

Environment and Sustainability Assessment

Project Title: Typhoo Factory Redevelopment		
Department: Place Prosperity and Sustainability	Team: EZ & Curzon Delivery	Person Responsible for assessment: James Betjemann
Date of assessment: 15 February 2023	Is it a new or existing proposal? New	
<p>Brief description of the proposal:</p> <p>With the BBC's lease at Mailbox expiring in 2026, they commenced a site search for a new broadcasting centre on 15 November 2021 and the Typhoo building was selected as their preferred location based on the proposal emphasis on sustainability, low carbon footprint during construction, future flexibility and build design. A commercial deal has now been struck to secure the BBC providing the high quality fit out is achieved and public realm is delivered.</p> <p>More specifically, the initiative makes Net Zero a priority. Because the scheme is an existing building, embedded carbon is saved in the construction process when compared to demolishing and rebuilding other existing, comparable sites. This links well to the goal stated in the <i>BCC Route to Zero Action Plan</i> to promote sustainable construction. The redeveloped former Typhoo Building comes with strong sustainability credentials, such as an EPC 'A' rating, a BREEAM 'outstanding' rating. The building (Shell and Core) is also 'Net Zero Carbon' (NZC) in construction and operation. As an all-electric building, using Air Source Heat Pumps, LED lighting, comprehensive controls and a wide range of internal environmental conditions, the building is enabled to achieve Net Zero Carbon in Operation as the grid decarbonizes. In addition, an area of PV on the roof will be provided to provide an element of the operational energy required. A brown roof will encourage biodiversity. Overall, the scheme will set a new standard in terms of development quality, fit out and design that will act as a president for future development in the area. Thus, the scheme sets a new standard in quality of development, fit out and environmentally friendly design in the area.</p> <p>There are wider sustainability benefits in addition to the building itself. The Masterplan area will build on current brownfield land, thus, taking pressure off developments on greenfield land. The wider scheme will also promote Digbeth as an area that is an inherently sustainable location for development as it features many previously developed sites which are not at their respective maximum lifespan in terms of productive uses. By promoting the area and acting as a catalyst, the scheme will help to ensure that existing developed sites will be used better and see their productive uses optimised. This will reduce the need for carbon intensive new builds elsewhere.</p>		

The new development is well aligned with Birmingham's Transport Plan, which aims at '*reducing transport's damaging impact on the environment, supporting Birmingham's commitment to becoming a carbon neutral city by 2030*'. The new development will provide cycling facilities for storage of 120 bicycles and, thus, will promote the use of active modes of transport. Moreover, the development will be adjacent to the new Digbeth Metrolink station and in walking distance from the new HS2 Curzon Station incentivising the use of public transport and discouraging the use of cars.

Potential impacts of the policy/development decision/procedure/ on:	Positive Impact	Negative Impact	No Specific Impact	What will the impact be? If the impact is negative, how can it be mitigated, what action will be taken?
Natural Resources- Impact on natural resources including water, soil, air	√			<p>The wider sustainability benefits include building on current brownfield land, thus taking pressure off developments on greenfield land.</p> <p>The new development is well aligned with Birmingham's Transport Plan, which aims at '<i>reducing transport's damaging impact on the environment, supporting Birmingham's commitment to becoming a carbon neutral city by 2030</i>'. The new development will provide cycling facilities for storage of 120 bicycles and, thus, will promote the use of active modes of transport. Moreover, the development will be adjacent to the new Digbeth Metrolink station and in walking distance from the new HS2 Curzon Station incentivising the use of public transport and discouraging the use of cars.</p>
Energy use and CO ₂ emissions	√			<p>The building will be designed to be net zero in operation and to BREEAM Excellent standards, with a range of technologies including local energy generation which will enable ongoing operation to respond to climate change challenges in the future.</p> <p>In addition, an area of PV on the roof will be provided to provide an element of the operational energy required.</p>
Impact on local green and open spaces and biodiversity	√			The building will include a brown roof to encourage

				biodiversity. The roof is focused on biodiversity to compensate for the loss of brownfield habitat caused by construction.
Use of sustainable products and equipment	√			The scheme is aligned with the goal to foster 'Environmental technologies'. This is supported by enabling the wider mix-used regeneration of the former industrial area to include land remediation, re-use of materials, deliver a BREEAM 'outstanding' rated building.
Minimising waste	√			The building (Shell and Core) is 'Net Zero Carbon' (NZC) in construction. As an all-electric building, using Air Source Heat Pumps, LED lighting, comprehensive controls and a wide range of internal environmental conditions, the building is enabled to achieve Net Zero Carbon in Operation as the grid decarbonizes. In addition, an area of PV on the roof will be provided to provide an element of the operational energy required. A brown roof will encourage biodiversity.
Council plan priority: a city that takes a leading role in tackling climate change	√			Since the redeveloped former Typhoo building will be net zero during operation, the scheme will lead to savings of 589,008 kg CO2 per year. The UK ETS Authority of the UK Emissions Trading Scheme (UK ETS) prices carbon at £69.15 per ton (as per 19 December 2022). This results in a total savings of £40,730 per year.
Overall conclusion on the environmental and sustainability impacts of the proposal	The Typhoo Factory redevelopment links well to the goal stated in the <i>BCC Route to Zero Action Plan</i> to promote sustainable construction. The redeveloped former Typhoo Building comes with strong sustainability credentials, such as an EPC 'A' rating, a BREEAM 'outstanding' rating.			

If you require assistance in completing this assessment, then please contact: ESAGuidance@birmingham.gov.uk