TOTAL ARCHITECTURE

WORK|SHOP
properties ltd

Environmental Statement

To support application for three storey office building on Tib Street/Foundry Lane, Manchester

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1.0 INTRODUCTION

Due to the small scale of the development a formal BREEAM pre-assessment has not been carried out. However, the following strategy has been prepared, based on the categories contained in the BREEAM Offices methodology, and this identifies the elements that are proposed for incorporation into the scheme and provides information on the reasons that others are not.

2.0 MANAGEMENT

The developer is committed to implementing a formal commissioning process for the services installation and also to providing a building user guide but for the other areas in this category it would be difficult to claim credits.

Control of costs is imperative to delivery of the business model of a low-cost starter business unit and in order to keep these to a minimum the client has opted for a management procurement route in which he will be managing individual sub-contractors rather than letting a contract to a single main contractor.

A number of credits are awarded for estimating, managing and recording the use of energy and emissions of CO2 during the construction process but this is a highly complex operation, requiring detailed specialist knowledge and is difficult to control when large numbers of individual sub-contractors are involved.

3.0 HEALTH & WELLBEING

This section would score very highly in a formal pre-assessment due to the large amount of daylight, extensive views out, orientation of the windows to reduce glare and a natural ventilation strategy. In addition, each floor will be individually controlled for heating and lighting to provide a highly user controlled environment.

The only credits that would not be available are those relating to proximity to air pollution sources. This is outside our control as the site is in a city centre and very close to a major thoroughfare and hence in proximity to substantial traffic.

4.0 ENERGY

The credits that would be available in this category are difficult to quantify at this stage but the potential for reduction of CO2 emissions is a significant factor. Whilst the servicing strategy has yet to be fully developed the relatively small area of glazing coupled with a highly insulated fabric will limit heat losses whilst the level of natural lighting, the use of energy efficient lighting and the flexibility of both lighting and heating controls will limit the energy use requirements.

The main area where credits could not be claimed relate to the use of low zero carbon technologies. From experience of similar projects we know that to implement the use of on-site renewable technology would add substantial cost to the project and is very unlikely to provide the required performance due to the restricted nature of the development site.

This extra cost would have to be passed on to the tenants and this in turn would prevent the development from achieving the low rental values that are an essential requirement for the success of the scheme.

5.0 TRANSPORT

Transport is another category that would score highly given the site's close proximity to a full public transport network, cycle parking facilities and many local amenities.

A travel plan would be difficult to provide at this stage as the development will accommodate an individual business, as yet unknown. Also, whilst cyclist facilities are provided in the adjacent Swan Square there is insufficient capacity within the development to provide specific showering and changing facilities and so maximum credits could not be claimed.

6.0 WATER

Water consumption will be limited through the specification of dual flush WC's and auto shut off taps and the water supply to the unit will be metered. However, the provision of major leak detection system to this supply will result in a substantial additional cost that will threaten the viability of the scheme and so will not be provided.

7.0 MATERIALS

The materials used in the development will consist mainly of brickwork and blockwork for internal and external walls, in-situ concrete for the ground floor with timber joists for the upper floors and roof structure. All of these materials score very highly in the BRE Green Guide to Specification.

Windows will be from aluminium, which again scores relatively well in the Green Guide, and has been selected for its quality and longevity. In addition, all insulation will have a low GWP and zero ODP and materials would be responsibly sourced where possible meaning that a good score would be achieved in relation to the actual materials used in construction.

We would, however, be unable to claim anything on re-use of the building's façade or structure as the existing building is due to be demolished due to it's poor quality and condition and it's inappropriateness for inclusion into the new development.

8.0 WASTE

Credits would be lost in this section due to the procurement process and the availability of the specialist skills to manage and control waste on site. In practice this is a very difficult process to manage and evidence to the required standard and places an unreasonable burden on the client.

The use of recycled aggregates is again another area that is very difficult to control and monitor in practice. It also substantially reduces the available supply sources and will place onerous restrictions on the client, leading to increased costs.

9.0 LAND USE & ECOLOGY

This category would be difficult to obtain maximum credits as the restricted nature of the site and existing building and the lack of any residual external area provides little opportunity to enhance the ecological value of the site. However, this also means that there will be no negative impact on the ecology of the site and so the effect should be considered as neutral.

10.0 POLLUTION

It would be possible to achieve close to maximum credits in this category mainly due to the lack of any air conditioning and, hence, refrigerants. As the site is fully built on and connected to the main sewerage system there is also no possibility of pollution to watercourses.

11.0 SUMMARY

Whilst a formal BREEAM Pre-Assessment has not been carried out, the developer's experience from the Swan Square development, which is currently in the process of obtaining Post-completion BREEAM Certification, suggests that this scheme would achieve a 'Very Good' rating.

Given the small scale of the development and the need to control costs in order to deliver the scheme economically we believe this strikes a good balance between environmental responsibility and commercial viability.