of the design and access statement which deals extensively with the consultation and how the building design was developed
- Copy of the citizens jury report, which came of the back of one set of consultations.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
72	1	Philip Harvey, Meeting minutes, Stage 2 DTM minutes	
73	2	Philip Harvey, email, FW Greenwood Center & Residentail	
74	2	Philip Harvey, Energy Statement, GREENWOOD PLACE & HIGHGATE ROAD SITE	
75	2	Philip Harvey, Schedule, Fabric, Structure & Components – Coordination Schedule	
76	5	Philip Harvey, report, Citizen Jury report FINAL March 2013	
77	6	Philip Harvey, minutes, Greenwood Resource Centre – Design Workshop 2	

Management
Man 02 - Life cycle cost and service life planning

Number of credits available:	**4**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To deliver whole life value from investment and promote economic sustainability by recognising and encouraging the use of life cycle costing and service life planning to improve design, specification and through-life maintenance and operation.

Credits

1 of 4 credits awarded.

	Credits awarded
Elemental life cycle cost (LCC)	0

Component level LCC option appraisal	0
Capital cost reporting	1

Assessor Comments / Notes

The capital cost for the Greenwood Place Centre project is approximately £4,700 per sqm

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
93	6	Kier, email , Greenwood Place - Man02 Credit 3	

Management
Man 03 - Responsible construction practices

Number of credits available:	**6**
Number of credits achieved:	**6**
Minimum standards met?	**Y**

Aim

To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.

Credits

6 of 6 credits awarded.

	Credits awarded
Pre-Requisite	Y
Environmental management	1

Sustainability Champion (construction)	1
Considerate construction	2
Monitoring of construction site impacts - Utility consumption	1
Monitoring of construction site impacts - Transport of construction materials & waste	1

Assessor Comments / Notes

- Paul Wilshire (7371) of Kier is the BREEAM AP.
- CCS score of 42 achieved in the latest visit.
- Kier's ISO14001 EMS certificate has been provided.
- Man03 proforma has been completed by Kier confirming their Man03 commitments in relation to site timber use, site energy and water usage as well as transport going in and out of the site.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
1	2	Kier, EMS certificate, Kier_EMS_ISO14001_Certificate	
51	7	Andrew Jenkins, Pro-Forma, Man03_Credit 3	
52	4	Andrew Jenkins, Pro-Forma, Man03_Credit 2	
53	15	Andrew Jenkins, Pro-Forma, Man03_Credit 5	
54	1	Andrew Jenkins, SHEM Doc, Timber Purchasing	
55	15	Andrew Jenkins, SHEM Doc, Pollution Prevention	
56	3	Andrew Jenkins, EMS, Man03_Credit 1	
78	4	Andy Jenkins, Evidence, Sustainability Champion Letter	
90	None selected	Matt Davis, Certificate, CCS Performance Beyond Compliance	
91	None selected	Matt Davis, Audit report, CCS Audit 12/09/17	
125	15, 16	Kier, Pro-Forma, Greenwood Place_Compliance_Proforma_Man03 Signed	

Management
Man 04 - Commissioning and handover

Number of credits available:	**4**
Number of credits achieved:	**3**
Minimum standards met?	**Y**

Aim

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.

Credits

3 of 4 credits awarded.

	Credits awarded
Pre-Requisite (Excellent & Outstanding only)	Y
Commissioning and testing schedule and responsibilities	1
Commissioning building services	1
Testing and inspecting building fabric	0
Handover	1

Assessor Comments / Notes

Credit 1 and 2: The letter provided confirms that commissioning will be scheduled in the main contractor programme, The letter also confirms a specialist commissioning manager will be appointed in line with the requirements for criterion 6.

Credit 4: There is a **l**etter provided by Kier confirming that a Building User Guide will be provided in line with the criteria, and that a training schedule and handover will also be programmed to meet the assessment requirements. Further details of this are also provided in the letter. This meets both the pre-requisite and complies with the criteria for the fourth credit.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
57	1	Andrew Jenkins, Pro-Forma, Man04_Credit 1	
58	5	Andrew Jenkins, Pro-Forma, Man04_Credit 2	
59	10	Andrew Jenkins, Pro-Forma, Man04_Credit 4	

Management
Man 05 - Aftercare

Number of credits available:	**3**
Number of credits achieved:	**3**
Minimum standards met?	**Y**

Aim

To provide post-handover aftercare to the building owner/occupants during the first year of occupation to ensure the building operates and adapts, where relevant, in accordance with the design intend and operational demands.

Credits

3 of 3 credits awarded.

	Credits awarded
Aftercare support	1
Seasonal commissioning	1
Post occupancy evaluation	1

Assessor Comments / Notes

Credit 1: Ref 47 is a letter confirming that Kier will provide an aftercare support service for which details are provided to confirm this will be in line with the criteria to achieve

the first credit.
Credit 2: Ref 50 is a letter confirming that seasonal commissioning will be undertaken over a 12 month period following building occupation, and that the scope of the seasonal commissioning will be in line with the criteria to achieve the second credit.
Credit 3: Ref 49 is a letter confirming that a post occupancy evaluation will be carried out 12 months after building occupation and will require the necessary points outlined in the criteria. The letter also confirms that the information will be appropriately disseminated to share good practice via the website, other literature or an alternative portal. The third credit is awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
47	1	Andrew Jenkins, Pro-Forma, Man05_Credit 1	
49	4	Andrew Jenkins, Pro-Forma, Man05_Credit 3	
50	3	Andrew Jenkins, Pro-Forma, Man05_Credit 2	

4.0 Health & Wellbeing

Health & Wellbeing
Hea 01 - Visual Comfort

Number of credits available:	**4**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To ensure daylighting, artificial lighting and occupant controls are considered at the design stage to ensure best practice visual performance and comfort for building occupants.

Credits

2 of 4 credits awarded.

	Credits awarded

Glare control	1
Daylighting	0
View out	0
Internal and external lighting levels, zoning and control	1

Assessor Comments / Notes

Credit 1 *Glare control*
Marked up drawing confirming the location of the blind has been provided.

