ROUNDHOUSE CAMPUS

STATEMENT OF SUSTAINABILITY (for modification to Container Building) SEPTEMBER 2016

Keeping Blue

New Level, Roundhouse Administration Building, Regent's Park Road, Camden

Statement of Sustainability

Issue 1.1 22 September 2016 Urban Space Management



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1 Introduction

This report details a Statement of Sustainability for the proposed New Level, Roundhouse Administration Building, Regent's Park Road, Camden. The extension is to be constructed from recycled shipping containers, consistent with the existing building. The external walls will be insulated with polyurethane spray foam and rockwool insulation batts, and lined internally with plasterboard. Much of the external façade is assigned to fenestration, consisting of openable double glazed floor to ceiling units with low solar transmittance and internal blinds. The roof will be insulated with polyurethane rigid foam (retained from existing roof).

The existing building is laid out over five storeys, with storage on ground floor, tenanted office space on 1^{st} and 2^{nd} floor (primarily open plan office space), and a mix of open and cellular office space on 3^{rd} and 4^{th} floor with a suspended floor section situated above the main driveway. The proposed 5^{th} floor extension will comprise the same layout as the existing 4^{th} floor.

According to 'Camdens Local Area Requirements for Planning Applications February 2014', a full Sustainability Statement is not required for minor extensions (<500m²). However, specific requirements with regards to sustainability are to be demonstrated and met. The purpose of this report is to review the sustainability requirements at local borough level, and to discuss how these requirements have been met. The requirements relate to the Camden Core Strategy and Camden Development Policies, which have been referenced.



Figure 1: New Level (shown blue), Roundhouse Administration Building

2 Executive Summary

The development has been shown to meet the local sustainability requirements. These include the Camden Development Policy DP22 'Sustainable Design & Construction' and DP23 'Water' requirements for minor extensions. Further guidance and specific targets have been provided in the Camden Planning Guidance Document 3 – Sustainability (CPG3).

Policy	Requirements	Achieved?
DP22 'Sustainable Design & Construction	 Incorporate sustainable design & construction measures 	√
	Resilience to climate change	\checkmark
DP23 'Water'	Reduce water consumption	\checkmark
	Reduce pressure on combined sewer network	\checkmark
	Reduce risk of flooding	\checkmark
Camden Planning Guidance	• 10% of the total value of materials is derived from	\checkmark
Doc 3 – Sustainability (CPG3)	recycled sources	

The Roundhouse Sustainability Team has committed to developing an education, communication and engagement programme to capitalise on the new premises, which presents an opportunity for improved performance in all areas of operation.

The team aims to embed procedures which are both innovative and practical, in order to reduce the environmental impact of the operations of the Roundhouse Trust.



Figure 2: Existing Roundhouse Administration Building, view from Regent's Park Road

3 Local Requirements

3.1 Camden Local Area Requirements

According to 'Camden's Local Area Requirements for Planning Applications February 2014' – pg 23 & 24, the following is required with regards to Sustainability Statements for minor extensions:

- Energy there is no requirement to show a reduction in CO₂ emissions in line with the energy hierarchy as the scheme is less than 500m² (however the scheme still shows compliance with Approved Document L2B see separate Energy Statement)
- Flooding demonstrate that the site is not located in a flood risk zone, using the councils flood risk map
- Waste Reduction a statement is to be submitted showing at least 10% of the total value of materials is derived from recycled and reused sources

Note: A BREEAM assessment is not required as the scheme is less than $500m^2$.

3.2 Camden Core Strategy

Camden's Core Strategy CS13 'Tackling climate change through promoting higher environmental standards' outlines the councils approach to reducing the effects of and adapting to climate change. This includes measures to make Camden a water efficient borough and minimise the potential for surface water flooding. It also outlines measures to mitigate against the causes of climate change, through carbon reduction and local energy generation.

This ensures that Camden's growth is sustainable, and meets the requirements of the borough. The Core Strategy states that 'Measures to tackle climate change are integral in the development process and are a priority of the Council. They should not be seen as add-ons'.

3.3 Camden Development Policies

In addition to the Camden Core Strategy, the council has issued the Camden Development Policies, which contribute towards delivering the Core Strategy by setting out detailed planning policies.

The relevant polices adhered to include the following:

- DP22 Sustainable Design and Construction
- DP23 Water

Camden Planning Guidance Document 3 – Sustainability (CPG3) provides further guidance on how to achieve these policies.

4 Discussion

4.1 Energy

The development has been shown to meet the requirements under Approved Document L2B: 'Conservation of fuel and power in existing buildings other than dwellings'.

Further information is provided in the document 'Roundhouse New Level - Energy Statement'.

4.2 Flooding

Please see below section 4.5: 'Development Policy 23 (DP23) – Water'.

4.3 Waste Reduction

All developments are to submit a statement stating how it will aim for at least 10% of the total value of materials used to be derived from recycled and reused sources. This should relate to the 'WRAP Quick Wins' assessments or equivalent.

