

THE CLIMBING HANGAR

SUSTAINABILITY

Introduction

- 1.1 This note sets out consideration of the proposed use of unit 8 Stadium Way, Reading as an indoor climbing centre by The Climbing Hangar.
- 1.2 We've reviewed the request for a pre-commencement condition related to BREEAM assessment and certification for the premises, together with the relevant planning policy position, and set out further consideration below.
- 1.3 In summary, for the reasons set out below the application of BREEAM to this use and the minor works to be undertaken to the property to facilitate the use is not feasible or practical. As part of the fit out undertaken internally within the unit The Climbing Hangar however do incorporate a range of measures to deliver a sustainable operation, which are appropriate and related to the level of works and nature of their use. Further details of these are set out below.

Application of BREEAM to this Proposal

- 2.1 TCH has taken specialist advice in relation to the application and potential to address the requirements of the BREEAM assessment criteria and meeting the identified standard. It is evident that the level of work required to facilitate the use presents significant challenges in the application and assessment of the BREEAM requirements.
- 2.2 The technical standard is broken down into a number of parts. Part 1 and 2 relate to the External Envelope, including building, fabric and structure, and core services. The works to the building are extremely limited to cosmetic changes. There are no changes to the building structure or fabric. The works to the building itself are restricted to application of film to windows, minor widening of an existing fire door to meet Fire Regulations and provision of a door in an existing opening. No changes are proposed or can be made to the existing walls or roof of the building and no construction works to be undertaken.
- 2.3 This is an existing building that was not constructed to current BREEAM standards and the very minor scope of works required to allow the new use to be introduced would not meet the scope of the BREEAM requirements to even enable the assessment or certification process to be undertaken. In practice, the proposed extent of works would need to be significantly increased and the building largely re-constructed, which is neither practical or viable, or related or proportional to the proposed change of use and minor works contained within the submitted planning application.
- 2.4 A far greater extent of new works to the building and further detailed assessment would be needed to achieve the enhancements required to enable review for BREEAM and meet current BREEAM standards. Much of this process needs to have been commenced and built in and documented at design stage. The additional building works that would be required would include further insulation to the whole building, grey water storage and distribution systems, installation of new heating systems and provision of renewable energy measures, such as photovoltaic cells on the roof which in turn would require major works to the roof structure to take the additional weight. A number of new and additional assessment would also be needed, beyond that required for planning. This would include Flood Risk Assessment, Land Condition Surveys, Ecological assessment, Noise

Assessments and Urban Greening. Many of these are mandatory requirements for credits but will have no sustainability benefit in terms of this building or use. Even if these measures were proposed as part of the fit out, it is unlikely that a BREEAM rating and certificate could be achieved under the current regulations due to the nature, structure and construction of the original building. Repairs to the roof, in terms of overcladding the existing asbestos roof, have previously been undertaken by the landlord. However further works are limited due to the original construction and need to maintain its containment. It would be unviable to undertake any works to this element of work due to the cost associated with removal of both the asbestos and a new roof, in accordance with the asbestos management plan.

- 2.5 Internally the proposed use also requires very minimal works and levels of fit out. The majority of the total footprint of the site will accommodate the climbing area 72% (10,438 sq ft). The climbing walls themselves are classed as non-structural fittings. In addition to the climbing walls a minimal M&E fit out will be installed including upgrading existing lighting to LED high bay lights, passive air handling system and speed variable mechanical ventilation, alongside energy efficient HVLS fans to improve the energy consumption of the premises.
- 2.6 The front of house area 28% (4118 sq ft), which provides the office part of the current premises, was recently refurbished by the landlord and therefore the works required to this area are largely cosmetic works only, including provision of a partition wall to the climbing area, reception desk, kitchen and servery, provision of storage and changing facilities. None of these works affect the building envelope or structure. Where possible TCH would aim to retain any existing M&E elements and fixtures, limiting unnecessary waste from the original refurbishment and requirement for new provisions to reduce any unnecessary environmental impact.
- 2.7 It is also important to recognize that there is also guidance within BREEAM documentation identifying that where interior fit out is limited to an area less than 50% of the existing floor space the requirements do not apply. Given that interior fit out works are only to be undertaken to 28% of the building area it is not possible to apply the requirements of BREEAM to this proposal.
- 2.8 The building was never originally designed and constructed with BREEAM in mind and it is simply not practical or viable to change the original plans, meaning that the BREEAM credits linked to RIBA stage 1 and 2 are highly unlikely to be able to be targeted at the current RIBA stage 3. Examples of this include:
- **Project brief and design** - the building itself is not being changed the proposed brief does not include any major redevelopment of the building's envelope, services or integral structure.
 - **Life cycle cost and service life planning** – Essentially, we are improving the existing office fit out at the front of the facility to include LED lighting. The remainder of the facility is to be used as existing just with the addition of new LED 'High Bay' lighting and passive air extraction. It is TCH's policy to only change elements of the building that require alteration and to not generate additional waste unnecessarily.
 - **Acoustic performance** - the intended new use is likely to be quieter than the building's lawful light industrial use, once again it would be wholly unsustainable to replace the existing wall cladding for example just for this reason. TCH play background music within the climbing and café areas, but due to the levels the noise created by TCH is likely to be quieter than the existing use and other surrounding businesses and no additional noise insulation is required.
 - **Safety and security** - TCH are re-using the existing intruder alarm system and will install 24/7 remote CCTV, additionally due to the later trading hours local businesses and the estate will benefit from driven footfall inherently making the estate more safe and providing natural surveillance.