Credit 4 *Internal and external lighting levels, zoning and control*
BREEAM compliant specification and drawings provided.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
60	1	Philip Harvey, drawing, 1213 Greenwood CC_Breeam_Hea 1_ blind mark up 16.05.2017	
81	10	Scott Tayler (Synergy), PDF, External Lighting INfo	
111	7	KCL, Evidence, Hea 01 - Luminaire Schedule with External Lights	
112	7	KCL, Evidence, Hea 01 - Internal Lighting Calculations 2 of 3	
113	7	KCL, Evidence, Hea 01 - Internal Lighting Calculations 3 of 3	
114	7	KCL, Evidence, Hea 01 - Internal Lighting Calculations 1a of 3	
115	7	KCL, Evidence, Hea 01 - Internal Lighting Calculations 1b of 3	
116	7	KCL, Evidence, Hea 01 - Internal Lighting Calculations 1c of 3	

117	7	KCL, Evidence, Hea 01 - Internal Lighting Calculations 1d of 3	
118	7	KCL, Evidence, Hea 01 - Internal Lighting Calculations 1e of 3	

Health & Wellbeing
Hea 02 - Indoor Air Quality

Number of credits available:	**5**
Number of credits achieved:	**3**
Minimum standards met?	**N/a**

Aim

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes

Credits

3 of 5 credits awarded.

	Credits awarded
Indoor air quality (IAQ) plan	1
Ventilation	0
Volatile organic compound (VOC) emission levels (products)	1
Volatile organic compound (VOC) emission levels (post construction)	1
Potential for natural ventilation	0

Assessor Comments / Notes

Credit 1: Ref 119 is a copy of the Indoor Air Quality Plan for the site which covers all elements specified by the criteria. This is therefore compliant with the requirements and

the credit can be awarded.

Credit 3: Ref 124 is the completed proforma document from the project team, which confirms the applicable products present in the design and that these will meet the requirements for VOCs testing and performance levels in line with the assessment criteria. This is compliant with the design stage requirement and the third credit can be awarded.
Credit 4: Ref 126 confirms the commitment to carry out post construction VOC testing and formaldehyde levels to comply with the requirements. The fourth credit is achieved.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
119	1	KCL, Evidence, HEA02 - IAQ	
124	6, 7	PCKO, Pro-Forma, signed hea2 proforma	
126	8, 9, 10	Kier, Pro-Forma, Greenwood Place_Proforma_Hea02_VOC Testing Signed	
128	6	Philip Harvey, manufacturers standard documentation, Technical Compliance Statement, August 2015	
129	6	Philip Harvey, Product Data Sheet, Dulux Trade Diamond Eggshell, Issued 02/14	
130	6	Philip Harvey, Product Data Sheet, Dulux Trade Floor Shield, 16.11.2107	

Health & Wellbeing
Hea 04 - Thermal comfort

Number of credits available:	**3**
Number of credits achieved:	**3**
Minimum standards met?	**N/a**

Aim

To ensure that appropriate thermal comfort levels are achieved through design and controls are selected to maintain a thermally comfortable environment for occupants within the building.

Credits

3 of 3 credits awarded.

	Credits awarded
Thermal modelling	1
Adaptability - for a projected climate change scenario	1
Thermal zoning and controls	1

Assessor Comments / Notes

Credit 1: The report provided in ref 97 provides a TM52 compliant thermal analysis for the building. The letter within ref 97 (GPRC HEA04 Letter) confirms the analysis is in accordance with TM52 and CIBSE Guide A and Table 1.5 and that the software used provides full dynamic thermal analysis. The results of the modelling are provided in section 3 which confirms that the design meets the criteria. The first credit is therefore awarded.
Credit 2: Ref 101 confirms thermal modelling is done under climate change environment.
Credit 3: Ref 96 confirm the thermal modelling analysis has informed the temperature control strategy for the building and its uers.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
96	9	Scott Tayler (Synergy), PDF, Thermal Zoning Letter	
97	1	Scott Tayler (Synergy), PDF, HEA01 C1 Evidence	
98	1	Synergy, Checklist, am11checklistapache (1)	
100	4	Scott Tayler (Synergy), PDF, PMV and PPD for AC Rooms	
101	6	Scott Tayler (Synergy), PDF, Climate Change Modelling	

Health & Wellbeing
Hea 05 - Acoustic Performance

Number of credits available:	**3**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To ensure the building's acoustic performance including sound insulation meet the appropriate standards for its purpose.

Credits

2 of 3 credits awarded.

	Credits awarded
Acoustic performance	2

Assessor Comments / Notes

Ref 45 and 46 is the report which confirms the noise survey that was carried out and also outlines the BB93 criteria that are to be met by the design. Noise criteria (1 credit), ref 45 page 12 and Reverberation (1 credit), ref 46, page 24will be met.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
45	2	Philip Harvey, report, External Building Fabric	
46	2	Philip Harvey, report, REVERBERATION CRITERIA GREENWOOD PLACE RESOURCE CENTRE	

Health & Wellbeing
Hea 06 - Safety and Security

Number of credits available:	**2**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage effective design measures that promote low risk, safe and secure access to and use of the building.

Credits

1 of 2 credits awarded.

	Credits awarded
Safe access	1
Security of site and building	0

Assessor Comments / Notes

Credit 1 *Safe access*
Please provide design drawings (including a scaled site plan), AND/OR relevant sections of the specification highlighting all necessary compliant features and dimensions - OK

Credit 2 *Security of site and building*
Please provide correspondence from or a copy of the report/feedback from the ALO/CPDA/Security Consultant confirming:
1. Scope of their advice/involvement
2. The stage of design in which their advice was sought
3. Summary of their recommendations

Please also provide design drawings AND/OR relevant sections of the specification or contract confirming the final design embodies the recommendations.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
65	1	Philip Harvey, email, 2016-05-25-1315-13-JYTJ rchan@swh.co Q1e RE- GPRC - Propose	
66	2	Philip Harvey, drawing, wwa_1611_LL_105_C01 Road Layout Levels	

5.0 Energy

Energy
Ene 01 - Reduction of energy use and carbon emissions

Number of credits available:	**12**
Number of credits achieved:	**5**
Minimum standards met?	**Y**

Aim

To recognise and encourage buildings designed to minimise operational energy demand, primary energy consumption and CO2 emissions.

Credits

5 of 12 credits awarded.

	Credits awarded
Energy performance	5

Assessor Comments / Notes

Based on the current SBEM result,5 credits are awarded

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
94	None selected	Synergy, BRE tool, Ene 01.JPG	
95	None selected	Synergy, Report, The Greenwood Centre Part L2 2013 Be Green brukl.pdf	

Energy
Ene 02 - Energy Monitoring

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption.

