

The Pavilion, Oracle Riverside

BREEAM Post Construction Assessment Report



Contents

1.0 Introduction
2.0 The BREEAM Standard
3.0 Management
4.0 Health & Wellbeing
5.0 Energy
6.0 Transport
7.0 Water
8.0 Materials
9.0 Waste
10.0 Land Use & Ecology
11.0 Pollution
12.0 Innovation
13.0 Reference Table

1.0 Introduction

This report is intended as a summary of the formal assessment of Oracle Riverside under New Construction version at Final (Post Construction Stage) .

The project has been submitted to BRE for Quality Assurance and Certification at a score of 56.27%, a Very Good rating.

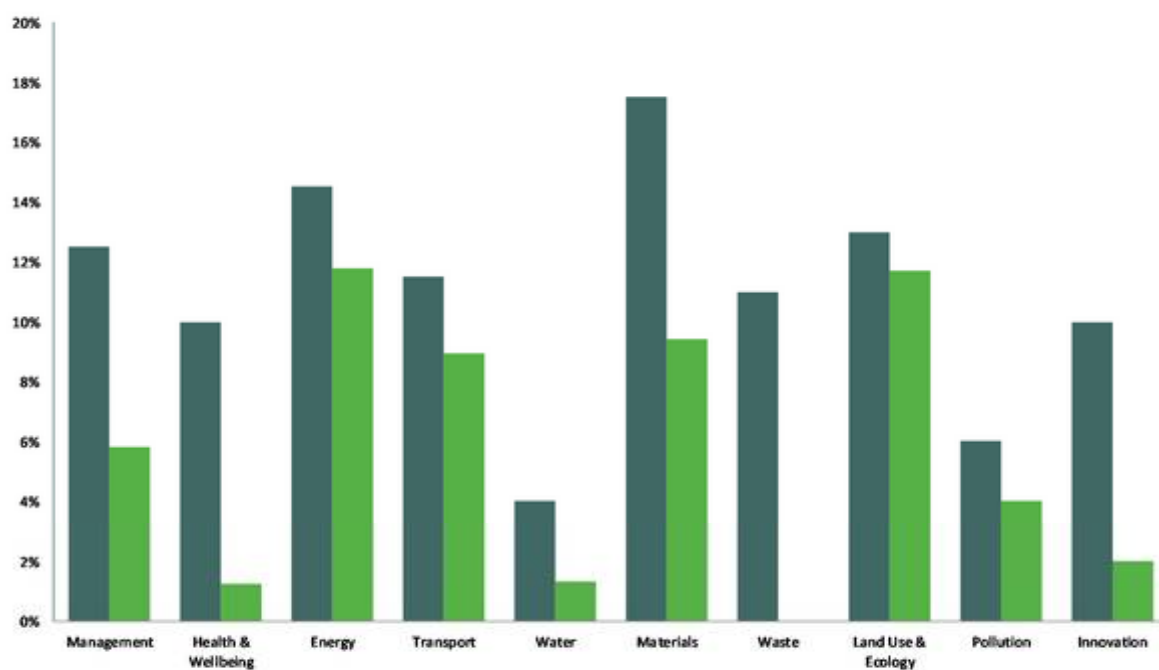
The licenced assessor for this project is Charlotte Brewin of Envision and the BRE registration number for the project is BREEAM-0060-0981.

BREEAM UK New Construction 2014 Assessment Report: Rating & Key Performance Indicators **BREEAM® UK**

Overall Building Performance

Building name	Oracle Riverside
BREEAM rating	Very Good
Total Score	56.25%
Min. standards level achieved	Very Good level

Building Performance by Environment Section



■ Section score available ■ Section score achieved

Environmental Section	No. credits available	No. credits Achieved	% credits achieved	Section Weighting	Section Score
Management	15	7	46.67%	12.50%	5.83%
Health & Wellbeing	8	1	12.50%	10.00%	1.25%
Energy	16	13	81.25%	14.50%	11.78%
Transport	9	7	77.78%	11.50%	8.94%
Water	3	1	33.33%	4.00%	1.33%
Materials	13	7	53.85%	17.50%	9.42%
Waste	8	0	0.00%	11.00%	0.00%
Land Use & Ecology	10	9	90.00%	13.00%	11.70%
Pollution	6	4	66.67%	6.00%	4.00%
Innovation	10	2	20.00%	10.00%	2.00%

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	12.5%
Health & Wellbeing	15%
Energy	14.5%
Transport	11.5%
Water	4%
Materials	17.5%
Waste	11%
Land Use & Ecology	13%
Pollution	6%
Innovation	10%

3.0 Management

Management
Man 01 - Project brief and design

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

Aim

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

Credits

2 of 4 credits awarded.

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

Assessor Comments / Notes

Stakeholder consultation (third party)

(Note this credit was not awarded at Design Stage and therefore full evidence is provided now).

Ref 1 confirms consultation with the local community in October 2015, including consultation on the proposed design, functionality and provision of facilities within the space. The information presented at these consultations is set out in the Design and Access Statement (ref 34). Refs 29-32 consultation with future tenant and Oracle FM team, including feedback on early design changes. This consultation covered management and operation, compliance with statutory requirements and inclusive/accessible design. The timing of this consultation was prior to the appointment of the design and build contractor (appointment of Careys confirmed in August 2016, ref p7), who were responsible for taking the design through RIBA Stage 3 to completion, i.e. still at concept design stage (RIBA Stage 2).

Sustainability Champion (design and monitoring progress)

(Note this credit was not awarded at Design Stage and therefore full evidence is provided now).

