

Planning Application - Atlantic House - Application No: 200110

Sustainability Approach



Ref: TVP-BDP-XX-XX-RP-A-000605

Contents

1. INTRODUCTION
2. DETAILED PROPOSALS



1. Introduction

This document relates to the planning application for the following proposals:

Application No: 200110

TVP has considered the incorporation of BREEAM standards in to the design of the Works involved in the refurbishment of Atlantic House. The BREEAM standards are set out for non-Domestic Buildings in the UK and TVP is fully aware of the desire to incorporate Breeam into the design of buildings.

Atlantic House is not a New Building and therefore the criteria used for assessment is not achievable to the highest standard. However TVP aspires to achieve the equivalent of 'Very Good' and the Design Team for the Project have been tasked with attempting to meet that standard at the least.

It should be noted that the Policy requirement for BREEAM is only required on this application as it constitutes a "Change of Use". In reality the use of the building by TVP will be akin to an Office Use (as per the previous use) and under normal circumstances no application for a Change Of Use, and therefore no BREEAM assessment would have been required.

2. Detailed Proposals

The following is intended to demonstrate the significant uplift in sustainability performance from the current position.

The Condition of the building from a sustainability perspective when it was acquired:

The existing heating, cooling and ventilation was a traditional system of gas fired boiler, an air cooled chiller, single speed AHU central plant, local Fan coil Units, with supplementary refrigerant based cooling to specific areas added over the intervening years.

The lighting is generally compact fluorescent and not to industry standards.

The EPC rating of the existing building of 95, a D rating.

The building services engineering systems will be removed and replaced with new, and significantly more efficient equipment thought.

There are reports of significant overheating in the atrium and the adjacent circulation areas which is very uncomfortable in the summer months for anyone working or walking through the atrium and the open walkways.

The programme of the works we are undertaking:

The boilers and chiller are being replaced with 4 pipe heat pumps with a very low impact refrigerant limited only to the heat pumps themselves, with all heating and cooling being distributed around the building by water.

The AHU will be replaced with two variable speed units that will operate significantly much more efficiently to serve new Fan Coil Units across the floors.

Heat recovery will be in place for all ventilation systems, including the toilet and store extract air.

Cooling is only provided where it is need, with heating elsewhere such as the locker room and stores.

The lighting throughout is being replaced with efficient, controlled lighting.

Where significant overheating was impacting on comfort on the floor

plates, thermal films have been added to the glazing.

The atrium will be improved significantly with mechanical extract ventilation at high level, new openings being added into the external elevation to supplement the existing openings in the barrel roof, and all openings will be controlled.

Wherever practical the solid building envelope's thermal performance is being improved by adding insulation.

Photovoltaics are being installed to the MSCP to serve the building.

Electric charging points for 12 operational vehicles will be provided (Reference Local Planning Policy TR5).

All of the above improves the building EPC rating to 56, comfortably within the 51-75 range for a C rating.

Other Sustainable features

New showers provided for employees cycling to work

New (with extra spaces) cycle shelters for staff.

Electric charging points for operational vehicles.

Promotion of corporate GTP—including free/discounted use of Buses for staff and officers.

What the results of these works will be with regard to creating more sustainable building/workplace:

The building's environment will be comfortable, safe and responsive to how it is used.

As people move around the building, the spaces will be ventilated, heated, cooled and lit as needed. Stores will be mechanically vented as they require, and any available heat recovered and re-used.

Where spaces are not in use the controls will make sure that the building systems are set back.

◇