- **Reduction of energy use and carbon emissions energy monitoring** - we propose incorporating extraction to the kitchen and energy efficient HVLS fans within the climbing area. All lighting to be PIR (Passive Infrared Sensor) LED so that in these areas lights are only on when the areas are in active use. In doing so we would upgrade the current offering within the warehouse and subsequently offer a more energy efficient fit out than if the facility was to retain its current M&E offering and purpose.
- **External lighting** - All external lighting will incorporate LED lights only
- **Low carbon design** - insofar as the intended works require. We are minimising the loss of embodied carbon in the building by retaining the existing structure and only replacing elements internally where required.
- **Drying space** - there is no requirement for such a space.
- **Compliant cyclist facilities** - this will be achieved. – Please refer to the planning application drawings which incorporate external covered cycle hoops allowance and additional cycle storage within the facility.
- **Hard landscaping and boundary protection** – No additional hard landscaping provided or boundary changes. With exception of the cycle shelter the scope of works related to this section is minimal.
- **Designing for durability and resilience** - insofar as works are being carried out.
- **Adaptation to climate change** - we see little opportunity to adapt the building within the intended scope of work due to the minimal nature of the build proposal. Energy efficient lighting will be incorporated to reduce carbon.
- **Functional adaptability** - This will be implemented. As stated in "Reduction of energy use and carbon emissions energy monitoring" we would aim to avoid waste of unnecessary materials and re-use any M&E items were possible within the current buildings fit out. Additionally, our proposal for change of use is in line with the requirement for this section as we aim to adapt the use of the intended industrial unit that has been empty for over 4 years. The level of fit out is entirely reversible allowing a range of uses to occupy the building if it was later to be vacated.
- **Early identification and design for protection of ecological features** - we cannot have any influence on this as the building and surrounding development already exists. The proposed change of use is for works to be carried out within the existing demise of the building.
- **Enhancing site ecology** - there is no opportunity for this due to our limited demise.
- **Long term impact on biodiversity** - there is no opportunity for this due to our limited demise.
- **Flood risk management and reducing surface water run-off** - the building is already constructed so we can't influence this. There is no existing flood risk.
- **Reduction of nighttime light pollution** - existing external estate lighting will remain which is already at a minimum and we will only have external lights on during opening hours if required and these will be operated via sensors (PIRs).

- **Reduction of noise** - the new use will be likely less noisy than the existing. As the facility is situated on an existing industrial area and is surrounded by functioning light industrial and trade counter businesses, The facility will conform to standard noise restrictions of a business situation in such a location.