Credits

2 of 2 credits awarded.

	Credits awarded
Sub-metering of major energy consuming systems	1
Sub-metering of high energy load and tenancy areas	1

Assessor Comments / Notes

BMS is provided and space heating and homestic hot water are metered. Small power and lightings are also metered. Kitchen area is separately metered,

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
86	1	Scott Tayler (Synergy), PDF, Energy Monitoring Schematics	
87	3	Scott Tayler (Synergy), PDF, Energy Meter Info	

Energy
Ene 03 - External Lighting

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the specification of energy efficient light fittings for external areas of the development.

Credits

1 of 1 credits awarded.

	Credits awarded
External lighting	1

Assessor Comments / Notes

Drawing and specification have confirmed:

- The average initial luminous efficacy of the external light fittings within the construction zone is not less than 60 luminaire lumens per circuit Watt.
- All external light fittings are automatically controlled for prevention of operation during daylight hours and presence detection in areas of intermittent pedestrian traffic.

One credit awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
81	2	Scott Tayler (Synergy), PDF, External Lighting INfo	

Energy
Ene 04 - Low carbon design

Number of credits available:	**3**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To encourage the adoption of design measures, which reduce building energy consumption and associated carbon emissions and minimise reliance on active building services systems.

Credits

1 of 3 credits awarded.

	Credits awarded
Passive design - Passive design analysis	0
Passive design - Free cooling	0
Low and zero carbon technologies - LZC feasibility study	1

Assessor Comments / Notes

Credit 3 *LZC feasibility study and life cycle analysis are provided.*

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
127	7, 8	KCL, Evidence, ENE04	
131	7, 8	Kier, Report, 04400 Greenwood Centre - Energy Statement Rev K	

Energy
Ene 06 - Energy Efficient Transportation Systems

Number of credits available:	**3**
Number of credits achieved:	**3**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the specification of energy-efficient transportation systems.

Credits

3 of 3 credits awarded.

	Credits awarded
Energy consumption	1
Energy efficient features	2

Assessor Comments / Notes

Ref 105 is the lift study and also consists of the specification of the lifts with two energy efficient features required by BREEAM.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
105	1	KCL, Evidence, Ene 06	

Energy
Ene 08 - Energy Efficient Equipment

Number of credits available:	**2**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage procurement of energy-efficient equipment to ensure optimum performance and energy savings in operation.

Credits

0 credits awarded.

	Credits awarded
Energy efficient equipment	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

6.0 Transport

Transport
Tra 01 - Public Transport Accessibility

Number of credits available:	**5**
Number of credits achieved:	**5**
Minimum standards met?	**N/a**

Aim

To recognise and encourage development in proximity of good public transport networks, thereby helping to reduce transport related pollution and congestion

Credits

5 of 5 credits awarded.

	Credits awarded
Public transport accessibility	5

Assessor Comments / Notes

The site has an AI of 24.54.

Five credits can be targeted.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
2	1	SWH, Map, 20160510.991696ff.pdf	

Transport

Number of credits available:	**1**
Number of credits achieved:	**1**

Tra 02 - Proximity to amenities	Minimum standards met?	N/a

Aim

To encourage and reward a building location that facilitates easy access to local services and so reduces the environmental, social and economic impacts resulting from multiple or extended building user journeys, including transport related emissions and traffic congestion.

Credits

1 of 1 credits awarded.

	Credits awarded
Proximity to local amenities	1

Assessor Comments / Notes

The site is within 500m safe route to GP, post office, food outlet, leisure centre.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
41	1	Philip Harvey, map, 1213 Greenwood CC_Breeam_Tra 02_Proximity to food outlet including cash machine	
42	1	Philip Harvey, photograph, 1213 Greenwood CC_Breeam_Tra 02_Proximity to food outlet including cash machine_photo	
43	1	Philip Harvey, map, 1213 Greenwood CC_Breeam_Tra 02_Proximity to leisure facility	
44	1	Philip Harvey, map, 1213 Greenwood CC_Breeam_Tra 02_Proximity to GP + post office	

Transport
Tra 03 - Cyclist facilities

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To encourage building users to cycle, so promoting exercise and helping reduce congestion and emissions, by ensuring adequate provision of cyclist facilities.

Credits

2 of 2 credits awarded.

	Credits awarded
Cycle storage	1
Cyclist facilities	1

Assessor Comments / Notes

8no. compliant cycle storage space provided. based on 78 staff. 30 lockers and showers are provided.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
61	1	Philip Harvey, drawing, 1213_WD_551_Cycle Storage_Rev_A	
62	3	Philip Harvey, drawing, 1213_WD_508.3_Staff Shower 2.08_REV A	
133	2	Kier, Email, Tra03 Locker	

134	1	BRE, email , 2017-03-14_155720_BRE Central Services_BREEAM Enquiry QN-07688-G1K6S0 P034 U	

Transport
Tra 04 - Maximum Car Parking Capacity

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To encourage the use of alternative means of transport to the building other than the private car, thereby helping to reduce transport related emissions and traffic congestion associated with the building's operation.

Credits

2 of 2 credits awarded.

	Credits awarded
Maximum car parking capacity	2

Assessor Comments / Notes

Only disabled parking spaces are provided.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
64	1	Philip Harvey, drawing, wwa_1611_LL_105_C01 Road Layout Levels	

Transport
Tra 05 - Travel Plan

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise the consideration given to accommodating a range of travel options for building users, thereby encouraging the reduction of user reliance on forms of travel that have the highest environmental impact.

Credits

1 of 1 credits awarded.

	Credits awarded
Travel plan	1

Assessor Comments / Notes

Compliant travel plan is provided.
Measures like provision of secure cycle parking is provided.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
61	None selected	Philip Harvey, drawing, 1213_WD_551_Cycle Storage_Rev_A	
62	None selected	Philip Harvey, drawing, 1213_WD_508.3_Staff Shower 2.08_REV A	

69	1	Andy Jenkins, Evidence, GPRC - Travel Plan Revised	
70	1	Andy Jenkins, Evidence, Transport Assessment Addendum	

7.0 Water

Water
Wat 01 - Water Consumption

Number of credits available:	**5**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To reduce the consumption of potable water for sanitary use in new buildings from all sources through the use of water efficient components and water recycling systems

Credits

2 of 5 credits awarded.