Ref 15 and 26 confirms appointment of Simon Rainsford, and subsequently Charlotte Brewin, as BREEAM AP. The Sustainability Statement (Ref 2) confirms the targeted BREEAM rating of Very Good. This was communicated to Careys, as lead designer and contractor, during the contract negotiations (as confirmed in reference p7.) The timing of this consultation was prior to the appointment of the design and build contractor (appointment of Careys confirmed in August 2016, ref p7), who were responsible for taking the design through RIBA Stage 3 to completion, i.e. still at concept design stage (RIBA Stage 2).

- BREEAM predictive assessment (ref 4) and progress reports (ref 5 and 59,60+61) confirm involvement/advice provided by BREEAM AP, Simon Rainsford and Charlotte Brewin

- Ref 13, 14, 25, 62-66 confirm invitations and regular attendance by BREEAM AP, Simon Rainsford and Charlotte Brewin at key Design/Project Meetings during RIBA Stage 2, 3 and 4, and regular inclusion of BREEAM on DTM agendas.

- Confirmation that there is no conflict between providing the BREEAM AP role and the BREEAM Assessor role is provided in ref 79.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
1	4	Barton Willmore, email, Oracle Riverside Reading - Public Consultation, 28/10/15	
2	9	Envision, report, Sustainability Report, 25/7/15	
4	12	Envision, report, BREEAM Pre Assessment - Oracle Riverside - Tracker, 18/9/15	
5	12	Envision, report, Riverside, The Oracle - BREEAM Summary Report 23 June 2016, 23/6/16	
13	12	Opera PM, minutes, Riverside The Oracle DTM Next Steps 290715, 290715	
14	12	Opera PM, minutes, The Oracle Riverside Pre-Start Meeting Notes and Next Steps, 30/08/16	
15	8	Opera PM, email, Re Riverside Works, 15/7/15	
25	12	Lead Manage, minutes, Hammerson Minutes, 18/11/15	
26	8	Gleeds, contract, eed of Appointment of BREEAM Consultant, 19/12/16	
29	4	Lead Manage, minutes, Next Steps Comptoir meeting , 24/2/16	
30	4	Lead Manage, minutes, Next Steps Comptoir meeting 22.03.16, 22/3/16	
31	4	Lead Manage, minutes, Next Steps Comptoir meeting 18.04.16, 18/04/16	
32	3	Lead Manage, minutes, Oracle Riverside Comptoir meeting 16.12.16, 16/12/16	
33	1	Lead Manage, minutes, TOSC RD Concept Review meeting minutes , 05/11/14	
34	3	Barton Willmore, report, Oracle Riverside - Design and Access Statement, Aug 2015	
59	12	Envision, report, Oracle Riverside - BREEAM Evidence Tracker v1 230916, 23/0916	
60	12	Envision, report, ORR.BREEAM tracker 20161026-1715, 26/10/16	
61	12	Envision, report, ORR.BREEAM tracker 20170213, 13/2/17	
62	12	Careys, email, Microsoft_Outlook_Memo_Style - Invitation and Agenda DTM 29-03-17, 29-03-17	
63	12	Careys, email, Microsoft_Outlook_Memo_Style -	

		Invitation and Agenda DTM 16-12-16, 16-12-16	
64	12	Careys, email, Microsoft_Outlook_Memo_Style - Invitation and Agenda DTM 27-10-16, 27-10-16	
65	12	Careys, minutes, 3297_Oracle_acf_v1_DTM No 6 Minutes_011216_Manufacturers Details Workshop, 01/12/16	
66	12	Careys, minutes, 3297_Oracle_acf_v1_DTM No 5 Minutes_221116_Superstructure, 22/11/16	
69	8	Envision Sustainability Ltd, report, BREEAM Responsibilities, July 2105	
70	8	Envision Sustainability Ltd, spreadsheet, BREEAM Pre-Assessment - First Pass, July 2105	
7	4	Gleeds, email, The Oracle - Riverside Contract documents, 15/9/16	

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

Ref 27 provides High Level Costing estimate for the proposed development. Page 9 confirms the high level cost estimate for construction for the Pavilion development as £973,489. The sqm is also confirmed on this page as 170sqm. Therefore the estimated capital cost as pounds per square metre for the proposed development is £5726/m2. The email from Careys (ref p8) confirms there is no change to this figure, post construction. This is reported on the BREEAM Assessment Scoring and Reporting tool, therefore 1 credit is awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
27	6	Gleeds, spreadsheet, Oracle Riverside - High Level Costing, 25/8/15	
8	6	Careys, email, ORR ... BREEAM evidence ... MAN02 criteria 6 capital cost reporting.msg, 29/6/17	

Management
Man 03 - Responsible construction practices

Number of credits available:	6
Number of credits achieved:	4
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

4 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	0
Monitoring of construction site impacts - Transport of construction materials & waste	0

Assessor Comments / Notes

Pre-requisite

Refs P9 and p12 confirm purchase of PEFC/FSC legally harvested and traded timber for construction timber.

Contractor EMS

Careys ISO14001 certificate (ref 38) confirms the principal contractor has an EMS certified to ISO14001. Onsite procedures followed during construction presented in refs p13 and p14, confirming compliance with requirements of PPG6.

Sustainability Champion

- ref 26 confirms appointment of Envision as Sustainability Champion during the construction phase
- the Employers Requirements (ref 3) confirms at Clause 2.17.1.4.3 that the Contractor will achieve the BREEAM requirement, and references the Envision predictive assessment (ref 5) confirming this requirement as Very Good.
- refs 18-22 confirm regular site visits by Envision and reporting of progress to the team. This post construction submission confirms achievement of a BREEAM Very Good rating, achieving the target set in Carey's contract.

