

Sustainability Checklist

Important: Please read instructions below.

Before you begin, download this form to your computer and complete using Acrobat Reader. **Please do not complete this form within your web browser (i.e. Explorer, Chrome, Firefox) as the information you write on and sign the form cannot be saved.**

How to use the checklist

The sustainable design and construction submission checklist needs to be submitted with applications for all new development (that result in a residential net gain of 1 dwelling and above or an increase in non-residential floorspace) and can also be used as part of the pre-application process.

The purpose of this checklist is to explain and evidence how the proposed development complies with District Plan policies that seek to improve the environmental sustainability of new development. The checklist topics and criteria reflect the sustainable design and construction guidance set out in the **Sustainability Supplementary Planning Document (SPD)**: www.eastherts.gov.uk/sustainabilityspd

The checklist should be used as a tool to provide an overview of how a scheme addresses different aspects of sustainability, although each application will be assessed on its own merit, taking account of local circumstances. It does not replace other application submission requirements, but aims to provide an overarching framework to help facilitate the assessment of different, often overlapping, strands of sustainability.

Applicants should:

- Briefly summarise/ explain how their proposal complies with the relevant criteria, signposting to other relevant statements/ surveys as appropriate (for example, the transport assessment, biodiversity checklist and Sustainable construction, energy and water statement). The checklist does not need to repeat detailed information submitted elsewhere, but should provide an overview of the approach taken in the scheme.
- Ensure answers are explained and justified, not simply 'yes' or 'no' or 'not applicable';
- Use District Plan policies and the relevant sections in the SPD to inform responses;
- Ensure the level of detail submitted is proportionate to the type of application. For outline applications, the relevance of criteria will depend how many matters are reserved. Given the importance of incorporating sustainability measures early into the design process (as outlined in section 2 of the SPD), the Council think it is important that the checklist is considered at the outline stage. However, it is recognised it may not be possible to provide all the information required. In these circumstances, the applicant should demonstrate which checklist criteria are not applicable to their proposal.
- Ensure the level of detail submitted is proportionate to the scale of application. While major applications will require significantly more input than others, it is appropriate that all submissions should consider the sustainable design and construction issues raised and provide a response.
- Refer to the Council's website for further details about the submission requirements of particular applications: <https://www.eastherts.gov.uk/planning-building/make-planning-application>

Site name and reference

Land adjacent to 25 Chapel Lane, Letty Green SG12 2PA

Details of person responsible for completing checklist

Name

Graham Randall

Organisation

Bryant and Moore Architects Ltd

Relationship to the proposal (e.g. applicant, agent, consultant)

Project Architect

With the following questions, please give a summary of the approach you are taking to address the criteria stated in the boxes provided.

Energy and carbon reduction

En.1 Does the Sustainable construction, Energy and Water Statement detail how the proposed development's carbon emissions have been minimised and to what extent?

Have full and reserved matters planning applications also included a carbon reduction template within the statement? (See SPD Section 3.3 and appendix B)

Yes.
It is also intended that the development will limit carbon emissions through compliance with Approved Document L1A of the Building Regulations.
Water use will be limited to 110litres/person/day through the use of low consumption fittings within the dwelling.

En.2 How have the site layout and building orientation and form been designed to minimise energy use? E.g. passive solar gain, natural shade, natural ventilation, thermal mass)
(See SPD section 3.2.3)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

The large glazed elements to the living accommodation face south and east.
The deep roof overhangs shall ensure adequate shading so that overheating will be avoided during the summer months, while the house will benefit from solar gain during the winter months.

Openable windows and doors have been incorporated throughout, providing good cross ventilation.

En.3 How has the energy hierarchy been applied to prioritise reducing the need for energy and implementing the 'fabric first approach'? (See SPD sections 3.2.2 and 3.2.3)

It is intended that a 'fabric first approach' is employed during the detailed design for the construction of the new dwelling.

Individual building elements shall be insulated to a high standard, thus ensuring that the dwelling emission rates do not exceed the target emission rates when calculated in accordance with the requirements of Approved Document L1A of the Building Regulations.

En.4 How will you ensure that where renewable/ low carbon technologies have been included to reduce carbon, that these will be successfully integrated into the design of the development? (See SPD sections 3.2.4 and 3.2.5)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

The developer will have options to integrate renewable/low carbon technologies if required to supplement the energy efficient fabric of the dwellings, to achieve compliance with Approved Document L1A.

