13 NOV 2013

LBRUT SUSTAINABLE CONSTRUCTION CHECKLIST

TO BE FILLED IN FOR ALL RESIDENTIAL DEVELOPMENT PROVIDING ONE OR MORE NEW RESIDENTIAL UNITS, AND ALL OTHER FORMS OF DEVELOPMENT PROVIDING 100sqm OR MORE OF NON-RESIDENTIAL DEVEL-OPMENT

ALL OTHER CLASSES OF DEVELOPMENT ARE ENCOURAGED TO COMPLY WITH THIS CHECKLIST

This document forms part of the Sustainable Construction Checklist SPD, and should be read in conjunction with the associated Guidance Document. 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. Scores will be awarded for different achievements on site, and a final score attributed to the site as a whole.

Property Name (if relevant): Development Type

St. Paul's School

Extension of time for implementation of the staff residential accommodation

Application No. (if known): 08/1760/OUT

Address (include, postcode)

St. Paul's School, Lonsdale Road, Barnes, London, SW13 9JT

Completed by:

Nathaniel Lichfield & Partners on behalf of St. Paul's School

| MINIMUM POLICY COMPLIANCE | | |
|--|--|-------|
| Ple | ase check the Sustainable Construction webpage for the policy requirements | |
| Environmental Rating of development: | | |
| Residential new-build Code for Sustainable Homes Level | Rating achieved Code Level 4 A pre-assessment is required to support this. Has this been provided? | Ø |
| Non-Residential new-build (100sqm or more) BREEAM Level | BREEAM Excellent A pre-assessment is required to support this. Has this been provided? | 9 |
| Extensions and conversions (residential dwellings) EcoHomes Level | Please Select A pre-assessment is required to support this. Has this been provided? | . 0 |
| If other environmental rating sought please state: | Marie Annual de Control de Contro | |
| Score awarded for Environmental Rating (this will or CSH: | nly be awarded once a pre-assessment is submitted to verify the level achieved): Level 3 = 4, Level 4 = 8, Level 5 = 16, Level 6 = 20 | Score |
| BREEAM: EcoHomes: | Good = 0, Very Good = 0, Excellent = 8, Outstanding = 16 Good = 0, Very Good = 0, Excellent = 8 | |
| Accredited Assessors (Please see Guidance docu | ment for more details on accredited assessors) | |
| Have you used a licensed Code for Sustainable Hor | nes, EcoHomes and BREEAM Accredited Assessor respectively? | 7 |
| Energy Assessment (Please see Justification & Gi | uidance document for more details on how to prepare an Energy Assessment) | |
| An energy assessment is required that demonstrate | s the expected energy and carbon dioxide emissions saving from energy efficiency and renewable energy measures | |

Carbon Dioxide emissions reduction (Please see Justification & Guidance document for more details on how to calculate these figures as part of the Energy Assessment)

- Percentage of total site CO₂ emissions saved through renewable energy installation?
 Percentage of regulated CO₂ emissions saved below Building Regulations target level through all low carbon measures?

08 /17 60/EX

| 1 | Need for Cooling | | |
|----------|--|---|------|
| а | How does the development incorporate cooling measures? Tick all that apply: | Score | |
| | Energy efficient design incorporating specific heat demand to less than or equal to 15 kWh/sqm Reduce heat entering a building through providing/improving insulation and living roofs and walls Reduce heat entering a building through shading Exposed thermal mass and high ceilings Passive ventilation Mechanical ventilation with heat recovery Active cooling systems, i.e. Air Conditioning Unit | 6 2 3 C 3 C 3 1 1 | |
| 1 b | Heat Generation How have the heating and cooling systems, with preference to the heating system hierarchy, been selected (defined in London Plan policy 4A.6)? Tick the fooling system that will be used in the development: | 0 🗅 | |
| | Connect to existing CCHP/CHP networks Site-wide CCHP/CHP powered by renewable energy Gas-fired CCHP/CHP Communal heating/cooling powered by renewable energy Communal heating/cooling powered by gas Individual heating/cooling powered by renewable energy Individual heating/cooling powered by gas or electricity | 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | |
| 1. a. | Pollution: Air, Noise and Light Ooes the development plan to implement reduction strategies for dust emissions from construction sites? | 2 🗹 | |
| b. | Does the development plan to include a biomass boiler? • If yes, please refer to the biomass <u>quidelines</u> for the Borough of Richmond, and see guidance for supplementary information. If the proposed boiler is of a qualifying size, you may need to complete the information request form found on the Richmond websit | - a | |
| c. | Please tick only one option below Has the development taken measures to reduce existing noise and enhance the existing soundscape of the site? Has the development taken care to not create any new noise generation/transmission issues in its intended | 3 [] | |
| d. | Has the development taken measures to reduce light pollution impacts on character, residential amenity and biodiversity? | 3 🗆 | |
| 0. | Have you attached a Lighting Pollution Report? | - 0 | |
| Pl | ase give any additional relevant comments to the Energy Use and Pollution Section below | Subtotal | 13.0 |