CCS

Site visit report and certificate for Considerate Constructors Scheme (ref p10 and p11) confirms achievement of exemplary level of practice (score of 40 achieved) - therefore 2 credits can be awarded at design stage, plus the exemplary level credit.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
3	5	Gleeds, contract, Volume 2 - Contract, 18/8/16	
26	None selected	Gleeds, contract, deed of Appointment of BREEAM Consultant, 19/12/16	
37	2	Careys, Letter, ORR-3257 letter dated 20170322 re BREEAM item MAN 03 criteria 2a 3, 22/3/17	
38	2	Careys, certificate, ISO 14001 certificate, 14 June 2017	
41	1	Careys, Letter, ORR-3257 letter dated 20170322 re BREEAM item MAN 03 criteria 1, 22/3/17	
42	7	Careys, Letter, ORR-3257 letter dated 20170322 re BREEAM item MAN 07 criteria 1 INN 01b, 22/3/17	
44	9	Careys, confirmation letter, BREEAM_2014v1_Compliance_Statement_MAN03 c1 (002), 23/3/17	
9	1	Travis Perkins, note, Delivery Note, 07/06/17	
10	7	Considerate Constructors, report, Monitors Site Report, 16/5/17	
11	7	Considerate Constructors, certificate, Performance Beyond Compliance Certificate 100385.pdf, 19/5/17	
12	1	Careys, scanned document, Scanned timber certificate, 15/5/17	
13	3	Careys, records, Site Records, 24/3/17	
14	3	Careys, drawing, River Protection , 1/3/17	
15	4	Envision, report, Construction Site Visit Report, 05/04/17	
16	4	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	4	Envision, report, Photographs from Site Visit 250517, 25/05/17	
18	4	Envision, email, RE Oracle Riverside RFI.msg, 13/3/17	
19	4	Envision, email, Oracle - Riverside - Envision Site Visit- Time Hold @ Wed 5 Apr visioneco.com).msg, 29/3/17	
20	4	Envision, email, RE Oracle Riverside - updated BREEAM tracker.msg, 14/3/17	
21	4	Envision, email, RE Riverside Breeam.msg, 3/5/17	
22	4	Envision, email, ORR ... BREEAM post construction stage .msg, 17/7/17	

Management

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

Man 04 - Commissioning and handover**Minimum standards met?****N/a****Aim**

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

Credits

0 credits awarded.

	Credits awarded
Testing and inspecting building fabric	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

4.0 Health & Wellbeing

Health & Wellbeing
Hea 01 - Visual Comfort

Number of credits available:	4
Number of credits achieved:	1
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

1 of 4 credits awarded.

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

Assessor Comments / Notes

As a shell only assessment, the only requirement for Credit 4 - Internal and External lighting is requirement 10. Ref 71 confirms the external lighting strategy has been designed and installed in compliance with both BS5489-1:2013 and BS EN 12464-2:2014.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
35	10	Studio Fractal, report, Lighting Report, 21/2/17	
71	10	24-7 Electrical, letter, Oracle Riverside - External Lighting, 29/6/17	

Health & Wellbeing
Hea 02 - Indoor Air Quality

Number of credits available:	1
Number of credits achieved:	0
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
Potential for natural ventilation	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Health & Wellbeing
Hea 05 - Acoustic Performance

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

Aim

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

Credits

0 credits awarded.

	Credits awarded
Acoustic performance	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Health & Wellbeing
Hea 06 - Safety and Security

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

0 credits awarded.

	Credits awarded
Safe access	0
Security of site and building	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
6	11	Barton Willmore, email, Re Oracle Riverside Reading -	

		Secure Design and Crime Prevention, 2/12/15	
46	13	Careys, record, PJs 3297_CCR-008 re undercroft gate lock, 29/3/17	

5.0 Energy

Energy
Ene 01 - Reduction of energy use and carbon emissions

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

Aim

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

Credits

12 of 12 credits awarded.

	Credits awarded
Energy performance	12

Assessor Comments / Notes

Ref P23 presents the as built Brukl report for the Riverside development. The results from this Brukl report have been inserted in the updated BREEAM Assessment Scoring and Reporting Tool (v9.6), confirming 12 credits are achieved. The correspondence in the email exchange between Envision Energy and Careys (Ref 24) confirms the building has been constructed in accordance with the parameters used in the as built Brukl report.

The energy assessment was completed by Ciaran Doherty (as shown in Certifier Details of Brukl report - ref p23). Ciaran is an accredited energy assessor (see CV ref 68), accreditation number QUID204786

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
7	1	Envision, report, Oracle - Riverside_Actual_Brukl, 19/8/15	
8	1	Envision, report, Ene 1 Compliance Checker BREEAM 2014, 29/9/16	
47	1	Careys, Letter, ORR-3257 letter dated 20170419 re BREEAM item ENE 01criteria 1, 19/4/17	
68	1	Envision, document, CV Ciaran Dorrity, 19/06/17	
23	1	Envision Energy Ltd, brucl, Oracle Riverside As Built Brukl , 23/6/17	

24	1	Envision Energy Ltd, email, RE Oracle Riverside - As-built information (BREEAM EPC BRUKL).msg, 23/6/17	
----	---	--	--

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

The Lighting Report (ref 35) and subsequent email correspondence (ref 36) confirms

- 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

Compliant external light fittings were observed during the site visit on 25/5/17 (refs P16-P17)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
35	None selected	Studio Fractal, report, Lighting Report, 21/2/17	
36	2	Studio Fractal, email, FW Oracle Riverside - BREEAM Credits, 14/3/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

Energy
Ene 04 - Low carbon design

Number of credits available:	3
Number of credits achieved:	0

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

0 credits awarded.

	Credits awarded
Passive design - Passive design analysis	0
Passive design - Free cooling	0
Low and zero carbon technologies - LZC feasibility study	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:	4
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

4 of 5 credits awarded.