	Credits awarded
Water consumption	2

Assessor Comments / Notes

Wat 01 proforma provided by the architect, the information is input to BRE Wa01 calculator confirming 2 credits can be awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
39	1	Philip Harvey, pro forma, BREEAM_2014v1_Compliance_Proforma_Wat01_01_Rev_A_20170510	
40	1	Scott White and Hookins, BRE tool, BREEAM_UK_NC_2014_Wat01_Calculator_v1.0	

Water
Wat 02 - Water Monitoring

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**Y**

Aim

To ensure water consumption can be monitored and managed and therefore encourage reductions in water consumption.

Credits

1 of 1 credits awarded.

	Credits awarded
Pre-requisite (Good to Outstanding ONLY)	Y
Water monitoring	1

Assessor Comments / Notes

Water meter with pulsed output connecting to the mains and BMS meter are provided, ref 85, top left corner.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
85	1	Scott Tayler (Synergy), PDF, Domestic Water Schematic	
88	3	Scott Tayler (Synergy), PDF, Water Meter Info	

Water
Wat 03 - Leak Detection

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To reduce the impact of water leaks that may otherwise go undetected.

Credits

2 of 2 credits awarded.

	Credits awarded
Leak detection system	1
Flow control devices	1

Assessor Comments / Notes

Specification and schematic diagram provided confirming leak detection and flow control system will be installed. Ref 94, typical ACC WC, the Cold water is controlled by solenoid valve linked to PIR.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information

83	1	Scott Tayler (Synergy), Spec, Major Water Leak Detection Spec Clauses	
84	2	Scott Tayler (Synergy), PDF, Domestic Water Schematic	

Water
Wat 04 - Water Efficient Equipment

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To reduce unregulated water consumption by encouraging specification of water efficient equipment.

Credits

1 of 1 credits awarded.

	Credits awarded
Water efficient equipment	1

Assessor Comments / Notes

Irrigation is the only unregulated water use and plant is watered manually.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
4	1	Synergy, Drawing, 2478_001.pdf	
120	1	Wynne-williams, email , Wat04 Confirmation	

8.0 Materials

Materials
Mat 01 - Life Cycle Impacts

Number of credits available:	**6**
Number of credits achieved:	**5**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.

Credits

5 of 6 credits awarded.

	Credits awarded
Life cycle impacts	5

Assessor Comments / Notes

Mat 01 proforma provided by the Architect and this information is input to Mat01 calculator confirming 5 credits can be awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
8	1	SWH, BRE tool, BREEAM_UK_NC_2014_Mat01_Calculator_v1.1 (1)	

29	1	PCKO, Credit pro-forma, Pro-forma for Mat 04 insulation	

Materials
Mat 02 - Hard Landscaping and Boundary Protection

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the specification of materials for boundary protection and external hard surfaces that have a low environmental impact, taking account of the full life cycle of materials used

Credits

1 of 1 credits awarded.

	Credits awarded
Hard landscaping and boundary protection	1

Assessor Comments / Notes

“Kilsaran ‘Kent’ PCC Slabs 600x300x63mm, GG is 830120005.Timber fence GG is 827020010. All of the materials are A or A+ rated.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
103	1	W-WA, Pro-Forma, BREEAM1_Compliance_Proforma_Mat02_2017_11_10.pdf	

Materials
Mat 03 - Responsible Sourcing of Materials

Number of credits available:	**4**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To recognise and encourage the specification of responsibly sourced materials for key building elements.

Credits

2 of 4 credits awarded.

	Credits awarded
Pre-requisite	Y
Sustainable Procurement Plan	1
Responsible sourcing of materials (RSM)	1

Assessor Comments / Notes

Mat 03 proforma and certificates are provided by Kier, this information is input to BRE Mat03 calculator confirming 1 credit can be awarded. This also confirms the timber product has FSC certificate.
Pre-requisite: Ref 136 is a copy of Kier's timber procurement policy which confirms this is compliant with the criteria to meet the pre-requisite for this issue.
Credit 1: Ref 135 is a copy of the contractor's sustainable procurement policy which is in line with the criteria requirements to meet the second credit.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
121	1, 3	Kier, Pro-Forma, BREEAM 2014 Mat 3 Proforma.pdf	

122	1, 3	Kier, BRE tool, BREEAM-UK-NC-2014-Mat03-Calculator-v2.0 (9).xlsx	
123	1, 3	Kier, EMS/BES certificates, Greenwood MAT03.zip	
135	2	Kier, Policy, KCL_-_Responsible_Procurement_Policy (2).pdf	
136	1	Kier, Policy, SHEMS-POL-GR-005_Timber_Purchasing_Policy_Statement (1).pdf	

Materials
Mat 04 - Insulation

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the use of thermal insulation which has a low embodied environmental impact relative to its thermal properties.

Credits

1 of 1 credits awarded.

	Credits awarded
Embodied impact	1

Assessor Comments / Notes

Mat04 proforma provided and the information is input to the BRE Mat04 tool confirming 1 credit can be achieved.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
26	1	PCKO, Credit pro-forma, Pro forma for Mat 04: Insulation	
27	2	SWH, BRE tool, BRE Mat 4 tool	
28	2	Synergy, Proforma, BREEAM_2014v1_Compliance_Proforma_Mat04_01	

Materials
Mat 05 - Designing for durability and resilience

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation.

Credits

1 of 1 credits awarded.

	Credits awarded
Protecting vulnerable parts of the building from damage & protecting exposed parts of the building from material degradation	1

Assessor Comments / Notes

Drawings show the durability and resilience measures included in the design both internally and externally, including identification of the high pedestrian and vehicular/trolley movement areas.

