

**Panther House**

**Response to Planning  
Comments (Issue №3)**

**Issue for Information**

**2<sup>nd</sup> March 2020**

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## ISSUE HISTORY

Issue	Date	Description
1	02/03/20	Issue for information

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## **1.0 INTRODUCTION**

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The following comment was issued as part of Camden Council's response to Panther House's planning application (application number 2019/4478/P):

***Issue 3:** The direction of travel is promising but lacks sufficient detail.*

***Further Action:** Applicant please to review resource efficiency guidance in Energy Efficiency & Adaptation CPG and propose standards including product/material certification, recyclability/recycled materials targets, Green Guide ratings and targets for re-use/treatment of construction waste".*

The report describes how the above issue is addressed as part of Panther House's route to achieving its BREEAM targets. The full BREEAM pre-assessment can be found within the 'BREEAM Pre-assessment and Sustainability Statement' report and has been uploaded to the planning portal as part of the planning application.

## 2.0 MATERIALS

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Paragraph 9.10: “Developers should consider the environmental impact of the materials used within development. This can be done in the following ways:

- *Managing existing resources; (re)use of existing materials as far as possible before considering introducing new materials;*
- *Specifying materials using the Building Research Establishment’s Green Guide to Specification;*
- *Ensuring that materials are responsibly sourced;*
- *Minimising the harmful effects of some materials on human health; and*
- *Ensuring that specified materials are robust and sensitive to the building type and age.”*

Both the elements to be refurbished and the new build elements are being assessed under BREEAM; BREEAM New Construction (NC) 2014 for the new build elements and BREEAM Refurbishment and Fit-out (RFO) 2014 for the retained elements. Both assessments have set targets under Mat 01 ‘Life Cycle Impacts’.

The new build elements are targeting 2 out of the 6 available credits and as such will utilise the Green Guide to Specification to procure appropriate materials. Targeting 2 credits approximately equates to relevant materials/elements achieving at least a ‘B’ Green Guide rating albeit with a degree of flexibility. Any elements that achieve below a ‘B’ will be negated by the procurement of other elements achieving above a ‘B’.

The refurbished elements will undergo a full embodied carbon analysis as per the requirements of BREEAM RFO 2014. This method of assessing the life cycle impact of materials is beyond procuring materials based upon the Green Guide to Specification. It will allow the Project Team to identify embodied carbon ‘hotspots’ and focus on procuring low carbon impact materials for the elements where the greatest benefit can be keenly felt.

All timber will be ‘legally harvested and traded timber’.

A sustainable procurement plan will be developed to set out a clear framework for the responsible sourcing of materials to guide procurement throughout the project.

For the refurbished elements 2 out of the 3 available credits are targeted under issue #2 ‘Responsible Sourcing of Materials’. This means that all relevant materials will at least hold EMS Certification for Key Process and Supply Chain Processes with key materials achieving at least BES 6001 certification or equivalent (timber FSC certification or equivalent). Elements re-used in-situ also score very highly. These are approximations based on previous experience of the issue’s scoring.

For the new build elements 1 out of the 3 available credits are targeted under issue #2 ‘Responsible Sourcing of Materials’. This means that all relevant materials will at least hold EMS Certification for Key Process and Supply Chain Processes with aspirations towards key material elements achieving at least BES 6001 certification or equivalent (timber FSC certification or equivalent). These are approximations based on previous experience of the issue’s scoring.

To ensure that specified materials are robust and sensitive to the building type and age both assessments are targeting BREEAM issue Mat 05 ‘Designing for Durability and Resilience’. Through compliance with this issue both the new build and refurbished elements will incorporate measures to protect vulnerable parts of the building from damage:

- Protect from the effects of high pedestrian traffic in main entrances, public areas and thoroughfares (corridors, lifts, stairs, doors, etc.);
- Protect against internal vehicle/trolley movement within 1 meter of the internal building fabric in storage, delivery, corridor and kitchen areas; and
- Protect against, or prevent any potential vehicle collision where vehicle parking and manoeuvring occurs within 1 meter of the external building façade for all car parking areas and within 2 meters for all delivery areas.

In addition to protect exposed parts of the building from material degradation newly-specified materials or newly constructed elements will incorporate appropriate design and specification measures to limit material degradation due to environmental factors:

Applicable Building Elements	Environmental Factors	Material Degradation Effects
<ul style="list-style-type: none"> <li>• Foundation/substructure/lowest floor/retaining walls</li> <li>• External walls</li> <li>• Roofs/balconies</li> <li>• Glazing: window, skylight</li> <li>• External doors</li> <li>• Railing/balustrades( where exposed to external environment)</li> <li>• Cladding (where exposed to external environment)</li> <li>• Staircase/ramps (where exposed to external environment)</li> <li>• Hard landscaping</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental agents, including:               <ul style="list-style-type: none"> <li>○ Solar radiation</li> <li>○ Temperature variation</li> <li>○ Water/moisture</li> <li>○ Wind</li> <li>○ Precipitation</li> <li>○ Extreme weather conditions (high wind speeds, flooding, driving rain, snow)</li> </ul> </li> <li>• Biological agents, including:               <ul style="list-style-type: none"> <li>○ Vegetation</li> <li>○ Pests, insects</li> </ul> </li> <li>• Pollutants, including:               <ul style="list-style-type: none"> <li>○ Air contaminants</li> <li>○ Ground contaminants</li> </ul> </li> </ul>	<p>Including, but not necessarily limited to:</p> <ul style="list-style-type: none"> <li>• Corrosion</li> <li>• Dimensional change, e.g. swelling or shrinkage</li> <li>• Fading/discolouration</li> <li>• Rotting</li> <li>• Leaching</li> <li>• Blistering</li> <li>• Melting</li> <li>• Salt crystallisation</li> <li>• Abrasion</li> </ul>

Table 1: Applicable building elements, environmental factors and material degradation effects to consider

In addition both elements of the development are targeting the Wst 05 ‘Adaptation to Climate Change’ credit which examines the potential effects of climate change that pose the greatest risk to the development and explores potential mitigating actions.