	Credits awarded
Public transport accessibility	4

Assessor Comments / Notes

In accordance with Criterion 1 & 2, the tra01 calculator (ref 16), map showing distances to transport nodes (ref 17) and bus and rail timetables (ref 18 and 19) have been provided.

Reading Train Station is located approximately 776 metres from the proposed development. The station offers connections throughout the UK, to London, Oxford the South West and the north of England. The frequency of services have been entered into the Tra01 calculator and the timetables that prove have also been provided.

The site also benefits from a high-quality bus network with a bus-stop located 255 metres from the site. This stop is served by a minimum of 4 services, with the 7 and Greenwave 40 services stopping hourly and the Emerald 5 and 6/6a service stopping 6 times per hour during peak times. The frequency of services have been entered into the Tra01 calculator and the timetables that prove have also been provided.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
16	1, 2	Envision Sustainability, BREEAM Calculator, Tra01 Calculator - Oracle Riverside, 03/10/2016	
17	1, 2	Envision Sustainability, Map, Distance from Site to Transport Nodes, 03/10/2016	
18	1, 2	Envision Sustainability, Document, Train Timetables from Reading Train Station, 03/10/2016	
19	1, 2	Envision Sustainability, Document, Bus Timetables from nearest Bus Stop, 03/10/2016	

Transport
Tra 02 - Proximity to amenities

Number of credits available:	1
Number of credits achieved:	1
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 a highly accessible area, located within the confines of "The Oracle Reading", which is a large shopping centre in the centre of Reading. Evidence Item 20 is a map export from The Oracle's website, showing

on Page 1, appropriate food outlets, names "Riverside Restaurants", along with ATMS, shown with a £ symbol. Page 2 of the map shows an over-the-counter pharmacy in Boots. Evidence Item 21 is a map showing a 500 metre radius, proving the entire of the shopping centre is within 500 metres of the site. The location of these facilities was confirmed during the site visit (refs P16 and P17)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
20	1, 2	Envision Sustainability, Map, The Oracle - Map of Amenities, 03/10/2016	
21	1, 2	Envision Sustainability, Map, Map showing 500 metre radius from site, 03/10/2016	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

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

The access and egress strategy (ref 72) confirms there is going to be a maximum of 8 staff, which would require 1 cycle storage space and therefore 1 shower and 1 locker.

Ref 57 confirms the potential location for shower, lockers and changing facilities within the back of house area of the restaurant, linked with the water supply and drainage provision for the WCs. In line with CN1.1, this confirms the building shell has been designed to facilitate the future installation of the compliant cyclist facilities by the future tenant, therefore the 2nd credit is achieved.

The space provided for one shower and 6 lockers was confirmed during the site visit (refs P16 and P17)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
22	1	Hammerson, Document, The Oracle Travel Plan, January 2015	
23	1	Workmans Building Consultancy, Map, Map showing location of cycle parking on-site	
57	2	Careys, drawing, ORR-3257_B.TRA03-01 rev 0, changing & shower facilities, 07/04/17	
72	1	Careys, report, Access and Egress Strategy, April 2017	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

Transport
Tra 05 - Travel Plan

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

0 credits awarded.

	Credits awarded
Travel plan	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
22	1, 2, 3, 4	Hammerson, Document, The Oracle Travel Plan, January 2015	
23	None selected	Workmans Building Consultancy, Map, Map showing location of cycle parking on-site	
73	4	Opera Project Management, email, Oracle - Riverside - Travel to Work Plan, 07/6/17	

7.0 Water

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
Water monitoring	1

Assessor Comments / Notes

Ref 52 confirms a water meter with a pulsed output will be installed as part of the main build contract. The location of the pulsed water meter for the mains water supply to the building is shown on ref 74. The building will be managed by the future tenant, and there is no existing BMS for this building. Therefore this requirement is not relevant to this shell only assessment.

The location of the water meter was confirmed during the site visit (refs P16 and P17)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
52	1	Opera PM, email, Riverside - BREEAM - Wat 02	
74	1	Careys, drawing, ORR-3257.Wat 02 pulsed water meter location, April 2017	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

Water
Wat 03 - Leak Detection

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

Aim

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

Credits

0 credits awarded.

	Credits awarded
Leak detection system	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
39	1	Hoare Lee, photo, Water meter location, 22/3/17	
40	1	Hoare Lee, drawing, Oracle Riverside Water Meter Location, 22/3/17	
52	None selected	Opera PM, email, Riverside - BREEAM - Wat 02	

Water
Wat 04 - Water Efficient Equipment

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

Aim

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

Credits

0 credits awarded.

	Credits awarded
Water efficient equipment	0

Assessor Comments / Notes

Credit not achieved at post construction

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
9	1	Envision, drawing, Oracle Riverside - BREEAM	

		Assessment areas - Hard landscaping, 28/9/16	
10	1	Barton Willmore, drawing, Oracle Public Realm - landscaping planting tender - layout, 17/5/16	
53	2	Careys, email, BREEAM Wat04 , 13/2/17	
54	2	Envision, website download, Temporary irrigation systems - Knowledge Base, 13/2/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

8.0 Materials

Materials
Mat 01 - Life Cycle Impacts

Number of credits available:	5
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 5 credits awarded.

	Credits awarded
Life cycle impacts	5

Assessor Comments / Notes

(Note this credit was not awarded at Design Stage and therefore full evidence is provided now). The principal contractor, Careys, completed Ref P2, confirming the main construction materials, specification details and, quantities achieved by the Mat 01 credit. This information was inputted into the Mat 01 calculator (ref P3) along with the Green Guide ratings and kg of CO2/m2eq, with 2 bespoke ratings calculated for the Aluminium Clad Concrete Upstand (ref P4) and Rainscreen Cladding (ref P5). The completed Mat 01 calculator (ref P3) confirms 8.4 Mat 01 points achieved, which translates to 5 credits, plus 1 innovation credit (see innovation section below). The email from Careys (ref P6) confirms the building has been constructed in accordance with these specifications.