Ref. 9 is the study complied with the **Protecting exposed parts of the building from material degradation requriements.**

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
9	2	Philip Harvey, pro forma, 1213 Greenwood Mat 05 pro forma, Number n/a, Version Rev_, 21.10.16	
11	1	Philip Harvey, Plan, Ground Floor Handrail Locations, Number 1213 WD 335, Version A, 21.10.16	
12	1	Philip Harvey, Plan, First Floor Handrail Locations, Number 1213 WD 336, Version Rev A, 21.10.16	
13	1	Philip Harvey, Plan, Second Floor Handrail Locations, Number 1213 WD 337, Version Rev A, 21.10.16	
14	1	Philip Harvey, Plan, Roof Handrail Locations, Number 1213 WD 338, Version Rev A, 21.10.16	
15	1	Philip Harvey, Plan, Basement Floor Handrail Locations, Number 1213 WD 339, Version Rev A, 21.10.16	
16	1	Philip Harvey, Schedule, Internal Wall Types, Number 1213 WD 600, Version Rev B, 21.10.16	
17	1	Philip Harvey, Plan, Ground Floor Flooring Layout, Number 1213 WD 315, Version Rev B, 21.10.16	
18	1	Philip Harvey, Plan, First Floor Flooring Layout, Number 1213 WD 316, Version Rev B, 21.10.16	
19	1	Philip Harvey, Plan, Second Floor Flooring Layout, Number 1213 WD 317, Version Rev B, 21.10.16	
20	1	Philip Harvey, Plan, roof Flooring Layout, Number 1213 WD 318, Version Rev B, 21.10.16	
21	1	Philip Harvey, Plan, Basment Floor Flooring Layout, Number 1213 WD 319, Version Rev B, 21.10.16	
22	1	Philip Harvey, specifciation, flotex technical spec, Number n/a, Version n/a, 21.10.16	
23	1	Philip Harvey, Schedule, Internal Door Pattern Type, Number 1213 WD 536, Version Rev B, 21.10.16	
24	1	Philip Harvey, Detail, External Wall Detail, Number 1213 WD 411, Version Rev A, 21.10.16	

25	1	Philip Harvey, Plan, road layout levels, Number WWA/1611/LL/105, Version T01, 21.10.16	

Materials
Mat 06 - Material efficiency

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage measures to optimise material efficiency in order to minimise environmental impact of material use and waste.

Credits

0 credits awarded.

	Credits awarded
Material efficiency	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

9.0 Waste

Waste
Wst 01 - Construction Waste Management

Number of credits available:	**4**
Number of credits achieved:	**3**
Minimum standards met?	**Y**

Aim

To promote resource efficiency via the effective management and reduction of construction waste

Credits

3 of 4 credits awarded.

	Credits awarded
Construction resource efficiency	2
Diversion of resources from landfill	1

Assessor Comments / Notes

Ref 110, SmartWaste Report is provided by Kier for this project confirming three credits are targeted.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
35	1	Andrew Jenkins, Pro-Forma, Wst_01 Credit 1	
36	5	Andrew Jenkins, Evidence, Wst_01 Credit 3	
37	4	Andrew Jenkins, Evidence, W	

38	2	Andrew Jenkins, Evidence, Wst_01 Credit 1	
110	1	KCL, Evidence, Wst01	

Waste
Wst 02 - Recycled Aggregates

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the use of recycled and secondary aggregates, thereby reducing the demand for virgin material and optimising material efficiency in construction

Credits

0 credits awarded.

	Credits awarded
Recycled aggregates	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Waste
Wst 03 - Operational Waste

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**Y**

Aim

To recognise and encourage the provision of dedicated storage facilities for a building's operational-related recyclable waste streams, so that this waste is diverted from landfill or incineration

Credits

1 of 1 credits awarded.

	Credits awarded
Operational waste	1

Assessor Comments / Notes

One credit awarded. 17m2 provided for recyclable waste.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
10	1	PCKO, Drawing, 1213_WD_550_Refuse Strategy_Rev_	

Waste
Wst 05 - Adaptation to climate change

Number of credits available:	**1**
Number of credits achieved:	**0**

Minimum standards met?	**N/a**

Aim

To recognise and encourage measures taken to mitigate the impact of extreme weather conditions arising from climate change over the lifespan of the building.

Credits

0 credits awarded.

	Credits awarded
Adaptation to climate change – structural and fabric resilience	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Waste
Wst 06 - Functional adaptability

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage measures taken to plan for the change of use of the building over its lifespan.

Credits

0 credits awarded.

	Credits awarded
Functional adaptability	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

10.0 Land Use & Ecology

Land Use & Ecology
LE 01 - Site Selection

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To encourage the use of previously developed and/or contaminated land and avoid land which has not been previously disturbed.

Credits

2 of 2 credits awarded.

	Credits awarded
Previously occupied land	1
Contaminated land	1

Assessor Comments / Notes

Credit 1: Credit awarded via Ecology report.
Credit 2: Ref. 68, page 48 Land Quality Statement confirms asbestos is found to be present in the ground. Ref. 67 Remediation Specification is provided. This provides advice on how to prevent, minimise, remedy or mitigate the risk, page 7 refers to Asbestos.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
3	2	Kier, Report, 1655,GI-PRELIM-LF,PD-20.05.16,V1-DRAFT	
30	1	Philip Harvey, document, Greenwood Resource Centre BREEAM 2014 LUE Assessment Final	
67	3	Andy Jenkins, Evidence, Remediation Strategy	
68	2	Kier, Report, Greenwood Place LE01	

Land Use & Ecology
LE 02 - Ecological Value of Site and Protection of Ecological Features

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To encourage development on land that already has limited value to wildlife and to protect existing ecological features from substantial damage during site preparation and completion of construction works.

Credits

2 of 2 credits awarded.

	Credits awarded
Ecological value of site	1
Protection of ecological features	1

Assessor Comments / Notes

Ref 30, page 9 A suitably qualified Ecologist has been appointed and undertaken a survey prior to any construction activity, confirming that the site is of low ecological value. The recommendations for the protection of wildlife will implemented prior to construction - see Kier's letter ref. 107.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
30	1, 2, 3	Philip Harvey, document, Greenwood Resource Centre BREEAM 2014 LUE Assessment Final	
106	1	KCL, Evidence, LE02	
107	2	KCL, Evidence, LE02 - Credit 2	
109	2	KCL, Evidence, LE02	

Land Use & Ecology
LE 03 - Minimising impact on existing site ecology

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To minimise the impact of a building development on existing site ecology.

Credits

2 of 2 credits awarded.

	Credits awarded
Change in ecological value	2

Assessor Comments / Notes

Ref.30, page 10, SQE's report confirms two credits can be targeted.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
30	1, 2	Philip Harvey, document, Greenwood Resource Centre BREEAM 2014 LUE Assessment Final	
137	1	Scott White and Hookins, BRE tool, BREEAM_UK_NC_2014_LE03_LE04_Calculator_v2.0 (4)	

Land Use & Ecology
LE 04 - Enhancing site ecology

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To encourage actions taken to enhance the ecological value of the site as a result of development.