Paragraph 9.11: *“The Council recommends the use of environmentally sensitive building (non-toxic) materials and avoiding the use of materials or products that produce VOC which can affect human health. The use of ‘healthy’ material options can contribute towards attaining the BREEAM credits but a clear audit trail will need to be provided to gain these credits.”*

Both assessments are targeting BREEAM issue Hea 02 ‘Indoor Air Quality’, credit #3 ‘Volatile Organic Compound (VOC) Emission Levels (products)’. This credit requires that all paints and varnishes meet defined VOC/formaldehyde testing/emission level requirements, as well as at least 5 of the following 7 additional product types (where present):

- Wood panels (including particle board, fibreboard including MDF, OSB, cement bonded particle board, plywood, solid wood panel and acoustic board);
- Timber structures (e.g. glue laminated timber)
- Wood flooring (e.g. parquet)
- Resilient textile and laminated floor coverings (e.g. vinyl, linoleum, cork, rubber, carpet, laminated wood flooring)
- Suspended ceiling tiles
- Flooring adhesives
- Wall coverings

Should not all product types be present, a sliding scale is provided within BREEAM defining how many of the remaining present product categories are required to be compliant in order to achieve the credit.

### **3.0 MANAGEMENT OF CONSTRUCTION WASTE**

Paragraph 9.12: *“Developers should reduce construction waste arising from new development and re-use and recycle as much material as possible, following the waste hierarchy.”*

The BREEAM assessment for the refurbishment element has set a waste generation target of  $\leq 4.5\text{m}^3/100\text{m}^2$  GIFA, targeting 2 out of the 3 available credits under Wst 01 ‘Project Waste Management’, credit #3 ‘Resource Efficiency’. Similarly for the new build elements a waste generation target of  $\leq 7.5\text{m}^3/100\text{m}^2$  GIFA.

Paragraph 9.14: *“It is expected that 85% of construction and demolition waste should be diverted from landfill and comply with the ICE’s Protocol where substantial demolition is proposed.”*

The BREEAM issue relating to the diversion of waste from landfill is being targeted for both assessments. For refurbished elements 85% of demolition waste by volume will be diverted from landfill (90% by tonnage). Although under the relevant BREEAM issue it is only required that 70% of non-hazardous construction waste by volume (80% by tonnage) be diverted from landfill, the Contractor’s BREEAM Employer’s Requirements will require the Contractor to achieve a non-hazardous construction waste divert from landfill value of 85% (by volume).

Paragraph 9.13: *“Similarly, in demolition developers should:*

- *Prioritise the on-site re-use of demolition materials;*
- *Recycle materials on site where feasible, then off-site*
- *Recovering (energy); and*
- *The least preferred option, disposal to landfill.”*

Paragraph 9.19: *“Developers should provide details of the following within the Energy and Sustainability Statement:*

- *Target % of materials to be reused in construction of development*
- *Target % of demolition waste to be reused offsite*
- *Target % of demolition waste to be recycled*
- *Target % of materials to come from recycled sources*
- *Target % of materials to be reused from other schemes*

For both aspects of the development a ‘Resources Management Plan’ will be developed to promote resource efficiency and to prevent illegal waste activities. Resource efficiency includes minimising waste at source and ensuring that clients, designers and principal contractor assess the use, reuse and recycling of materials and products on and off the site. The Resource Management Plan will define:

- A target benchmark for resource efficiency, i.e.  $\text{m}^3$  of non-hazardous waste per  $100\text{m}^3$  or tonnes of non-hazardous waste per  $100\text{m}^2$  GIFA;
- Procedures and commitments for minimising non-hazardous waste in line with the target benchmark (and in line with the waste hierarchy defined in paragraph 9.13 of Camden’s ‘Energy Efficiency and Adaptations’ planning guidance document);
- Procedures for minimising hazardous waste;
- Procedures for the principal contractor and all subcontractors for monitoring waste, managing and diverting demolition waste from landfill;
- A waste minimisation target and details of waste minimisation actions to be undertaken;
- Procedures for estimating, monitoring, measuring and reporting hazardous and non-hazardous site waste covering the principal contractor and all subcontractors. All construction waste will be reported on a monthly basis throughout the project and checked against what would be expected based upon the stage of the project;
- Procedures for sorting, reusing and recycling construction waste into defined waste groups, either on-site or through a licenced external contractor;

- Procedures for reviewing and updating the plan; and
- The name or job title of the individual responsible for implementing the above.

The targets listed within paragraph 9.19 of Camden's 'Energy Efficiency and Adaptations' planning guidance document will also be defined within the Resource Management Plan.

For both the refurbished and new build elements waste will also be reduced through targeting BREEAM issue Wst 04 'Speculative Finishes' which limits floor and ceiling finishes to show areas only. This prevents finishes being installed that may be removed and replaced once a tenant for the facilities is found.