Schedule of Evidence

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

2	1	Careys, report, BREEAM_2014v1_Mat01_01 (20170728-1444) compliance proforma, 28/7/17	
3	1	Envision, calculator, BREEAM_UK_NC_2014_Mat01_Calculator_v1.1 Oracle Riverside.xlsm	
4	1	Envision, Bespoke Green Guide, Aluminium clad concrete upstand BRE Green Guide calculator.pdf, 29/8/17	
5	1	Envision, Bespoke Green Guide Rating, Rainscreen Cladding BRE Green Guide Calculator.pdf, 28/7/17	
6	1	Careys, email, ORR..BREEAM...Green Guide confirmations, 26/10/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

Materials
Mat 02 - Hard Landscaping and Boundary Protection

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

0 credits awarded.

	Credits awarded
Hard landscaping and boundary protection	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Materials
Mat 03 - Responsible Sourcing of Materials

Number of credits available:	4
Number of credits achieved:	1
Minimum standards met?	Y

Aim

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

Credits

1 of 4 credits awarded.

	Credits awarded
Pre-requisite	Y
Sustainable Procurement Plan	1
Responsible sourcing of materials (RSM)	0

Assessor Comments / Notes

Refs P9 and p12 confirm purchase of PEFC/FSC legally harvested and traded timber for use within the construction of the Pavillion.

Ref P1 confirms Careys sourced materials for the project in accordance with their documented sustainable procurement plan (ref 75)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
48	1	Careys, letter, ORR-3257 letter dated 20170322 re BREEAM item MAT 03 criteria 1 (002), 24/3/17	
55	2	Careys, policy document, Careys Sustainability Policy, 05/04/17	
75	2	Careys, policy document, Sustainable Procurement Plan, June 2016	
1	2	Careys, email, ORR..BREEAM...MAT 03 confirmation re responsible sourcing - sustainable procurement plan, 26/10/17	
9	None selected	Travis Perkins, note, Delivery Note, 07/06/17	
12	None selected	Careys, scanned document, Scanned timber certificate, 15/5/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

Materials
Mat 04 - Insulation

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

0 credits awarded.

	Credits awarded
Embodied impact	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

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

The email from Brendan Mullard, architect at Object Space Place (Ref 58) confirms relevant consideration has been given to designing for durability and resilience of the shell of this building and sets out the identified vulnerable areas and proposed protection measures. Ref 97 confirms the design decisions made to limit material degradation due to environmental factors.

The inclusion of the above durability and protection measures in the construction of the Pavillion was confirmed during the site visit (refs P16 and P17)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
58	1	Object Space Place, email, Re Oracle Riverside - BREEAM Mat 05, 31/3/17	
76	2	Object Space, report, Mat 05 Designing for Durability and Resilience, 22/6/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

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:	0
Minimum standards met?	Y

Aim

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

Credits

0 credits awarded.

	Credits awarded
Construction resource efficiency	0
Diversion of resources from landfill	0

Assessor Comments / Notes

Credit not achieved at post construction

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
43	1	Careys, confirmation letter, BREEAM_2014v1_Compliance_Statement_Wst01_01, 22/3/17	
45	1	Careys, plan, ORR-3257_SWMP rev 0 site waste management plan (blank template) (002), 23/3/17	
77	3	Careys, document, Pre demolition audit, 17/5/16	

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:	0
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

0 credits awarded.

	Credits awarded
Operational waste	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

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:	1
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

1 of 2 credits awarded.

	Credits awarded
Previously occupied land	1
Contaminated land	0

Assessor Comments / Notes

Ref 11 confirms the existing site layout. Ref 9 shows the proposed site layout for the proposed Riverside restaurant and external seating area, showing all within an area previously developed.

The location of the site on existing developed land was confirmed during the site visit (refs P16 and P17)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
9	None selected	Envision, drawing, Oracle Riverside - BREEAM Assessment areas - Hard landscaping, 28/9/16	
11	1	Barton Willmore , drawing, Existing Site Layout, 20/8/15	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

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 49 and 50 (letter and report issued by ecology consultants EPR) confirm all requirements met and both credits can be awarded.

The only protection measures referred to in the EPR report relate to protection of the river. Refs P13 and P14 confirm these measures were followed during construction therefore both credits can be awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
49	1	EPR, Letter, Reading Oracle BREEAM LTR 270317, 27/3/17	
50	1	EPR, report, BREEAM Ecology Report, 27/3/17	
13	None selected	Careys, records, Site Records, 24/3/17	
14	None selected	Careys, drawing, River Protection , 1/3/17	

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 49 and 50 (letter and report issued by ecology consultants EPR) confirm all requirements met. The before and after habitat/species values have been inserted into the LE03/LE04 calculator (ref 67) and confirm species change of +0.39 and therefore both credits can be awarded.

Confirmation of the planting, including the green roof was confirmed during the site visit on 25/5/17 (refs P16-P17), therefore the proposed change in ecological value calculated at design stage has been achieved.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
49	None selected	EPR, Letter, Reading Oracle BREEAM LTR 270317, 27/3/17	
50	None selected	EPR, report, BREEAM Ecology Report, 27/3/17	
67	1	Envision, calculator, BREEAM_UK_NC_2014_LE03_LE04_Calculator_v2.0, 19/4/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

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 49 and 50 (letter and report issued by ecology consultants EPR) confirm all requirements met. The before and after habitat/species values have been inserted into the LE03/LE04 calculator (ref 67) and confirm species change of +0.39. The letter (ref 49) confirms that the SQE agrees that all their recommendations have been incorporated, will result in an increase in ecological value, appropriate to the riparian habitat features associated with the River Kennet and supporting local bird life. As such, whilst the increase doesn't achieve 6, in accordance with CN3.5, based on the advice for the SQE and the enhancement achieved, both credits are awarded.

