

# **Sustainable Design Statement**

This template has been prepared to help applicants or their agents preparing a sustainable design statement, where required to support a householder planning application.

A Sustainable Design Statement is required to demonstrate you have incorporated relevant sustainable design principles into the design of your development in line with our <u>City Plan 2019-2040</u>, in particular Policy 36 and 38 and following the guidance in our <u>Environmental SPD</u>.

# How to use this template

The template is for guidance only. Not all of the questions will be relevant, and the level of detail will depend on the size and nature of your proposal and its impacts. You can enter questions directly into the template or use this to help inform your statement. Your statement may be a section in your Design and Access Statement, where one is required.

Please be aware that standards set out in the Building Regulations may affect your design and you should consider how you will meet the required standards early in the design process<sup>1</sup>. In all cases we recommend the use of a professional advice to help you prepare and submit your application and maximise the sustainability credentials of your scheme. You can search the following directories to find a professional with sustainable buildings expertise -

- https://www.greenregister.org.uk/search
- https://www.aecb.net/
- https://www.climatechangeandyourhome.org.uk/

A glossary of terms and links to sources of further information can be found at the end of this document.

# 1. Site Address

| IRVING HOUSE<br>IRVING STREET |  |  |  |
|-------------------------------|--|--|--|
| WC2H 7AT                      |  |  |  |
|                               |  |  |  |

2. About your development. Please use our <u>interactive policies map</u> to find out what policy constraints listed below apply to your site:

<sup>&</sup>lt;sup>1</sup> The amended Building Regulations Standards Part F, L, P and Q come into force on 15 June 2022. The changes will not apply in relation to building work where a building notice or an initial notice has been given to, or full plans deposited with, a local authority before 15 June 2022 provided that the building work is started before 15 June 2023.

| Is your site (identify all that are applicable)?   |   |                                     |   |
|--|---|-------------------------------------|---|
| In an <u>Air Quality Focus Area</u> ?  |   |                                     |   |
| In a Flood Risk Zones 2/3 (mainly Pimlico and Victoria areas and sites clo   | se to th  | e [                                 |   |
| River Thames)?   |   |                                     |   |
| In a <u>Surface Water Flood Risk Hotspot</u> <sup>1</sup> ?  |   |                                     |   |
| In or next to a <u>Site of Importance for Nature Conservation</u> <sup>2</sup> ?   |   | +                                   |   |
| A <u>listed building</u> <sup>3</sup> or in a <u>conservation area</u> <sup>3</sup> ?  |   |                                     | $\boxtimes$                                 |
| The tower is in flood zone 1 and therefore no flood risk assessment is requ<br>The property is in the Leicester Square Conservation area   | iired.  |                                     |   |
|  |   |                                     |   |
| policy, are you prioritising durable and high quality materials? Are you using healthy materials (i.e. low VOC emitting materials) and products made of na Could you reuse materials on site and reduce or recycle the waste that will be  | g low car<br>atural m   | bon<br>ater                         | ials?                                       |
| policy, are you prioritising durable and high quality materials? Are you using healthy materials (i.e. low VOC emitting materials) and products made of na Could you reuse materials on site and reduce or recycle the waste that will be  | g low car<br>atural m<br>be creat<br>ed to str  | bon<br>ater<br>ed a                 | ials?                                       |
| standards and reports provided back, giving the percentage of materials re   | g low can<br>atural m<br>be creat<br>ed to str<br>ecycled.<br>ment to<br>prating d<br>archy.<br>vide deta | ed a a ict Unit                     | n<br>ials?<br>as a<br>eed<br>mise<br>gn for |
| policy, are you prioritising durable and high quality materials? Are you using healthy materials (i.e. low VOC emitting materials) and products made of national could you reuse materials on site and reduce or recycle the waste that will be result of your extension/ refurbishment project?  All waste materials are removed from site and from there, split and recycle standards and reports provided back, giving the percentage of materials relations work between a Recycling percentage of 95-97%.  Optimising resources (energy and water) City Plan policy requires development and water efficiency and following the principles of the energy hiera Please use the tables below to identify any measures incorporated and prove specification in the space below or attach product details to your statement Energy Efficiency   | g low can<br>atural m<br>be creat<br>ed to str<br>ecycled.<br>ment to<br>prating d<br>archy.<br>vide deta | ebon<br>ater<br>ed a<br>ict<br>Unit | nials?<br>as a<br>eed<br>mise<br>n fo       |
| policy, are you prioritising durable and high quality materials? Are you using healthy materials (i.e. low VOC emitting materials) and products made of nat Could you reuse materials on site and reduce or recycle the waste that will be result of your extension/ refurbishment project?  All waste materials are removed from site and from there, split and recycle standards and reports provided back, giving the percentage of materials reliving work between a Recycling percentage of 95-97%.  Optimising resources (energy and water) City Plan policy requires development resource efficiency and minimise the need for plant and machinery, incorposenergy and water efficiency and following the principles of the energy hiera Please use the tables below to identify any measures incorporated and proving specification in the space below or attach product details to your statement Energy Efficiency | ed to streecycled.  ment to prating durchy.  vide detat, where  | opti esig                           | mised mise                                  |