*Note: The 'Recycled Content Toolkit' is no longer available from WRAP, due to funding constraints

The project will meet and exceed the required 10% recycled content through the following measures:

The entire structure of the building comprises recycled material, consisting of 'upcycled' reclaimed shipping containers. Thus the choice of structural materials is inherently sustainable, as a result of the following factors:

- Low Embedded carbon use of recycled materials
- Lightweight construction material minimal transport and site carbon
- Offsite pre-fabrication reduced construction time and resources, minimal waste

In addition to the structural materials, further sustainable & recycled materials are included in the design of the building. These include:

- Mineral wool insulation to external walls made from natural volcanic rock, recyclable
- Floor boards within shipping containers these will be retained providing structural base
- Plasterboard typically contains 80% recycled content
- Roof insulation Existing roof insulation to be retained and applied to new roof

4.4 Development Policy 22 (DP22) – Sustainable Design and Construction

The council expects all development to incorporate sustainable design & construction measures.

The council does not require a BREEAM assessment, as the proposed extension does not exceed 500m², however sustainable development principles should still be incorporated into the design and proposed implementation.

The same principles used during the design & construction of the existing building, will be employed in the extension.

According to DP22, the council requires development to be resilient to climate change through measures such as:

- Summer Shading and Planting solar shading will be provided in the form of 'brise soleil'
- Limiting run-off please see below section 4.5: 'Development Policy 23 (DP23) Water'
- **Reducing Water Consumption** low consumption taps & dual flush WC's
- **Reducing Air Pollution** cycle parking provided and no fossil fuel combustion in building
- Not locating vulnerable uses in basements in flood prone areas no basement in building

4.5 Development Policy 23 (DP23) – Water

The council requires developments to reduce their water consumption, the pressure on the combined sewer network and the risk of flooding. These three issues are addressed below.

4.5.1 Water Consumption

The consumption of water will be kept to a minimum within the proposed extension through the implementation of water efficient fittings and appliances. These will include the following:

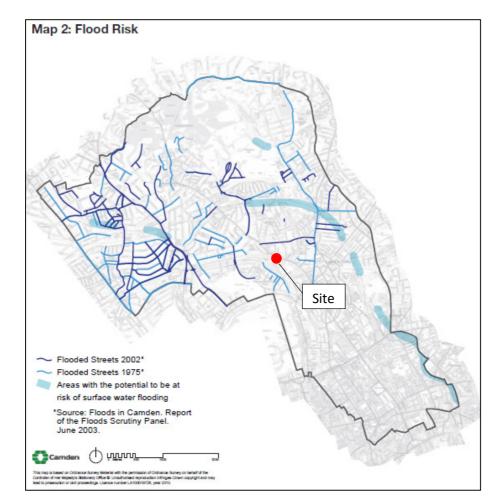
- Low-flow taps
- Dual Flush WC's

4.5.2 Waste Water and Run-Off

Through the implementation of water efficient fittings and appliances, waste water will also be reduced within the proposed extension.

In terms of surface water run-off from the site, the proposed extension does not involve the addition of hardstanding or roof area, as the proposed roof will be identical in surface area to the existing roof area. Thus there will be no net increase in surface run-off from the building.

4.5.3 Risk of Flooding



The following Flood Risk Map is extracted from the DP23 document:

Figure 3: Camden Borough Flood Risk Zones

'Developments located up stream of the areas shown on Core Strategy Map 5 (or Development Policies Map 2) must demonstrate how the development will not increase the risk of flooding through the inclusion of mitigation measures.'

As shown in the above Flood Risk Map, the site of the proposed extension does not fall within a zone identified as having a high risk of surface water flooding.

4.6 Sustainability Policy – The Roundhouse Trust

The Roundhouse Trust has an ongoing commitment to operating sustainably. An internal sustainability team has been appointed, as well as external consultants being engaged for specific areas of study.

The Roundhouse Trust commissioned 'Julie's Bicycle' – a charitable organisation which bridges the gap between environmental sustainability and creative industries – to undertake an energy audit at the end of 2014. This demonstrates the Roundhouse's commitment to sustainability, through monitoring and awareness of consumption of resources (water, gas, electricity).

A Sustainability Policy has been developed internally which focuses on the following key areas:

- 1. Energy
- 2. Water
- 3. Use of Raw materials
- 4. Waste
- 5. Transport

An Action Plan has been drafted, which outlines targets and implementation timelines for each of the categories. Some of the measures which have been implemented (relevant to the new Administration Building) include:

4.6.1 Energy

- Solar PV array installed on roof of new Administration Building
- Logging energy consumption

4.6.2 Water

• Provide volunteer staff with reusable water bottles

4.6.3 Use of Raw Materials

- Replacement of print marketing with digital solutions
- Paperless invoicing
- Upcycled shipping containers used in construction of new building
- Print-at-home ticketing increasing towards target of 50%

4.6.4 Waste

• Waste and recycling tracked by activity

4.6.5 Transport

• A shipping container has been converted to a covered cycle parking area, adjacent to the new building. This cycle store, along with showers located on each floor of the building, will help to encourage cycling to work.

The sustainability team has committed to developing an education, communication and engagement programme to capitalise on the new premises, which presents an opportunity for improved performance in all areas of operation. The team aims to embed procedures which are both innovative and practical, in order to reduce the environmental impact of the operations of the Roundhouse Trust.