The change in ecological value is confirmed in the LE03/04 calculator (ref 67) as 0.39. This is the same as is reporting in the Scoring and Reporting Spreadsheet. The confusion may have arisen as the letter from the ecologist had the wrong figure reported. This has now been edited, see Appendix 2 of the rev 2 of the Ecology letter (ref 78)

Confirmation of the planting, including the green roof was confirmed during the site visit on 25/5/17 (refs P16-P17), therefore the proposed change in ecological value calculated at design stage has been achieved.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
49	None selected	EPR, Letter, Reading Oracle BREEAM LTR 270317, 27/3/17	
50	None selected	EPR, report, BREEAM Ecology Report, 27/3/17	
67	None selected	Envision, calculator, BREEAM_UK_NC_2014_LE03_LE04_Calculator_v2.0, 19/4/17	
78	3	EPR, letter, Reading Oracle BREEAM LTR 270317 rev2, Version rev 2, 27/3/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

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

Ref 49 and 50 (letter and report issued by ecology consultants EPR) confirms EPR were appointed as SQE prior to commencement of work on site and confirm all relevant UK and EU legislation relating to protection of ecology will be followed. Ref P25 confirms correspondence with EPR post construction and confirms their satisfaction to the measures following during construction.

Ref 51 confirms Chris Duffy has been appointed by Careys as on site Biodiversity Champion, and actions to train workforce and record biodiversity protection measures are being undertaken on site. The training of the workforce on protection of the river is demonstrated in ref P13 and P14.

The landscape and habitat management plan has been prepared (ref 56), in line with BS42020:2003, confirming management requirements for the first 5 years after completion.

Confirmation of the planting, including the green roof was confirmed during the site visit on 25/5/17 (refs P16-P17).

Based on above, the letter (ref 49) confirms implementation of the relevant measures during construction, 4 additional measures are achieved and therefore 2 credits can be awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
49	None selected	EPR, Letter, Reading Oracle BREEAM LTR 270317, 27/3/17	
50	None selected	EPR, report, BREEAM Ecology Report, 27/3/17	
51	3	Careys, email, RE ORR ... BREEAM ... sustainability champion, 13/2/17	
56	2	Barton Willmore, report, Habitat and Landscape Management Plan (Pavilion), March 2017	
13	None selected	Careys, records, Site Records, 24/3/17	
14	None selected	Careys, drawing, River Protection , 1/3/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	
25	1	EPR, email, Birdboxes, 02/08/17	

11.0 Pollution

Pollution
Pol 03 - Surface Water Run Off

Number of credits available:	5
Number of credits achieved:	3
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

3 of 5 credits awarded.

	Credits awarded
Flood resilience	1
Surface water run-off	2
Minimising watercourse pollution	0

Assessor Comments / Notes

Ref 28 shows the Modelled Flood Events and confirms Floor level of pavilion is at 38.85m AOD, which is 650mm

above the 1 in 100-year plus 20% climate change flood level (38.2m AOD), and over 850mm above the Flood Zone 3 (current 1 in 100-year) flood level of 37.96m AOD. The safe access route would be over the bridge and south-west along the southern side of the Kennet through the area, which is above the reference flood levels, Therefore 1 credit achieved.

Para 5.4.3 of the FRA (ref 12) confirms the existing site is 100% impermeable, and para 5.4.4 confirms the incorporation of soft landscaping and green roof will reduce the overall volume and rate of runoff from the site. Therefore, in accordance with compliance note CN3.9, both credits are awarded by default.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
12	2	Peter Bretts, report, Flood Risk Assessment, August 2015	
28	3	Hoare Lee, drawing, FRA Modelled Flood Events , 23/6/15	

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

Refs 24, 35 and 36 together confirm the lighting strategy for the development and confirm that the external lighting design has been specified in compliance with Table 2 of the ILP Guidance notes and will be automatically switched off between 23:00 and 07:00, or for security/safety lighting, will comply with lower levels of lighting in Table 2 of ILP guidance. This letter also confirms no illuminated advertisements are specified in this shell specification.

Compliant external light fittings were observed during the site visit on 25/5/17 (refs P16-P17)

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
24	2	24-7 Electrical, letter, 2017-01-03 BREEAM 2014 Pol 04 Light Pollution, 03/1/17	

35	None selected	Studio Fractal, report, Lighting Report, 21/2/17	
36	None selected	Studio Fractal, email, FW Oracle Riverside - BREEAM Credits, 14/3/17	
16	None selected	Envision, report, Construction Site Visit Report 250517, 25/05/17	
17	None selected	Envision, report, Photographs from Site Visit 250517, 25/05/17	

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

Site visit report and certificate for Considerate Constructors Scheme (ref p10 and p11) confirms achievement of exemplary level of practice (score of 40 achieved) - therefore exemplary level credit can be awarded.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
42	None selected	Careys, Letter, ORR-3257 letter dated 20170322 re BREEAM item MAN 07 criteria 1 INN 01b, 22/3/17	
10	None selected	Considerate Constructors, report, Monitors Site Report, 16/5/17	
11	None selected	Considerate Constructors, certificate, Performance Beyond Compliance Certificate 100385.pdf, 19/5/17	

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
Mat 01 - Life Cycle Impacts

Number of credits available:	3
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 3 credits awarded.

