

## LBRUT Sustainable Construction Checklist - January 2016

This document forms part of the Sustainable Construction Checklist SPD. This document **must** be filled out as part of the planning application for the following developments: all residential development providing **one or more new residential units (including conversions leading to one or more new units)**, and all other forms of development providing **100sqm or more of non-residential floor space**. Developments including new non-residential development of less than 100sqm floor space, extensions less than 100sqm, and other conversions are strongly encouraged to comply with this checklist. Where further information is requested, please either fill in the relevant section, or refer to the document where this information may be found in detail, e.g. Flood Risk Assessment or similar. **Further guidance** on completing the Checklist may be found in the Justification and Guidance section of this SPD.

Property Name (if relevant):  Application No. (if known):

Address (include, postcode)   
 Completed by:

For Non-Residential  
 Size of development (m2)

For Residential  
 Number of dwellings

### 1 MINIMUM COMPLIANCE (RESIDENTIAL AND NON-RESIDENTIAL)

**Energy Assessment**  
 Has an energy assessment been submitted that demonstrates the expected energy and carbon dioxide emissions saving from energy efficiency and renewable energy measures, including the feasibility of CHP/CCHP and community heating systems? If yes, please tick.

**Carbon Dioxide emissions reduction**  
 What is the carbon dioxide emissions reduction against a Building Regulations Part L (2013) baseline  
*Policy DM SD 1 and London Plan Policy 5.2 (2015) require a 35% reduction in CO<sub>2</sub> emissions beyond Building Regulations 2013.*

Percentage of **total** site CO<sub>2</sub> emissions saved through renewable energy installation?

### 1A MINIMUM POLICY COMPLIANCE (NON-RESIDENTIAL AND DOMESTIC REFURBISHMENT)

*Please check the Guidance Section of this SPD for the policy requirements*

**Environmental Rating of development:**

<i>Non-Residential new-build (100sqm or more)</i>		
BREEAM Level	<input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this? <input type="checkbox"/>
<i>Extensions and conversions for residential dwellings</i>		
BREEAM Domestic Refurbishment	<input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this? <input type="checkbox"/>
<i>Extensions and conversions for non-residential buildings</i>		
BREEAM Level	<input type="text" value="Please Select"/>	Have you attached a pre-assessment to support this? <input type="checkbox"/>

Score awarded for Environmental Rating:  
 BREEAM: Good = 0, Very Good = 4, Excellent = 8, Outstanding = 16 Subtotal

### 1B MINIMUM POLICY COMPLIANCE (RESIDENTIAL)

**Water Usage**

Internal water usage limited to 105 litres person per day. (Excluding an allowance 5 litres per person per day for external water consumption). Calculations using the water efficiency calculator for new dwellings have been submitted.  1

Subtotal

## 2. ENERGY USE AND POLLUTION

### 2.1 Need for Cooling

- |   | Score                                 |
|---|---------------------------------------|
| a. How does the development incorporate cooling measures? Tick all that apply:                    |                                       |
| Energy efficient design incorporating specific heat demand to less than or equal to 15 kWh/sqm    | <input type="checkbox"/> 6            |
| Reduce heat entering a building through providing/improving insulation and living roofs and walls | <input type="checkbox"/> 2            |
| Reduce heat entering a building through shading   | <input type="checkbox"/> 3            |
| Exposed thermal mass and high ceilings  | <input type="checkbox"/> 4            |
| Passive ventilation   | <input checked="" type="checkbox"/> 3 |
| Mechanical ventilation with heat recovery   | <input type="checkbox"/> 1            |
| Active cooling systems, i.e. Air Conditioning Unit  | <input type="checkbox"/> 0            |

### 2.2 Heat Generation

- |   |                                       |
|---|---------------------------------------|
| b. How have the heating and cooling systems, with preference to the heating system hierarchy, been selected (defined in London Plan policy 5.6)? Tick all heating and cooling systems that will be used in the development: |                                       |
| Connection to existing heating or cooling networks powered by renewable energy  | <input type="checkbox"/> 6            |
| Connection to existing heating or cooling networks powered by gas or electricity  | <input type="checkbox"/> 5            |
| Site wide CHP network powered by renewable energy   | <input type="checkbox"/> 4            |
| Site wide CHP network powered by gas  | <input type="checkbox"/> 3            |
| Communal heating and cooling powered by renewable energy  | <input type="checkbox"/> 2            |
| Communal heating and cooling powered by gas or electricity  | <input type="checkbox"/> 1            |
| Individual heating and cooling  | <input checked="" type="checkbox"/> 0 |