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|----------------------|--|--|--|--|
| | Provision for the safe efficient and sustainable movement of people and goods | nion cuch ac alcatric | nare? | 2 🗆 |
| а. | Does your development provide opportunities for occupants to use innovative travel technological | gres, such as electric | Vet 9 : | 2 🗆 |
| b. | For major developments ONLY: Has a Transport Assessment been produced for your devel | lopment based on TfL | 's Best Practice Guidance? | |
| ٠. | If you have provided a Transport Assessment as part of your part | planning application, p | lease tick here and move to Sec | ction 3 of this |
| | Checklist. | | | 5 🗹 |
| | | | | |
| C. | For smaller developments ONLY: Have you provided a Transport Statement? | | | 5 🗆 |
| | | | | |
| d. | Does your development provide cycle storage? | | | 2 2 |
| | If so, for how many bicycles? | | Deliver the | 62 |
| | Is this shown on the site plans? | | | - 0 |
| | | | | |
| е. | Will the development create or improve links with local and wider transport networks? If yes, | please provide details | below. | 2 🗆 |
| | | | | |
| | | | | Subtotal 7.0 |
| le | ase give any additional relevant comments to the Transport Section below | | | |
| | | | | |
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| 3 | BIODIVERSITY | | | |
| | | | | |
| .1 | Minimising the threat to biodiversity from new buildings, lighting, hard surfacing and peo | | | |
| | | | a success assessed to the one det | unlanment site? 2 □ |
| | Does your development involve the loss of an ecological feature or habitat, including a loss of | | n space compared to the pre-de | velopment site? -2 □ |
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| 4 | FLOODING AND DRAINAGE | |
|----------|--|---|
| 4. a. | 1 Reducing and mitigating the risks of flooding and other impacts of climate change in the borough Is your site located in an area at risk of flooding? (Tick if yes) | . 🛭 |
| | If yes, please tick only ONE option below: New development in a high flood risk zone (3a) New development in a medium flood risk zone (2) Redevelopment of an existing building or conversion | -2 ☑ -1 □ 0 □ |
| | Is your development within 20 metres of a watercourse or a flood defence? (Tick if yes) Have you submitted a Flood Risk Assessment? (Tick if yes) | - 🖸 |
| b. | Which of the following measures of the drainage hierarchy are incorporated onto your site? (tick all that apply) Store rainwater for later use Use of infiltration techniques such as porous surfacing materials to allow drainage on-site Attenuate rainwater in ponds or open water features Store rainwater in tanks for gradual release to a watercourse Discharge rainwater directly to watercourse Discharge rainwater to surface water drain Discharge rainwater to combined sewer | 5 0 3 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| 1. | Please give the change in area of permeable surfacing which will result from your development proposal: Please provide details of the permeable surfacing below please represent a loss in permeable and | sqm area as a negative number |
| Ple | ase give any additional relevant comments to the Flooding and Drainage Section below | Subtotal 1.0 |



| 5 IMPROVING RESOURCE EFFICIENCY | CANCELL SELECTION OF THE SECOND SERVICES. | |
|---|---|--------------------------|
| Will demolition be required on your site prior to Will 10% of de | led of by landfill though increasing level of re-use and recycling o construction? molition waste or more be reused in the new development? molition waste or more be recycled? | 0 Z 1 D 1 Z |
| Have you subr Are plans in pl | has the site previously been used for potentially contaminating uses? nitted an assessment of the site contamination? ace to remediate the contamination? nitted a remediation plan? | 1 D 2 Ø 2 D 1 D |
| . Are plans in place to include composting on s | ite? | 1 🗹 |
| Fitting of water Use of water e | | 1 9 1 2 4 0 4 0 |
| | evelopment (in litres per person per day?) nded target for conversions or other small scale residential properties is 105 ay. Will this be met? (Indicate if yes) | 1 🗹 |
| c, If applicable, have you submitted evidence the | at capacity exists in the public sewerage and water supply network? | Subtotal 8.0 |
| Please give any additional relevant comments, include the Improving Resource Efficiency Section below | uding reasons why the water consumption target has not been met should this be the case, | |



| 6 DESIGN STANDARDS AND ACCESSIBILITY 6.1 Ensure flexible adaptable and long-term use of structures | |
|---|-------------------|
| a. If the development is residential, will it meet the requirements set out in the Residential Design Standards SPD for internal space and layout? If the standards are not met, in the space below, please provide details of the functionality of the internal space and layout. | 1 🗹 |
| | |
| AND | |
| b. If the development is residential, will it meet the criteria included in the Lifetime Home Standards? | 2 🗆 |
| If not all Lifetime Homes criteria are to be met, in the space below, please provide details of any accessibility measures included in the development. | 20 |
| | |
| c. • Are 10% or more of the units in the development wheelchair accessible? | 1 🗹 |
| OR . | 322 00 |
| d. If the development is non-residential, does it comply with requirements included in Richmond's Design for Maximum Access SPG? Please provide details of the accessibility measures specified in the Maximum Access SPG that will be included in the development | 2 🗆 |
| | |
| | |
| Please give any additional relevant comments to the Design Standards and Accessibility Section below | ototal 2 |
| | |
| | |
| | |
| | |
| LBRUT Sustainable Construction Checklist- Scoring Matrix | 52 |

| Score for new construction | Score for extensions or conversions | Rating | Significance |
|----------------------------|-------------------------------------|--------|--|
| 80 or more | 70 or more | A+ | Project strives to achieve highest standard in energy efficient sustainable development |
| 71-79 | 61-69 | A | Makes a major contribution towards achieving sustainable development in Richmond |
| 51-70 | 41-60 | В | Helps to significantly improve the Borough's stock of sustainable developments |
| 36-50 | 26-40 | С | Minimal effort to increase sustainability beyond general compliance |
| 35 or less | 25 or less | FAIL | Does not comply with planning policies on sustainability and climate change |

Authorisation:
I herewith declare that I have filled in this form to the best of my knowledge

Signature aniel Lichfield and Partners for St Pauls S

Date __11-Nov-13

TOTAL 53