	Credits awarded
Green Guide to Specification (elemental approach)	1
Compliant Life Cycle Assessment software tools (Whole Building approach)	0

Assessor Comments / Notes

(Note this credit was not awarded at Design Stage and therefore full evidence is provided now).
The principal contractor, Careys, completed Ref P2, confirming the main construction materials, specification details and, quantities achieved by the Mat 01 credit. This information was inputted into the Mat 01 calculator (ref P3) along with the Green Guide ratings and kg of CO2/m2eq, with 2 bespoke ratings calculated for the Aluminium Clad Concrete Upstand (ref P4) and Rainscreen Cladding (ref P5). The completed Mat 01 calculator (ref P3) confirms 8.4 Mat 01 points achieved, which translates to 5 credits, plus 1 innovation credit (see innovation section below). The email from Careys (ref P6) confirms the building has been constructed in accordance with these specifications.

Schedule of Evidence

Ref	Criteria number	Reference	Supporting notes/information
2	None selected	Careys, report, BREEAM_2014v1_Mat01_01 (20170728-1444) compliance proforma, 28/7/17	
3	None selected	Envision, calculator, BREEAM_UK_NC_2014_Mat01_Calculator_v1.1 Oracle Riverside.xlsm	
4	None selected	Envision, Bespoke Green Guide, Aluminium clad concrete upstand BRE Green Guide calculator.pdf, 29/8/17	
5	None selected	Envision, Bespoke Green Guide Rating, Rainscreen Cladding BRE Green Guide Calculator.pdf, 28/7/17	
6	None selected	Careys, email, ORR..BREEAM...Green Guide confirmations, 26/10/17	

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
AI - Approved Innovation

Number of credits available:	1
Number of credits achieved:	0
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	Date
1	Barton Willmore	email	Oracle Riverside Reading - Public Consultation	28/10/15
2	Envision	report	Sustainability Report	25/7/15
3	Gleeds	contract	Volume 2 - Contract	18/8/16
4	Envision	report	BREEAM Pre Assessment - Oracle Riverside - Tracker	18/9/15
5	Envision	report	Riverside, The Oracle - BREEAM Summary Report 23 June 2016	23/6/16
6	Barton Willmore	email	Re Oracle Riverside Reading - Secure Design and Crime Prevention	2/12/15
7	Envision	report	Oracle - Riverside_Actual_Brukl	19/8/15
8	Envision	report	Ene 1 Compliance Checker BREEAM 2014	29/9/16
9	Envision	drawing	Oracle Riverside - BREEAM Assessment areas - Hard landscaping	28/9/16
10	Barton Willmore	drawing	Oracle Public Realm - landscaping planting tender - layout	17/5/16
11	Barton Willmore	drawing	Existing Site Layout	20/8/15
12	Peter Bretts	report	Flood Risk Assessment	August 2015
13	Opera PM	minutes	Riverside The Oracle DTM Next Steps 290715	290715
14	Opera PM	minutes	The Oracle Riverside Pre-Start Meeting Notes and Next Steps	30/08/16
15	Opera PM	email	Re Riverside Works	15/7/15
16	Envision Sustainability	BREEAM Calculator	Tra01 Calculator - Oracle Riverside	03/10/2016
17	Envision Sustainability	Map	Distance from Site to Transport Nodes	03/10/2016
18	Envision Sustainability	Document	Train Timetables from Reading Train Station	03/10/2016
19	Envision Sustainability	Document	Bus Timetables from nearest Bus Stop	03/10/2016
20	Envision Sustainability	Map	The Oracle - Map of Amenities	03/10/2016
21	Envision Sustainability	Map	Map showing 500 metre radius from site	03/10/2016
22	Hammerson	Document	The Oracle Travel Plan	January 2015
23	Workmans Building Consultancy	Map	Map showing location of cycle parking on-site	
24	24-7 Electrical	letter	2017-01-03 BREEAM 2014 Pol 04 Light Pollution	03/1/17
25	Lead Manage	minutes	Hammerson Minutes	18/11/15
26	Gleeds	contract	eed of Appointment of BREEAM Consultant	19/12/16
27	Gleeds	spreadsheet	Oracle Riverside - High Level Costing	25/8/15
28	Hoare Lee	drawing	FRA Modelled Flood Events	23/6/15
29	Lead Manage	minutes	Next Steps Comptoir meeting	24/2/16
30	Lead Manage	minutes	Next Steps Comptoir meeting 22.03.16	22/3/16
31	Lead Manage	minutes	Next Steps Comptoir meeting 18.04.16	18/04/16
32	Lead Manage	minutes	Oracle Riverside Comptoir meeting 16.12.16	16/12/16
33	Lead Manage	minutes	TOSC RD Concept Review meeting minutes	05/11/14
34	Barton Willmore	report	Oracle Riverside - Design and Access Statement	Aug 2015
35	Studio Fractal	report	Lighting Report	21/2/17
36	Studio Fractal	email	FW Oracle Riverside - BREEAM Credits	14/3/17