3.

4.

<sup>&</sup>lt;sup>2</sup> The Wildlife Assessment check tool may help clarify whether your project needs expert ecological advice.

<sup>&</sup>lt;sup>3</sup> You will also need a design and access/ <u>heritage statement</u> and should choose measures which are sensitive to historic significance and traditional fabric, following <u>Historic England advice</u>.

<sup>&</sup>lt;sup>4</sup> For advice on sustainable materials, see the Green Guide to Specification <u>www.bre.co.uk/greenguide</u>

| Mechanical ventilation with heat recovery  |             |    | $\boxtimes$ |
|--|-------------|----|-------------|
| Click or tap here to enter text.   |             |    |             |
| Active cooling systems, i.e. Air Conditioning Unit                                       |             |    | $\boxtimes$ |
| Click or tap here to enter text.   |             |    |             |
| Draught-proofing <sup>6</sup>  |             |    | $\boxtimes$ |
| Click or tap here to enter text.   |             |    |             |
| Insulation <sup>7</sup> (for example to roofs, tanks, pipes, internal or external walls) | $\boxtimes$ |    |             |
| 140mm FATE Insulation & 0.15W/m²K Proposed Roof Insulation                               |             |    |             |
| Repairs/ damp proofing work to improve energy efficiency                                 | $\boxtimes$ |    |             |
| Associated lead upstand and flashing details   |             |    |             |
| Secondary or high performance glazing  |             |    |             |
| Click or tap here to enter text.   | <u>I</u>    |    |             |
| Renewable energy technologies (e.g. photovoltaics, solar thermal                         |             |    | $\boxtimes$ |
| panel, heat pump <sup>8</sup> )  |             |    |             |
| Click or tap here to enter text.   |             |    |             |
| Smart meters <sup>9</sup>  |             |    | $\boxtimes$ |
| Click or tap here to enter text.   |             |    |             |
| Energy efficient lighting or appliances <sup>10</sup>                                    |             |    |             |
| Click or tap here to enter text.   |             |    |             |
| Other – please specify   |             |    | $\boxtimes$ |
| Click or tap here to enter text.   |             |    |             |
|  |             |    |             |
|  |             |    |             |
| Water Efficiency   | Yes         | No | N/a         |

https://energysavingtrust.org.uk/advice/draught-proofing/
 http://energysavingtrust.org.uk/energy-at-home/reducing-home-heat-loss/

<sup>&</sup>lt;sup>8</sup> https://energysavingtrust.org.uk/advice/in-depth-guide-to-heat-pumps/

<sup>9</sup> https://energysavingtrust.org.uk/advice/guide-to-smart-meters/

 $<sup>^{10}\</sup> https://energysavingtrust.org.uk/energy-at-home/buying-energy-efficient-products/$ 

