# **SUSTAINABILITY**

Hoxton Hotel, Holborn Extension BREEAM Executive Summary for Planning Application

## **Overview**

A BREEAM pre-assessment workshop has been carried out for the Hoxton Hotel, Holborn Extension, to determine the scheme's ability to meet the Camden Council planning requirements. After reviewing the feasibility of each credit with the specialist consultants, it has been identified that there are multiple constraints that prevent the proposed extension from achieving a BREEAM 'Excellent' rating.

The pre-assessment report REP-1520565-08-JP-20161216-Hoxton - Holborn Extension - Pre-assessment Report-Rev01 has been produced to demonstrate the alternative proposed strategy that is deemed the most appropriate and relevant to the scheme. Appendix 1 of the aforementioned document provides a breakdown of the credits that have been targeted in order to achieve a 'Very Good' BREEAM rating. Omitted credits include justification for their exclusion, which primarily relates to their inability to either meet the technical criteria or are associated with a significant cost uplift and unlikely to provide a reasonable benefit to the project.

# 1. Camden Council Planning Requirements

The proposed extension falls under the planning requirements for Camden Council and the following condition is therefore applicable to scheme, in relation to BREEAM:

'Achieve a BREEAM 'Excellent' rating (minimum) and minimum credit requirements under Energy (60%), Materials (40%) and Water (60%) for the non-residential areas.'

# 2. Implications for Achieving BREEAM 'Excellent' Certification

Whilst the technical criteria for BREEAM New Construction 2014 caters for extension developments to a degree, in many aspects, the assessment also relies upon the existing development to comply - particularly if the scheme shares the same services. To meet a number of credits, improvements will be required to be made to the existing building. The necessary alterations have been considered by the project team, however have been subsequently deemed too pervasive or impractical to implement.

However, the scheme seeks to target all feasible credits and, by doing so, the current Stage 3 extension proposals achieve the following scores in the three BREEAM categories pertinent to Camden Council:

	Camden Council planning requirements	Target score based upon Stage 3 proposals
Energy	60%	63%
Materials	40%	64%
Water	60%	37%

### 2.1 Energy

The most onerous of the mandatory credits are those in Ene 01, relating to the energy and carbon performance of the building. However, the Holborn Extension aims to achieve a minimum of 5 credits to current Stage 3 design, the scheme has potential to achieve the minimum 8 credits in line with the mandatory credits for BREEAM 'Outstanding' performance in Ene 01. As a result, the scheme will exceed the 60% target set by Camden Council in this category.

Additionally, current UK Building Regulations addressed by BREEAM New Construction 2014 will ensure that the extension's CO<sub>2</sub> emissions and energy performance is a substantial improvement upon the existing building.

#### 2.2 Materials

The project aims to achieve a high percentage score in this category, including the selection of materials that have low levels of embodied carbon and through responsibly sourcing all products in line with BS 6001 and ISO 1401, where possible. The scheme aims to significantly exceed upon the Camden Council 40% target.

#### 2.3 Water

Due to the project classification, the hotel extension is unlikely to achieve the 60% Camden Council target. This is due to the complexity of the technical criteria for many of the water credits in the BREEAM New Construction 2014:

- ▶ Wat 01: Water consumption the nature of the building type i.e. Hotel, will not be able to reduce the hotels. Additionally, as the building is an extension, it will connect to the existing building water achieve a 25% improvement over baseline building water consumption.
- Wat 03: Water leak detection this issue will require the installation of an automatic shut-off system

Overall, the project is at a disadvantage in comparison to a new build development due to the technical complexity of achieving BREEAM 'Excellent'. If the extension is conditioned to achieve BREEAM 'Excellent', this would require incorporating further credits with additional costs, which are unlikely to offer significant benefits to the building or users/client and are purely incorporated to achieve a higher rating.

# 3. Recommendations

The BREEAM Assessor would advise that achieving a 'Very Good' rating is the most appropriate sustainable solution for the building, in place of Camden Council's desired 'Excellent' rating with specific category requirements; Energy (60%), Materials (40%) and Water (60%). By achieving a 'Very Good' rating under the BREEAM New Construction 2014 methodology, the extension can be considered to be a significant improvement upon the existing building. The existing building achieved a 'Very Good' rating under the BREEAM 2008 Bespoke scheme (now superseded twice by the 2011 and current 2014 version). Furthermore, current UK Building Regulations combined with the CO<sub>2</sub> targets of London Plan will ensure the extension's energy performance is a substantial improvement upon the existing building.

The targeted credits in the 'Very Good' pre-assessment report are perceived to have the most benefit to both the development and lifecycle of the extension.



# meet the mandatory credits equivalent to a BREEAM 'Excellent' performance. Furthermore, based upon the

flow rates of the sanitary fittings by a substantial amount in comparison to other building types, as the purpose of the development aims to provide sanitary facilities that meet the expectations of standard supply, which does not provide greywater or rainwater harvesting. However, the project will still aim to

on the water supply to all WC facilities in both the extension and the existing building, to achieve the credits. This is deemed to be impractical, as it will require extensive alteration to the existing building.