Credits

2 of 2 credits awarded.

	Credits awarded
Ecologist's report and recommendations	1
Increase in ecological value	1

Assessor Comments / Notes

Ref. 30, page 10 -11, SQE's report confirms two credits can be targeted.

The SQE identifies that an increase in the ecological value of the site can be achieved without meeting the target of an increase of six plant species. There is clear justification which addresses the following three points:

- The enhancement of the ecological value of the site
- The best possible chance of establishment and long term survival of the species within the habitat
- Links to and support of the local ecosystem beyond the site boundary

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
30	1, 2, 3, 4, 5, 6	Philip Harvey, document, Greenwood Resource Centre BREEAM 2014 LUE Assessment Final	
31	1	Philip Harvey, document, 865_RichardGravesAssociatesLtd	
32	1	Philip Harvey, drawing, 1213_WD_216_Elevations D1_REV E	
33	3	Philip Harvey, drawing, 1213_WD_215_Elevations C1, C2 & C3_REV E	

34	3	Philip Harvey, drawing, 1213_WD_214_Elevations B3 & B4_REV I	

Land Use & Ecology
LE 05 - Long Term Impact on Biodiversity

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To minimise the long term impact of the development on the site and the surrounding area's biodiversity.

Credits

2 of 2 credits awarded.

	Credits awarded
Long term impact on biodiversity	2

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
30	1, 2, 3	Philip Harvey, document, Greenwood Resource Centre BREEAM 2014 LUE Assessment Final	
108	3	KCL, Evidence, LE05	

11.0 Pollution

Pollution
Pol 01 - Impact of Refrigerants

Number of credits available:	**3**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.

Credits

1 of 3 credits awarded.

	Credits awarded
Impact of refrigerants	1

Assessor Comments / Notes

One credit awarded.Tthe systems using refrigerants have Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2e) of ≤ 1000 kgCO2e/kW cooling/heating capacity.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
104	3	Scott Tayler (Synergy), PDF, POL01 Evidence	

Pollution
Pol 02 - NOx emissions

Number of credits available:	**3**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To contribute to a reduction in national NOx emission levels through the use of low emission heat sources in the building.

Credits

1 of 3 credits awarded.

	Credits awarded
NOx emission levels for heating and hot water	1

Assessor Comments / Notes

83.636 mg/kWh.Where CHP systems are specified, it is only necessary to consider the heat-related NOx emissions for the assessment of this issue.
83.636 mg/kWh

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
92	1	Scott Tayler (Synergy), PDF, POL03 Evidence	

Pollution
Pol 03 - Surface Water Run Off

Number of credits available:	**5**
Number of credits achieved:	**4**

Minimum standards met?	N/a

Aim

To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, therefore minimising the risk of localised flooding on and off site, watercourse pollution and other environmental damage.

Credits

4 of 5 credits awarded.

	Credits awarded
Flood resilience	2
Surface water run-off	2
Minimising watercourse pollution	0

Assessor Comments / Notes

Credit 1 *Flood resilience*
Two credits targeted, a BREEAM compliant FRA is required.

Credit 2 *Surface water run-off*
Two credits targeted - ref, 7

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
5	1	Campbell Reith, Report, BSF11167-100315-Level 2 FRA F2 with Appendices Rev 1.pdf	

6	4	Campbell Reith, Drawing, 12291-CRH-GC-XX-DR-C-5051-P1.pdf	
7	4	Campbell Reith, Checklist, BREEAM-UK-NC-2014-Guidance-Note-GN15-Relating-drainage-reports-to-BREEAM....pdf	

Pollution
Pol 04 - Reduction of Night Time Light Pollution

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.

Credits

1 of 1 credits awarded.

	Credits awarded
Reduction of night time light pollution	1

Assessor Comments / Notes

Letter confirms external lighting design will comply with Pol04 requriements.
One credit awarded.

Schedule of Evidence

Ref	**Criteria number**	**Reference**	**Supporting notes/information**

82	2	Scott Tayler (Synergy), Letter, POL04 - Letter of Compliance	

Pollution
Pol 05 - Noise Attenuation

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To reduce the likelihood of noise arising from fixed installations on the new development affecting nearby noise-sensitive buildings.

Credits

1 of 1 credits awarded.

	Credits awarded
Reduction of noise pollution	1

Assessor Comments / Notes

The survey was undertaken by Robin Honey BA(Hons) MIOA AMIEnvSc. Ref. 99, page 12 confirms the proposed plant, in conjunction with the proposed attenuation, should be capable of achieving the proposed environmental noise criteria at the nearest noise sensitive window.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
71	2	Andy Jenkins, Evidence, Noise Impact Assessment	

99	1	Andrew Jenkins, Evidence, Environmental Noise Survey and Plant Noise Assessment Report	

12.0 Innovation

Innovation
Man 03 - Responsible construction practices

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

1 of 1 credits awarded.

	Credits awarded
Considerate Construction: Exemplary performance	1

Assessor Comments / Notes

42 points second visit.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information

90	18	Matt Davis, Certificate, CCS Performance Beyond Compliance	
91	18	Matt Davis, Audit report, CCS Audit 12/09/17	

Innovation
Man 05 - Aftercare

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

1 of 1 credits awarded.

	Credits awarded
Aftercare / monitoring: 3 years	1

Assessor Comments / Notes

Confirmation letter provided.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
102	5	London Borough of Camden, Evidence, Man_05 - Aftercare	

Innovation
Hea 01 - Visual Comfort

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Daylighting: Exemplary levels	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation

Number of credits available:	**2**
Number of credits achieved:	**0**

Hea 02 - Indoor Air Quality	Minimum standards met?	N/a

Aim

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

Credits

0 credits awarded.