### 2.3 Pollution: Air, Noise and Light

- |  |                                       |
|--|---------------------------------------|
| a. Does the development plan to implement reduction strategies for dust emissions from construction sites?   | <input checked="" type="checkbox"/> 2 |
| b. Does the development plan include a biomass boiler?   | <input type="checkbox"/> -            |
| If yes, please refer to the biomass guidelines for the Borough of Richmond, please see guidance for supplementary information. If the proposed boiler is of a qualifying size, you may need to completed the information request form found on the Richmond website. | <input type="checkbox"/> -            |
| c. Please tick only one option below   |                                       |
| Has the development taken measures to reduce existing noise and enhance the existing soundscape of the site?   | <input type="checkbox"/> 3            |
| Has the development taken care to not create any new noise generation/transmission issues in its intended operation?   | <input checked="" type="checkbox"/> 1 |
| d. Has the development taken measures to reduce light pollution impacts on character, residential amenity and biodiversity?  | <input checked="" type="checkbox"/> 3 |
| e. Have you attached a Lighting Pollution Report?  | <input type="checkbox"/> -            |

Subtotal

Please give any additional relevant comments to the Energy Use and Pollution Section below

As the use of CHP is no longer encouraged within the london plan, a CHP system has not been specified. Investigations using the London Heat Map have concluded that there are no heat networks within the vicinity of the site, and that the site is in a relatively low energy density area, it has been determined that there is an extremely low possibility of an area wide network being deployed in this area in the future. It is therefore considered not sustainable to provide systems and infrastructure to facilitate connection to a future network.

## 3. TRANSPORT

### 3.1 Provision for the safe efficient and sustainable movement of people and goods

- |  |   |
|--|---|
| a. Does your development provide opportunities for occupants to use innovative travel technologies?  |   |
| Please explain:  |   |
| A cycle store is to be provided for the occupants to use which has secure cycle storage for 17 cycle parking spaces to enable occupants to travel by carbon neutral means. |   |
| b. Does your development include charging point(s) for electric cars?  | <input checked="" type="checkbox"/> 2   |
| c. <b>For major developments ONLY:</b> Has a Transport Assessment been produced for your development based on TfL's Best Practice Guidance?                                | <input type="checkbox"/> 5  |
| If you have provided a Transport Assessment as part of your planning application, please tick here and move to Section 3 of this Checklist.                                |   |
| d. <b>For smaller developments ONLY:</b> Have you provided a Transport Statement?  | <input type="checkbox"/> 5  |
| e. Does your development provide cycle storage? (Standard space requirements are set out in the the Council's Parking Standards - DM DPD Appendix 4)                       | <input checked="" type="checkbox"/> 2   |
| If so, for how many bicycles?  | <input style="width: 60px; border: 1px solid black;" type="text" value="17"/> |
| Is this shown on the site plans?   | <input checked="" type="checkbox"/> -   |
| f. Will the development create or improve links with local and wider transport networks? If yes, please provide details.   | <input type="checkbox"/> 2  |

Subtotal

Please give any additional relevant comments to the Transport Section below

The development has a PTAL of 2 and has an existing vehicular access point from Hampton Road which would provide safe access and visibility when entering and exiting the site.