Planning Policy

- 3.0 Policy CC2 states that "Proposals for new development, including the construction of new buildings and the redevelopment and refurbishment of existing building stock...". The proposal does not propose a new building, redevelopment or refurbishment, or represent a conversion to residential. The proposal relates to a change of use with minor cosmetic works and limited internal fit out to facilitate the new use. The building was refurbished recently by the landlord including containment of the current roof and upgrade of the office area. Further refurbishment is not required to enable a bouldering use within the property.
- 3.1 The stated ambition of Local Plan Policy CC2 is to seek to ensure that "*the design of buildings and site layouts use energy, water, minerals, materials and other natural resources appropriately, efficiently and with care and take account of the effects of climate change*". The proposal does not include a building design or affect the site layout as the existing building is in place and there are no changes to these elements. These elements of the construction of the building are historic and as set out no new-build, reconstruction or redevelopment is proposed as part of the change of use.
- 3.2 The policy also recognizes that the relevant BREEAM standards cannot always be met, but should be met "where possible". There is also recognition in the supporting text that some types of development, such as new industrial uses, warehouses and schools might find it difficult to meet these standards. This demonstrates that there is acknowledgement that BREEAM is not always the best or most appropriate approach – whilst it also needs to be appreciated that the limited works as part of building fit out further limits the potential to meet BREEAM standards and apply the criteria even further than the construction of new buildings of this nature.
- 3.3 For the reasons set out above this particular case is one where it is not possible to apply the criteria or undertaken such an assessment against the BREEAM standards, due to the limited works required and feasible to be undertaken. To apply the requirements and meet BREEAM standards certain parts of the building would likely need virtual reconstruction, and such works are likely to need planning permission in their own right, which would not be feasible or viable given the nature, location and use of the premises. A requirement to undertake significant additional physical works substantially beyond the scope required to undertake the proposed use is neither reasonable or related to the scale of the proposal within the current application.

Sustainable Approach

- 4.1 The proposal is located in a sustainable, urban location. The premises is located within an existing built-up area within the settlement boundary. The site is previously developed land comprising a vacant property that is not currently providing any use or benefit to the area or local community. The building is in an accessible location with excellent public transport connections and good pedestrian links connecting it with the local and wider area.
- 4.2 The property has been vacant for over 4 years and not provided any beneficial use or sustainable occupation during this period. The proposal will provide a complimentary and ancillary active recreation and fitness use that will provide opportunities to improve health and well-being.

- 4.3 The proposal to reuse this existing building to provide an active use for the surrounding community represents economic and social sustainability criteria as set out within the NPPF.
- 4.4 The proposal retains an existing building, avoiding the impacts of providing a new building and the associated embodied carbon within the current building fabric. The reuse of the existing fabric and approach to limited works enables the existing fabric to be retained and avoids the potential for increased embodied carbon impact. As such the approach of re-using an existing building, making beneficial and active use of an existing structure and extending its occupation represents good environmental practice and itself delivers sustainability benefits over substantial refurbishment works to the buildings structure and envelope.
- 4.5 Whilst it is not practical or feasible to apply BREEAM to this proposal, it is still possible to demonstrate that the proposal will meet the aims and ambitions of Policy CC2 and deliver measures which use resources effectively and efficiently, and take account of the effects of climate change. The scheme will incorporate a number of measures in the limited fit out to be undertaken which will deliver environmental sustainability benefits and incorporate water conservation, energy reduction and sustainable transport measures. In summary the proposal will incorporate the following measures in the change of use and fit out works:
- Retain current loading bay shutter and utilize space for new facility entrance improving facilities U-value and energy efficiency of the facility.
 - Upgrade current system to Air-source heat pump.
 - Retain and re-use any M&E from the existing fit out where possible.
 - Passive air handling system with speed variable mechanical ventilation and energy efficient HVLS fans
 - LED energy efficient lighting with PIR sensors within front of house for low frequency usage areas.
 - Covered cycle externally and internal cycle storage designed and specified in line with BREEAM guidelines to encourage sustainable access. Internal changing facilities to encourage walking and cycling to the facility.
 - Toilet and changing facilities for customers to include automatic timed shut off taps and urinal flush sensors to reduce water wastage, along with energy efficient hand dryers.

Summary and Conclusion

- 5.1 For the reasons set out above it is not practical or feasible to apply a BREEAM approach to this proposal.
- 5.2 The proposal will deliver the sustainable reuse of this existing building, making use of an existing structure and its embodied carbon to deliver a beneficial and active use for the surrounding community, and providing an opportunity for increased health, fitness, social interaction and wellbeing. The proposal therefore represents sustainable development in line with the NPPF.
- 5.3 Limited works are required internally and externally to facilitate the change of use, however a number of measures will be incorporated into the use and limited fit out works to ensure water conservation, energy reduction and sustainable construction such that the proposal will represent a sustainable re-use of this property and meet the ambitions of Policy CC2.
- 5.4 On this basis we would suggest that the elements set out in Para. 4.5 of this paragraph form the basis of a compliance condition to secure these elements and provide a reasonable and proportionate requirement given the nature of the scheme and level of works to be undertaken.