	Credits awarded
VOC emissions (post construction): Exemplary levels	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation	Number of credits available:	5
	Number of credits achieved:	0
Ene 01 - Reduction of energy use and carbon emissions	Minimum standards met?	N/a

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Zero regulated carbon / carbon negative	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Wat 01 - Water Consumption

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Water consumption: Exemplary levels	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Mat 01 - Life Cycle Impacts

Number of credits available:	**3**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded

Green Guide to Specification (elemental approach)	0
Compliant Life Cycle Assessment software tools (Whole Building approach)	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Mat 03 - Responsible Sourcing of Materials

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Exemplary performance: Responsible sourcing	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Wst 01 - Construction Waste Management

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Resource efficiency / Diversion of waste from landfill: Exemplary performance	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Wst 02 - Recycled Aggregates

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Recycled aggregates: Exemplary performance	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Wst 05 - Adaptation to climate change

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Responding to adaptation to climate change	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation

Number of credits available:	**1**
Number of credits achieved:	**0**

AI - Approved Innovation	Minimum standards met?	N/a

Aim

To provide additional recognition for a procurement strategy, design feature, management process or technological development that innovates in the field of sustainability, above and beyond the level that is currently recognised and rewarded within standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Innovation application approved by BRE Global	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

13.0 References Table

Document Ref.	Originator	Document Type	Document Title	Document No.	Version	Date
1	Kier	EMS certificate	Kier_EMS_ISO14001_Certificate			
2	SWH	Map	20160510.991696ff.pdf			
3	Kier	Report	1655,GI-PRELIM-LF,PD-20.05.16,V1-DRAFT			
4	Synergy	Drawing	2478_001.pdf			
5	Campbell Reith	Report	BSF11167-100315-Level 2 FRA F2 with Appendices Rev 1.pdf			
6	Campbell Reith	Drawing	12291-CRH-GC-XX-DR-C-5051-P1.pdf			
7	Campbell Reith	Checklist	BREEAM-UK-NC-2014-Guidance-Note-GN15-Relating-drainage-reports-to-BREEAM....pdf			
8	SWH	BRE tool	BREEAM_UK_NC_2014_Mat01_Calculator_v1.1 (1)			
9	Philip Harvey	pro forma	1213 Greenwood Mat 05 pro forma	n/a	Rev_	21.10.16
10	PCKO	Drawing	1213_WD_550_Refuse Strategy_Rev_			
11	Philip Harvey	Plan	Ground Floor Handrail Locations	1213 WD 335	A	21.10.16
12	Philip Harvey	Plan	First Floor Handrail Locations	1213 WD 336	Rev A	21.10.16
13	Philip Harvey	Plan	Second Floor Handrail Locations	1213 WD 337	Rev A	21.10.16
14	Philip Harvey	Plan	Roof Handrail Locations	1213 WD 338	Rev A	21.10.16
15	Philip Harvey	Plan	Basement Floor Handrail Locations	1213 WD 339	Rev A	21.10.16
16	Philip Harvey	Schedule	Internal Wall Types	1213 WD 600	Rev B	21.10.16
17	Philip Harvey	Plan	Ground Floor Flooring Layout	1213 WD 315	Rev B	21.10.16
18	Philip Harvey	Plan	First Floor Flooring Layout	1213 WD 316	Rev B	21.10.16
19	Philip Harvey	Plan	Second Floor Flooring Layout	1213 WD 317	Rev B	21.10.16
20	Philip Harvey	Plan	roof Flooring Layout	1213 WD 318	Rev B	21.10.16
21	Philip Harvey	Plan	Basment Floor Flooring Layout	1213 WD 319	Rev B	21.10.16
22	Philip Harvey	specifciation	flotex technical spec	n/a	n/a	21.10.16
23	Philip Harvey	Schedule	Internal Door Pattern Type	1213 WD 536	Rev B	21.10.16
24	Philip Harvey	Detail	External Wall Detail	1213 WD 411	Rev A	21.10.16
25	Philip Harvey	Plan	road layout levels	WWA/1611/LL/105	T01	21.10.16
26	PCKO	Credit pro-forma	Pro forma for Mat 04: Insulation			
27	SWH	BRE tool	BRE Mat 4 tool			
28	Synergy	Proforma	BREEAM_2014v1_Compliance_Proforma_Mat04_01			
29	PCKO	Credit pro-forma	Pro-forma for Mat 04 insulation			
30	Philip Harvey	document	Greenwood Resource Centre BREEAM 2014 LUE Assessment Final			
31	Philip Harvey	document	865_RichardGravesAssociatesLtd			
32	Philip Harvey	drawing	1213_WD_216_Elevations D1_REV E			
33	Philip Harvey	drawing	1213_WD_215_Elevations C1, C2 & C3_REV E			
34	Philip Harvey	drawing	1213_WD_214_Elevations B3 & B4_REV I			

35	Andrew Jenkins	Pro-Forma	Wst_01 Credit 1			
36	Andrew Jenkins	Evidence	Wst_01 Credit 3			
37	Andrew Jenkins	Evidence	W			
38	Andrew Jenkins	Evidence	Wst_01 Credit 1			
39	Philip Harvey	pro forma	BREEAM_2014v1_Compliance_Proforma_Wat01_01_Rev_A_20170510			
40	Scott White and Hookins	BRE tool	BREEAM_UK_NC_2014_Wat01_Calculator_v1.0			
41	Philip Harvey	map	1213 Greenwood CC_Breeam_Tra 02_Proximity to food outlet including cash machine			
42	Philip Harvey	photograph	1213 Greenwood CC_Breeam_Tra 02_Proximity to food outlet including cash machine_photo			
43	Philip Harvey	map	1213 Greenwood CC_Breeam_Tra 02_Proximity to leisure facility			
44	Philip Harvey	map	1213 Greenwood CC_Breeam_Tra 02_Proximity to GP + post office			
45	Philip Harvey	report	External Building Fabric			
46	Philip Harvey	report	REVERBERATION CRITERIA GREENWOOD PLACE RESOURCE CENTRE			
47	Andrew Jenkins	Pro-Forma	Man05_Credit 1			
49	Andrew Jenkins	Pro-Forma	Man05_Credit 3			
50	Andrew Jenkins	Pro-Forma	Man05_Credit 2			
51	Andrew Jenkins	Pro-Forma	Man03_Credit 3			
52	Andrew Jenkins	Pro-Forma	Man03_Credit 2			
53	Andrew Jenkins	Pro-Forma	Man03_Credit 5			
54	Andrew Jenkins	SHEM Doc	Timber Purchasing			
55	Andrew Jenkins	SHEM Doc	Pollution Prevention			
56	Andrew Jenkins	EMS	Man03_Credit 1			
57	Andrew Jenkins	Pro-Forma	Man04_Credit 1			
58	Andrew Jenkins	Pro-Forma	Man04_Credit 2			
59	Andrew Jenkins	Pro-Forma	Man04_Credit 4			
60	Philip Harvey	drawing	1213 Greenwood CC_Breeam_Hea 1_ blind mark up 16.05.2017			
61	Philip Harvey	drawing	1213_WD_551_Cycle Storage_Rev_A			
62	Philip Harvey	drawing	1213_WD_508.3_Staff Shower 2.08_REV A			
64	Philip Harvey	drawing	wwa_1611_LL_105_C01 Road Layout Levels			
65	Philip Harvey	email	2016-05-25-1315-13-JYTJ rchan@swh.co Q1e RE- GPRC - Propose			
66	Philip Harvey	drawing	wwa_1611_LL_105_C01 Road Layout Levels			
67	Andy Jenkins	Evidence	Remediation Strategy			
68	Kier	Report	Greenwood Place LE01			
69	Andy Jenkins	Evidence	GPRC - Travel Plan Revised			
70	Andy Jenkins	Evidence	Transport Assessment Addendum			
71	Andy Jenkins	Evidence	Noise Impact Assessment			
72	Philip Harvey	Meeting minutes	Stage 2 DTM minutes			