**4 BIODIVERSITY**

**4.1 Minimising the threat to biodiversity from new buildings, lighting, hard surfacing and people**

- a. Does your development involve the loss of an ecological feature or habitat, including a loss of garden or other green space? (Indicate if yes)  
If so, please state how much in sqm?  -2  
400 sqm
- b. Does your development involve the removal of any tree(s)? (Indicate if yes)  
If so, has a tree report been provided in support of your application? (Indicate if yes)
- c. Does your development plan to add (and not remove) any tree(s) on site? (Indicate if yes)
- d. Please indicate which features and/or habitats that your development will incorporate to improve on site biodiversity:
- |   |     |                                     |                |       |     |
|---|-----|-------------------------------------|----------------|-------|-----|
| Pond, reedbed or extensive native planting                              | 6   | <input type="checkbox"/>            | Area provided: |       | sqm |
| An extensive green roof   | 5   | <input type="checkbox"/>            | Area provided: |       | sqm |
| An intensive green roof   | 4   | <input type="checkbox"/>            | Area provided: |       | sqm |
| Garden space  | 4   | <input checked="" type="checkbox"/> | Area provided: | 467.2 | sqm |
| Additional native and/or wildlife friendly planting to peripheral areas | 3   | <input checked="" type="checkbox"/> | Area provided: | 150   | sqm |
| Additional planting to peripheral areas                                 | 2   | <input checked="" type="checkbox"/> | Area provided: | 150   | sqm |
| A living wall   | 2   | <input checked="" type="checkbox"/> | Area provided: |       | sqm |
| Bat boxes   | 0.5 | <input checked="" type="checkbox"/> |                |       |     |
| Bird boxes  | 0.5 | <input checked="" type="checkbox"/> |                |       |     |
| Other   | 0.5 | <input type="checkbox"/>            |                |       |     |

**Subtotal** 8

Please give any additional relevant comments to the Biodiversity Section below

**5 FLOODING AND DRAINAGE**

**5.1 Mitigating the risks of flooding and other impacts of climate change in the borough**

- a. Is your site located in a high flood risk zone (Zone 3)? (Indicate if yes)  
Have you submitted a Flood Risk Assessment? (Indicate if yes)  -2  
 -
- b. Which of the following measures of the drainage hierarchy are incorporated onto your site? (tick all that apply)
- |   |                                     |   |
|---|-------------------------------------|---|
| Store rainwater for later use   | <input checked="" type="checkbox"/> | 5 |
| Use of infiltration techniques such as porous surfacing materials to allow drainage on-site | <input type="checkbox"/>            | 3 |
| Attenuate rainwater in ponds or open water features   | <input type="checkbox"/>            | 4 |
| Store rainwater in tanks for gradual release to a watercourse                               | <input type="checkbox"/>            | 3 |
| Discharge rainwater directly to watercourse   | <input type="checkbox"/>            | 2 |
| Discharge rainwater to surface water drain  | <input type="checkbox"/>            | 1 |
| Discharge rainwater to combined sewer   | <input checked="" type="checkbox"/> | 0 |
- c. Please give the change in area of permeable surfacing which will result from your development proposal:  
Please provide details of the permeable surfacing below -400 sqm  
*please represent a loss in permeable area as a negative number*

**Subtotal** 5

Please give any additional relevant comments to the Flooding and Drainage Section below

**6 IMPROVING RESOURCE EFFICIENCY**

**6.1 Reduce waste generated and amount disposed of by landfill though increasing level of re-use and recycling**

- a. Will demolition be required on your site prior to construction? *[Points will only be awarded if 10% or greater of demolition waste is reused/recycled]*  1
- If so, what percentage of demolition waste will be reused in the new development?   %
- What percentage of demolition waste will be recycled?   %
- b. Does your site have any contaminated land?
- |   |                                     |   |
|---|-------------------------------------|---|
| Have you submitted an assessment of the site contamination? | <input type="checkbox"/>            | 1 |
| Are plans in place to remediate the contamination?          | <input type="checkbox"/>            | 2 |
| Have you submitted a remediation plan?                      | <input type="checkbox"/>            | 1 |
| Are plans in place to include composting on site?           | <input checked="" type="checkbox"/> | 1 |

**6.2 Reducing levels of water waste**

- a. Will the following measures of water conservation be incorporated into the development? (Please tick all that apply):
- |   |                                     |   |
|---|-------------------------------------|---|
| Fitting of water efficient taps, shower heads etc | <input checked="" type="checkbox"/> | 1 |
| Use of water efficient A or B rated appliances    | <input checked="" type="checkbox"/> | 1 |
| Rainwater harvesting for internal use             | <input type="checkbox"/>            | 4 |
| Greywater systems                                 | <input type="checkbox"/>            | 4 |
| Fit a water meter                                 | <input checked="" type="checkbox"/> | 1 |

**Subtotal** 4

Please give any additional relevant comments to the Improving Resource Efficiency Section below