Practical options for this development would be:

- solar thermal panels to generate hot water. The large flat roof area provides an excellent opportunity for their inclusion in the scheme.
- photovoltaic solar panels to generate electrical power. The large flat roof area would be ideal for the installation of such panels.
- air source heat pump. These heat pumps are highly efficient and could be integrated into the dwelling should they be required to improve the overall energy efficiency of each dwelling beyond minimum standards.

En.5 How has the energy embodied in construction materials been reduced? (e.g. reuse and recycling/ sustainable materials/ locally sourced) (See SPD section 3.2.6)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

Redevelopment of the site would result in the demolition of existing buildings. There would be opportunities to recycle/re-use materials arising from the demolition works eg masonry and concrete to be crushed and re-used as hardcore.

The proposed dwelling is to be built using traditional construction, and building materials and contractors will be sourced locally wherever possible.

Materials will be procured from

Climate Change Adaptation

CA.1 How has the site layout and buildings been designed to mitigate overheating, giving priority to measures in line with the cooling hierarchy? (See SPD section 4.2.2)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

The large glazed elements to the living accommodation face south and east.

The deep roof overhangs shall ensure adequate shading so that overheating will be avoided during the summer months, while the house will benefit from solar gain during the winter months.

Openable windows and doors have been incorporated throughout, providing good cross ventilation.

CA.2 How has overheating been assessed and what measures are proposed to address it?
(See SPD section 4.2.2)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

The large glazed elements to the living accommodation face south and east.

The deep roof overhangs shall ensure adequate shading so that overheating will be avoided during the summer months, while the house will benefit from solar gain during the winter months.

Should any overheating occur during extreme conditions, openable windows and doors have been incorporated throughout, providing excellent natural cross ventilation when required.

CA.3 What Green Infrastructure is proposed? (See SPD section 4.2.3)

A large number of mature trees exist to all boundaries of the site. These trees are to be retained, with the proposed dwelling carefully positioned to avoid root damage.

CA.4 How have existing landscape features such as trees/woodlands and hedgerows been protected and incorporated within a Green Infrastructure network? (See SPD section 4.2.3)

A large number of mature trees exist to all boundaries of the site. These trees are to be retained, with the proposed dwelling carefully positioned to avoid root damage.

CA.5 Where feasible and appropriate, have green roofs or walls been included. Please explain your answer? (See SPD section 4.2.3)

No green roofs have been incorporated into the design at this stage.

CA.6 Have measures been included to address surface water runoff? (See SPD section 4.2.4)

It is intended to use soakaways for surface water disposal.

The suitability of soakaways will be established through site testing of the sub soil.

Should the subsoil prove unsuitable, surface water would be directed to the main sewer.

The surface water drainage system would incorporate attenuation and underground storage to ensure that run off rates into the sewer are limited to agreed rates during peak storm events.

Parking areas will be constructed using permeable paving.

CA.7 If the application is major development, have details of SUDs been submitted?
(See SPD section 4.2.4)

The application is for a minor development and no SUDs design details have been included at this stage.

Water efficiency

WA.1 For new residential proposals, have you demonstrated compliance with the target for mains water consumption to be 110 litres or less per head per day in the Sustainable construction, Energy and Water Statement? (See SPD section 5.2.2)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

Water use will be limited to 110litres/person/day through the use of low consumption fittings within the dwelling.

WA.2 For non-residential development have measures been taken to reduce water consumption in the proposed development? (See SPD section 5.2.3)

Not applicable.

WA.3 Has consideration been given to the using water recycling systems? (See SPD section 5.2.4)

Consideration has been given to water recycling systems but this have been discounted due to the financial viability and scale of the development.

Pollution-Air Quality

AQ.1 How has the proposal addressed the recommended minimum air quality standards? These apply to all new development as set out in paragraphs 6.1.2.2 of the SPD.

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

There are no local sources of pollution that would affect the air quality.

- AQ.2** How does the proposal show consideration of air quality in the design of new development?
Design should address the following principles:
- Building and development layout and design
 - Emissions from transport
 - Sustainable energy
- (See SPD section 6.1.2.4)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

There are no local sources of pollution that would affect the air quality.
Excellent natural ventilation has been provided by openable windows and doors throughout.

- AQ.3** How has emissions mitigation been incorporated into the proposal? (See SPD section 6.1.2.5)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement .

AQ.4 How will emissions be minimised through the construction and demolition phase of the development? Measures should follow the national guidance set out in section 6.1.2.7 of this SPD.

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement .

AQ.5 Has an Emissions Assessment been carried out as part of the Air Quality Neutral Requirement? The assessment should utilise the Damage Cost Approach.