73	Philip Harvey	email	FW Greenwood Center & Residentail			
74	Philip Harvey	Energy Statement	GREENWOOD PLACE & HIGHGATE ROAD SITE			
75	Philip Harvey	Schedule	Fabric, Structure & Components – Coordination Schedule			
76	Philip Harvey	report	Citizen Jury report FINAL March 2013			
77	Philip Harvey	minutes	Greenwood Resource Centre – Design Workshop 2			
78	Andy Jenkins	Evidence	Sustainability Champion Letter			
81	Scott Tayler (Synergy)	PDF	External Lighting INfo			
82	Scott Tayler (Synergy)	Letter	POL04 - Letter of Compliance			
83	Scott Tayler (Synergy)	Spec	Major Water Leak Detection Spec Clauses			
84	Scott Tayler (Synergy)	PDF	Domestic Water Schematic			
85	Scott Tayler (Synergy)	PDF	Domestic Water Schematic			
86	Scott Tayler (Synergy)	PDF	Energy Monitoring Schematics			
87	Scott Tayler (Synergy)	PDF	Energy Meter Info			
88	Scott Tayler (Synergy)	PDF	Water Meter Info			
90	Matt Davis	Certificate	CCS Performance Beyond Compliance			
91	Matt Davis	Audit report	CCS Audit 12/09/17			
92	Scott Tayler (Synergy)	PDF	POL03 Evidence			
93	Kier	email	Greenwood Place - Man02 Credit 3			
94	Synergy	BRE tool	Ene 01.JPG			
95	Synergy	Report	The Greenwood Centre Part L2 2013 Be Green brukl.pdf			
96	Scott Tayler (Synergy)	PDF	Thermal Zoning Letter			
97	Scott Tayler (Synergy)	PDF	HEA01 C1 Evidence			
98	Synergy	Checklist	am11checklistapache (1)			
99	Andrew Jenkins	Evidence	Environmental Noise Survey and Plant Noise Assessment Report			
100	Scott Tayler (Synergy)	PDF	PMV and PPD for AC Rooms			
101	Scott Tayler (Synergy)	PDF	Climate Change Modelling			
102	London Borough of Camden	Evidence	Man_05 - Aftercare			
103	W-WA	Pro-Forma	BREEAM1_Compliance_Proforma_Mat02_2017_11_10.pdf			

104	Scott Tayler (Synergy)	PDF	POL01 Evidence			
105	KCL	Evidence	Ene 06			
106	KCL	Evidence	LE02			
107	KCL	Evidence	LE02 - Credit 2			
108	KCL	Evidence	LE05			
109	KCL	Evidence	LE02			
110	KCL	Evidence	Wst01			
111	KCL	Evidence	Hea 01 - Luminaire Schedule with External Lights			
112	KCL	Evidence	Hea 01 - Internal Lighting Calculations 2 of 3			
113	KCL	Evidence	Hea 01 - Internal Lighting Calculations 3 of 3			
114	KCL	Evidence	Hea 01 - Internal Lighting Calculations 1a of 3			
115	KCL	Evidence	Hea 01 - Internal Lighting Calculations 1b of 3			
116	KCL	Evidence	Hea 01 - Internal Lighting Calculations 1c of 3			
117	KCL	Evidence	Hea 01 - Internal Lighting Calculations 1d of 3			
118	KCL	Evidence	Hea 01 - Internal Lighting Calculations 1e of 3			
119	KCL	Evidence	HEA02 - IAQ			
120	Wynne-williams	email	Wat04 Confirmation			
121	Kier	Pro-Forma	BREEAM 2014 Mat 3 Proforma.pdf			
122	Kier	BRE tool	BREEAM-UK-NC-2014-Mat03-Calculator-v2.0 (9).xlsx			
123	Kier	EMS/BES certificates	Greenwood MAT03.zip			
124	PCKO	Pro-Forma	signed hea2 proforma			
125	Kier	Pro-Forma	Greenwood Place_Compliance_Proforma_Man03 Signed			
126	Kier	Pro-Forma	Greenwood Place_Proforma_Hea02_VOC Testing Signed			
127	KCL	Evidence	ENE04			
128	Philip Harvey	manufacturers standard documentation	Technical Compliance Statement			August 2015
129	Philip Harvey	Product Data Sheet	Dulux Trade Diamond Eggshell			Issued 02/14
130	Philip Harvey	Product Data Sheet	Dulux Trade Floor Shield			16.11.2107
131	Kier	Report	04400 Greenwood Centre - Energy Statement Rev K			
133	Kier	Email	Tra03 Locker			
134	BRE	email	2017-03-14_155720_BRE Central Services_BREEAM Enquiry QN-07688-G1K6S0 P034 U			
135	Kier	Policy	KCL_-_Responsible_Procurement_Policy (2).pdf			
136	Kier	Policy	SHEMS-POL-GR-005_Timber_Purchasing_Policy_Statement (1).pdf			
137	Scott White and Hookins	BRE tool	BREEAM_UK_NC_2014_LE03_LE04_Calculator_v2.0 (4)			