| ater efficient taps, shower heads, use of water efficient A or B rated pliances, rainwater harvesting, water meter)? Please specify below.   |          |        |        |
|--|----------|--------|--------|
| ick or tap here to enter text.   |          |        |        |
| eening, biodiversity and climate resilience<br>es your development involve the loss of an ecological feature or ha<br>a tree, garden or green space? Indicate if yes/no and provide detail   |          | _      | a loss |
| 0  |          |        |        |
| ve you considered any of the following opportunities for greening a diversity? – where yes, please provide details in the space below.   | and enha | ancing |        |
|  | Voc      | No     | NI/a   |
|  | Yes      | No     | N/a    |
| A green or blue roof or green wall (please specify below whether extensive/intensive green roof or other)  | Yes      | No 🗵   | N/a    |
| A green or blue roof or green wall (please specify below whether extensive/intensive green roof or other)  Click or tap here to enter text.  |          |        | N/a    |
| extensive/intensive green roof or other)   |          |        |        |
| extensive/intensive green roof or other)  Click or tap here to enter text.   |          |        |        |
| extensive/intensive green roof or other)  Click or tap here to enter text.  Pond or rain garden <sup>11</sup> Click or tap here to enter text.  Other greening including green walls, tree planting, additional  |          |        |        |
| extensive/intensive green roof or other)  Click or tap here to enter text.  Pond or rain garden <sup>11</sup> Click or tap here to enter text.   |          |        |        |
| extensive/intensive green roof or other)  Click or tap here to enter text.  Pond or rain garden <sup>11</sup> Click or tap here to enter text.  Other greening including green walls, tree planting, additional landscaping  |          |        |        |
| extensive/intensive green roof or other)  Click or tap here to enter text.  Pond or rain garden <sup>11</sup> Click or tap here to enter text.  Other greening including green walls, tree planting, additional landscaping  Click or tap here to enter text.  |          |        |        |
| extensive/intensive green roof or other)  Click or tap here to enter text.  Pond or rain garden <sup>11</sup> Click or tap here to enter text.  Other greening including green walls, tree planting, additional landscaping  Click or tap here to enter text.  Wildlife enhancement features (such a bird/bat or insect boxes) |          |        | N/a    |

5.

 $<sup>^{11}\,\</sup>underline{\text{https://www.susdrain.org/delivering-suds/using-suds/suds-components/infiltration/rain-gardens.html}$ 

| • | Other – Please use this space to provide any further commentary on the proposed works, how they have incorporated sustainable design principles and set out any sustainability accreditation or standards you are pursuing, for example Enerphit, BREEAM or <a href="LETI">LETI best</a> practice standards. Where accreditations are being achieved, please provide any assessments with your statement. |
|---|---|
|   | United Living use accredited waste management providers where between 95-97% is expected  |
|   |   |

Further help and advice.

We offer a pre-application service to provide advice to applicants prior to the submission of an application. Further information can be found here:

Westminster Pre-application Advice.

# **Glossary**

# **Air Quality Focus Area**

There are eight Air Quality Focus Areas (AQFAs) in Westminster, which are designated by the Mayor of London. These areas not only exceed air quality limits but are also locations with high human exposure. 'Air Quality Neutral' is a term to describe development that do not contribute to air pollution beyond certain allowable benchmarks. The benchmarks are set out in the London Plan and Guidance <a href="https://www.london.gov.uk/sites/default/files/air\_quality\_neutral\_lpg\_-consultation\_draft\_0.pdf">https://www.london.gov.uk/sites/default/files/air\_quality\_neutral\_lpg\_-consultation\_draft\_0.pdf</a>

## **Circular Economy**

The circular economy is a model of production and consumption, where materials are retained in use at their highest value for as long as possible and are then reused and recycled.

#### **Embodied carbon**

Embodied carbon may be defined as the carbon footprint of a material. It considers the amount of greenhouse gas emissions that are released throughout a production supply chain to produce a material or product. It considers all extraction, transport, processing and fabrication activities of a material or product.

# **Energy Hierarchy**

The London Plan Energy Hierarchy (shown in the Westminster City Plan, Page 138, Figure 30) sets a tiered approach to reducing carbon dioxide emissions in the built environment. The first step is to reduce energy demand (be lean), the second step is to supply energy efficiently (be clean) and the third step is using renewable energy (be green). Further advice is set out in the Environmental SPD.

### **Flood Risk Zones**

Large parts of South Westminster are in the Environment Agency's Flood Zone 3 where there is a more significant (1%) chance of flooding from the River Thames in any one year. There is also a small section within Flood Zone 2 with a moderate (0.1%) chance of flooding in any one year. If you are in a flood risk area you may need specialist advice for certain types of development, especially basement development and you may wish to incorporate flood resistance and resilience measures as part of the design. A Flood Risk Assessment may be needed. See Environment Agency Advice - https://www.gov.uk/guidance/flood-risk-assessment-standing-advice#advice-for-minor-extensions

# MVHR (Mechanical Ventilation with Heat Recovery)

An efficient way to provide ventilation, is through a MVHR system. The equipment circulates air in a dwelling using a small fan, whilst recovering the heat from inside so it is not lost.

