

Environment and Sustainability Assessment

Birmingham City Council is required to assess any positive or negative impacts that any policy/strategy/ decision/development proposal is likely to have on the environment. To complete the assessment, you should consider whether that policy/development/proposal will have a positive or a negative impact on each of the key themes by placing a (✓) for positive, (x) for negative and (?) for unclear impact, and (N/A) for non-applicable impact. The assessment must be completed for all Cabinet reports. It is the responsibility of the Service Director signing off the report to ensure that the assessment is complete. The officers from the sustainability team can help to fill the assessment especially during the early days of implementation.

Theme	Example
Natural Resources - Impact on natural resources including water, soil, air.	<p>Does the decision increase water use?</p> <p>Does the decision have an impact on air quality?</p> <p>Does the decision discourage the use of the most polluting vehicles (private and public) and promote sustainable modes of transport or working from home to reduce air pollution?</p> <p>Does the decision impact on soil?</p> <p>For example, development will typically use water for carrying out various operations and, once complete, water will be needed to service the development. Providing water to development and treating affluent water requires energy and contributes to climate change. Some of the activities including construction or disposal of waste may lead to soil pollution. The decisions may lead to more journeys thereby deteriorating air quality and thus contribution to climate change and greenhouse gases.</p>
Energy use and CO ₂ emissions.	<p>Will the decision have an impact on energy use?</p> <p>Will the decision impact on carbon emissions?</p> <p>Most day-to-day activities use energy. The main environmental impact of producing and using energy such as electricity, gas, and fuel (unless it is from a renewable source) is the emission of carbon dioxide.</p>
Quality of environment.	<p>Does the decision impact on the overall quality of the built environment?</p> <p>Decisions may have an impact on the overall setting, character and distinctiveness in the area. For example, if development involves ground digging and excavations etc. it may have an impact on the local archaeology.</p>

Impact on local green and open spaces and biodiversity	<p>The proposal may lead to localised impacts on the local green and open spaces which may have an impact on local biodiversity, trees and other vegetation in the area.</p> <p>Will the proposal lead to loss (or creation) of green and blue infrastructure?</p> <p>For example, selling an open space may reduce access to open space within an area and lead to a loss of biodiversity. However, creating a new open space would have positive effects.</p>
Use of environmentally sustainable products, equipment and packaging'	<p>Will the decision present opportunities to incorporate the use of environmentally sustainable products (such as compostable bags, paper straws etc.), recycled materials (i.e. Forest Stewardship Council (FSC) Timber/wood), non-polluting vehicles, avoid the use of single use plastics and packaging.</p>
Minimising waste	<p>Will the decision minimise waste creation and the maximise recycling during the construction and operation of the development/programme/project?</p> <p>Will the decision provide opportunities to improve recycling?</p> <p>For example, if the proposal involves the demolition of a building or a structure, could some of the construction materials be reused in the new development or recycled back into the construction industry for use on another project?</p>
Council plan priority: a city that takes a leading role in tackling climate change and deliver Route to Zero.	<p>How does the proposal or decision contribute to tackling and showing leadership in tackling climate change and deliver Route to Zero aspirations?</p>

Project Title:	Ladywood Estate Regeneration			
Department: Place, Prosperity and Sustainability Directorate	Team: Project Delivery Team		Person Responsible for assessment: Nick Matthews	
Date of assessment: 18/11/2022		Is it a new or existing proposal? New		
Brief description of the proposal: The report seeks to obtain approval for the construction of up to 7,531 new homes on cleared housing sites on the Ladywood Estate. The report seeks approval for a revised strategy and commencement of the procurement activity and delegated approvals for the contract award for the regeneration of the Ladywood Estate.				
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	x			<p>Berkeley Homes target 6% reduction year on year against the 2016 baseline on water usage. This will be achieved through a tested water management strategy being communicated to all contractors.</p> <p>The site is located close to public transport and contractors are encouraged to use.</p> <p>Electric and hybrid machinery will further cut emission and reduce carbon footprint.</p> <p>A key part of the scheme is enhanced public open space which will include opportunities to improve the biodiversity of green spaces in the area. The Canal runs through the site, which together with the enhanced green spaces will provide a network of blue and green corridors. Opportunities to enhance the water quality and biodiversity of the Canal will be explored.</p> <p>Sustainable design is at the heart of the scheme, including the use of Sustainable Urban Drainage throughout the</p>