37	Careys	Letter	ORR-3257 letter dated 20170322 re BREEAM item MAN 03 criteria 2a 3	22/3/17
38	Careys	certificate	ISO 14001 certificate	14 June 2017
39	Hoare Lee	photo	Water meter location	22/3/17
40	Hoare Lee	drawing	Oracle Riverside Water Meter Location	22/3/17
41	Careys	Letter	ORR-3257 letter dated 20170322 re BREEAM item MAN 03 criteria 1	22/3/17
42	Careys	Letter	ORR-3257 letter dated 20170322 re BREEAM item MAN 07 criteria 1 INN 01b	22/3/17
43	Careys	confirmation letter	BREEAM_2014v1_Compliance_Statement_Wst01_01	22/3/17
44	Careys	confirmation letter	BREEAM_2014v1_Compliance_Statement_MAN03 c1 (002)	23/3/17
45	Careys	plan	ORR-3257_SWMP rev 0 site waste management plan (blank template) (002)	23/3/17
46	Careys	record	PJCs 3297_CCR-008 re undercroft gate lock	29/3/17
47	Careys	Letter	ORR-3257 letter dated 20170419 re BREEAM item ENE 01criteria 1	19/4/17
48	Careys	letter	ORR-3257 letter dated 20170322 re BREEAM item MAT 03 criteria 1 (002)	24/3/17
49	EPR	Letter	Reading Oracle BREEAM LTR 270317	27/3/17
50	EPR	report	BREEAM Ecology Report	27/3/17
51	Careys	email	RE ORR ... BREEAM ... sustainability champion	13/2/17
52	Opera PM	email	Riverside - BREEAM - Wat 02	
53	Careys	email	BREEAM Wat04	13/2/17
54	Envision	website download	Temporary irrigation systems - Knowledge Base	13/2/17
55	Careys	policy document	Careys Sustainability Policy	05/04/17
56	Barton Willmore	report	Habitat and Landscape Management Plan (Pavilion)	March 2017
57	Careys	drawing	ORR-3257_B.TRA03-01 rev 0, changing & shower facilities	07/04/17
58	Object Space Place	email	Re Oracle Riverside - BREEAM Mat 05	31/3/17
59	Envision	report	Oracle Riverside - BREEAM Evidence Tracker v1 230916	23/0916
60	Envision	report	ORR.BREEAM tracker 20161026-1715	26/10/16
61	Envision	report	ORR.BREEAM tracker 20170213	13/2/17
62	Careys	email	Microsoft_Outlook__Memo_Style - Invitation and Agenda DTM 29-03-17	29-03-17
63	Careys	email	Microsoft_Outlook__Memo_Style - Invitation and Agenda DTM 16-12-16	16-12-16
64	Careys	email	Microsoft_Outlook__Memo_Style - Invitation and Agenda DTM 27-10-16	27-10-16
65	Careys	minutes	3297_Oracle_acf_v1_DTM No 6 Minutes_011216_Manufacturers Details Workshop	01/12/16
66	Careys	minutes	3297_Oracle_acf_v1_DTM No 5 Minutes_221116_Superstructure	22/11/16
67	Envision	calculator	BREEAM_UK_NC_2014_LE03_LE04_Calculator_v2.0	19/4/17
68	Envision	document	CV Ciaran Dorrity	19/06/17
69	Envision Sustainability Ltd	report	BREEAM Responsibilities	July 2105
70	Envision Sustainability Ltd	spreadsheet	BREEAM Pre-Assessment - First Pass	July 2105
71	24-7 Electrical	letter	Oracle Riverside - External Lighting	29/6/17
72	Careys	report	Access and Egress Strategy	April 2017
73	Opera Project Management	email	Oracle - Riverside - Travel to Work Plan	07/6/17
74	Careys	drawing	ORR-3257.Wat 02 pulsed water meter location	April 2017
75	Careys	policy document	Sustainable Procurement Plan	June 2016
76	Object Space	report	Mat 05 Designing for Durability and Resilience	22/6/17

77	Careys	document	Pre demolition audit	17/5/16
78	EPR	letter	Reading Oracle BREEAM LTR 270317 rev2	27/3/17
1	Careys	email	ORR..BREEAM...MAT 03 confirmation re responsible sourcing - sustainable procurement plan	26/10/17
2	Careys	report	BREEAM_2014v1_Mat01_01 (20170728-1444) compliance proforma	28/7/17
3	Envision	calculator	BREEAM_UK_NC_2014_Mat01_Calculator_v1.1 Oracle Riverside.xlsm	
4	Envision	Bespoke Green Guide	Aluminium clad concrete upstand BRE Green Guide calculator.pdf	29/8/17
5	Envision	Bespoke Green Guide Rating	Rainscreen Cladding BRE Green Guide Calculator.pdf	28/7/17
6	Careys	email	ORR..BREEAM...Green Guide confirmations	26/10/17
7	Gleeds	email	The Oracle - Riverside Contract documents	15/9/16
8	Careys	email	ORR ... BREEAM evidence ... MAN02 criteria 6 capital cost reporting.msg	29/6/17
9	Travis Perkins	note	Delivery Note	07/06/17
10	Considerate Constructors	report	Monitors Site Report	16/5/17
11	Considerate Constructors	certificate	Performance Beyond Compliance Certificate 100385.pdf	19/5/17
12	Careys	scanned document	Scanned timber certificate	15/5/17
13	Careys	records	Site Records	24/3/17
14	Careys	drawing	River Protection	1/3/17
15	Envision	report	Construction Site Visit Report	05/04/17
16	Envision	report	Construction Site Visit Report 250517	25/05/17
17	Envision	report	Photographs from Site Visit 250517	25/05/17
18	Envision	email	RE Oracle Riverside RFI.msg	13/3/17
19	Envision	email	Oracle - Riverside - Envision Site Visit- Time Hold @ Wed 5 Apr visioneco.com).msg	29/3/17
20	Envision	email	RE Oracle Riverside - updated BREEAM tracker.msg	14/3/17
21	Envision	email	RE Riverside Breeam.msg	3/5/17
22	Envision	email	ORR ... BREEAM post construction stage .msg	17/7/17
23	Envision Energy Ltd	brukl	Oracle Riverside As Built Brukl	23/6/17
24	Envision Energy Ltd	email	RE Oracle Riverside - As-built information (BREEAM EPC BRUKL).msg	23/6/17
25	EPR	email	Birdboxes	02/08/17