# **Renewable Technologies**

Renewable energy is derived from a source that is continually replenished, such as wind, wave, solar, hydroelectric and energy from plant material, but not fossil fuels or nuclear energy. Energy consumption can be reduced by generating energy using renewable technologies. Although not strictly renewable, geothermal energy is generally included. The Environmental SPD provides advice on different technologies which may be suitable in Westminster. You can also read Energy Saving Trust advice - https://energysavingtrust.org.uk/energy-at-home/generating-renewable-electricity/

# **Passive Building design**

Passive design uses layout, fabric and form to reduce or remove the need for mechanical cooling, heating, ventilation and lighting demand. This may include measures to control solar gains such as solar shading and natural ventilation strategies.

# Photovoltaics (PV)

Photovoltaic cells convert sunshine directly into electricity. See Energy Saving Trust for information - <a href="https://energysavingtrust.org.uk/advice/solar-panels/">https://energysavingtrust.org.uk/advice/solar-panels/</a>

# **Site of Importance for Nature Conservation**

Sites of Importance to Nature Conservation (SINCs), known nationally as Local Wildlife Sites, are recognised as being of particular importance to wildlife and biodiversity. There are 33 SINCs in the Westminster which account for more than 3,000 hectares. SINCs provide important habitats for a range of species. If you are near a SINC you should pay particular attention to whether your development could have an impact on protected species. Before undertaking works, check the roof space for bird<sup>12</sup> / bat<sup>13</sup> roosts and other urban wildlife dependent on buildings for shelter. Any works that would affect breeding birds and their nests, such as works of demolition, vegetation removal or site clearance, should be done outside the nesting season from 1st of March to 31st July inclusive. You could also incorporate measures to enhance and encourage biodiversity as part of your works.

# **Surface Water Flood Risk Hotspot**

In some areas of Westminster, modelling has identified a greater risk of surface water flooding. These are known as 'hotspots'. These 'hotspot' locations require particular attention in terms of flood risk management. To reduce risks in these areas, you may wish to consider Sustainable Urban Drainage measures to reduce the surface water runoff for example rainwater tanks, permeable paving and living roofs enhanced.

#### VOC

Abbreviation for Volatile Organic Compounds which can release easily into the atmosphere and can in some cases cause health problems and ozone depletion. Low VOC mostly refers to paints and other products that have a very low or zero VOC, e.g. sealants, adhesives and cleaners. These are better for both the environment and living organisms.

# **Zero Carbon**

Causing or resulting in no net loss of carbon dioxide into the atmosphere. A zero carbon building is one with zero net energy consumption or zero net carbon emissions on an annual basis.

<sup>&</sup>lt;sup>12</sup> Resources such as the Swift Mapper can be used to check for the presence of swifts before undertaking roof work. <a href="https://www.swiftmapper.org.uk/">https://www.swiftmapper.org.uk/</a>

<sup>13</sup> https://www.bats.org.uk/advice/im-working-on-a-building-with-bats

### Sources of further advice and information

There are a range of links to sources of information within our Environmental SPD. The following may also be useful –

# **Planning Portal Advice on Greener Homes**

https://www.planningportal.co.uk/info/200140/greener homes

**Energy Saving Trust Advice** <a href="https://energysavingtrust.org.uk/">https://energysavingtrust.org.uk/</a>

**London Solar Opportunity Map** - <a href="https://www.london.gov.uk/what-we-do/environment/energy/energy-buildings/london-solar-opportunity-map">https://www.london.gov.uk/what-we-do/environment/energy/energy-buildings/london-solar-opportunity-map</a>

# **Living Roofs website**

https://livingroofs.org/

# **Advice on Sustainable Drainage and Rain Gardens**

https://www.susdrain.org/delivering-suds/using-suds/suds-components/infiltration/rain-gardens.html https://www.susdrain.org/delivering-suds/using-suds/suds-components/source-control/source-control.html

# Advice on historic buildings, refer to Historic England Guidance:

**Energy Efficiency and Historic Buildings** 

**LETI** <u>Climate Emergency Retrofit Guide</u> - advice to help develop a retrofit plan and adopt best practice targets for constrained (e.g. buildings in conservation areas or listed buildings) and unconstrained building types.

Mayor of London Guidance Urban Greening for Biodiversity Net Gain: A Design Guidehttps://www.london.gov.uk/sites/default/files/urban\_greening\_and\_bng\_design\_guide\_march\_202\_1.pdf