No assessment has been carried out at this stage.

AQ.6 Has an Air Quality Impact Assessment been submitted? This must be submitted if the proposal meets any of the criteria listed in paragraphs 6.1.3 of the SPD.

Not applicable.

AQ.7 Has an Air Quality Neutral Assessment been submitted? This must be submitted if the proposal meets the criteria listed in paragraphs 6.1.3 of this SPD.

Not applicable.

Pollution: Light Pollution

- LP.1** Does the proposal materially alter light levels outside the development and/or have the potential to adversely affect the neighbouring uses or amenity of residents and road users or impact on local ecology? (See SPD section 6.2.2)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

Light levels outside the development will not be affected.

- LP.2** Is the proposed light design the minimum required for security and operational purposes? (See SPD section 6.2.2)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

Low level lighting will be employed, sufficient for security purposes.

LP.3 Does the proposal minimise potential glare and spillage? Please detail the design measures adopted to ensure this. (See SPD section 6.2.2)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

Low level lighting will be employed, sufficient for security purposes.

Biodiversity

Bio.1 Have you submitted East Herts biodiversity checklist? (See SPD section 7.3)

Yes.

Bio.2 In accordance with the Biodiversity checklist, does the proposal affect a protected species or habitat? (See SPD section 7.2.4 and 7.3)

No.

Bio.3 If a protected species or habitat has been identified, has an ecological survey, with sufficient information been undertaken? (See SPD section 7.2.4 and 7.3)

Not applicable.

Bio.4 If relevant, has an ecological survey, with sufficient information been undertaken to assess the likely ecological impact of the development?

Yes.

Bio.5 Has the mitigation hierarchy been applied undertaken, to demonstrate an adverse impact on biodiversity has been avoided? If this is not possible, has the impact been mitigated and then subsequently compensated? (See SPD section 7.2. and 7.3)

Please refer to separate Ecological Impact Assessment report.

Bio.6 Has a net gain been achieved using a locally approved biodiversity metric?
(See SPD section 7.2.5)

Please refer to separate Ecological Impact Assessment report.

Bio.7 Has a suitable biodiversity management and monitoring strategy for the site been proposed?

Please refer to separate Ecological Impact Assessment report.

Sustainable Transport

- T.1** Have you demonstrated that the development includes measures that reduce the overall need to travel, and particularly by private car? (See SPD section 8.2.2)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

- T.2** Have you demonstrated how, as first principles of design; the scheme's proposals prioritise walking and cycling within the development and link with existing networks beyond the development to deliver healthy and walkable neighbourhoods? (See SPD section 8.2.3)

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

T.3 Where cycling facilities and any bus stops and/or transport hubs are to be provided, have you demonstrated that they accessible and attractive for all users and offer appropriate shelter? (See SPD section 8.2.3)

Not applicable.

T.4 Have you included measures (traditional and/or innovative) to encourage uptake of more sustainable modes of transport and engender modal shift from the outset of development? (See SPD section 8.2.2 and 8.2.3)

Cycle storage facilities have been provided for the new dwelling.

T.5 Have you developed and submitted to Herts County Council an appropriate Travel Plan, Transport Assessment and/or Statement (as appropriate)? (See SPD section 8.2.4)

Not applicable.

T.6 Where car parking is to be provided, have you provided justification for the number of spaces proposed and made provision for electric vehicle charging in accordance with the Vehicle Parking Provision at New Developments SPD?

Please see the accompanying Sustainable Construction, Energy, Water and Carbon Reduction Statement.

Waste Management

W.1 Have measures been proposed to reduce, re-use and recycle construction and demolition waste? (See SPD Sections 9.2.2 and 9.2.3)

A construction management plan will be developed prior to construction stage, to identify suitable measures.

W.2 How has the internal and external design of the development factored in effective sustainable waste management measures? Has sufficient detail been submitted with the application? (See SPD Section 9.2.4)

Kitchen areas have been adequately sized to accommodate separate waste and recycling storage.

W.3 Have all the relevant criteria identified in table 13 of the SPD been addressed?
(See SPD Section 9.2.4)

Yes.

Data Protection Clause

In accordance with the Data Protection Act 2018 the information you supply the Council will be used to process the planning application or any subsequent appeal and retained as per our published corporate data protection privacy policy which may be found here. Your details and comments will be shown on the website and this information may be shared with other Council departments and/or outside partners.

I agree (Please tick this box to confirm your agreement).

If you are happy with the information contained in this checklist, please save the PDF and submit with your planning application.