				<p>redeveloped Estate and public realm. This should help with the better management of water run-off.</p> <p>Increased green infrastructure throughout the Estate area will also help increase biodiversity, tackle air pollution and mitigate the impacts of climate change.</p> <p>The scheme includes several measures to increase public transport use, walking and cycling. Including a bus priority network and new cycle routes. The scheme also looks to reduce the dominance of cars on the environment and people. These measures should all help tackle poor air quality and reduce the use of private cars.</p> <p>The scheme does propose the redevelopment of large built areas which could have the potential to create emissions through demolition and require the use of new materials in construction. However, much of this demolition is necessary to create a more sustainable environment and provide energy efficient buildings. Consideration has been given where appropriate to the re-use of existing buildings and several of the tower blocks are being refurbished rather than demolished.</p>
Energy use and CO ₂ emissions		x		<p>Berkeley will reduce emissions from direct operations by 50% between 2019 and 2030. It includes the electricity, natural gas and other fuels used across our offices, sales suites and construction sites.</p> <p>Zero Carbon Transition Plan to be prepared for the development during the preferred bidder phase. Will roadmap homes to operate at 0 carbon by 2030 and will comply with.</p> <p>All Residential buildings will be designed to Home Quality Mark Standard of 4 and 5 stars.</p> <p>All houses to have smart meters to improve awareness</p>

				<p>of energy consumption and this may help change behavioural habits and inform decisions to buy more energy efficient appliances which would put less pressure on the electricity grid.</p> <p>All energy consumption is to be metered and monitored on site with measures being introduced to reduce the energy usage. Berkeley are increasing the use of biodiesel in place of traditional gas oil during construction and being an early adopter of electric and hybrid machinery will further cut emission and reduce carbon footprint. The contractors are encouraged to use suppliers within 30 miles of the site to help reduce the amount of fuel emissions.</p> <p>The greening of the Estate area will support in offsetting the emissions of CO2</p>
Quality of environment	X			<p>Improves the currently vacant site into a higher quality environment, providing homes, two new parks and community green open space. The existing housing and open space are not fit for purpose.</p> <p>Net gain biodiversity will be achieved by crating two new parks and planting of trees, shrubs which will improve air quality around the site and general area.</p> <p>The Listed Brockhouse Chatwin Precision Limited The former Ledsam Street Works buildings will be part of a cluster of refurbished historic buildings sensitively refurbished to provide long term viable use.</p>
Impact on local green and open spaces and biodiversity			x	<p>Net Biodiversity Gain of a minimum of 10% delivered at the Ladywood estate from pre-development baseline.</p> <p>There will be no loss of local green open space. Two new parks will be provided and targeted planting schedules</p>

				which incorporates shrubs and trees will harness and improve biodiversity.
Use of sustainable products and equipment	x			The new homes are to be built using timber frame construction – timber acts as a carbon sink so resulting in a lower carbon footprint. Using off-site manufacture as part of the construction process may reduce building times and more efficient use of materials produced in a safe controlled environment may produce less waste. Improved quality of construction could reduce maintenance costs over the lifetime of the assets. All materials that are used with the development are to be sourced where possible with the use of local suppliers encouraged as part of the social value agenda.
Minimising waste	x			<p>Berkeley Homes will divert 99% of total waste per year from landfill to recycling/material recovery.</p> <p>Berkeley Groups bespoke Environmental Management System will be used at Ladywood. They operate a bespoke Internal EMS, however, the majority of our subcontractors operate ISO14001. They have an internal EMS in place, which works in parallel to ISO14001 with internal audits, regular reviews, maintenance of a legal register, a document management system in place, and bespoke reporting.</p> <p>The scheme does propose the redevelopment of large built areas. Consideration will be given where appropriate to the re-use of existing buildings.</p>
Council plan priority: a city that takes a leading role in tackling climate change			x	The specification for the housing units is designed from the ground up to present a suite of energy saving and sustainable features. A sample of these measures are PV panels on the roofing, improved thermal insulation in the cavity walls, heat pumps and double glazing on all windows. In this manner all units produce are intended to support the wider agenda of sustainable housing and thus contribute

				<p>towards tackling climate change in the medium to long term in line with the Council plan priority.</p> <p>The developer is leading and setting an example in promoting using the best techniques and most energy efficient materials in their development.</p> <p>Developments also include provisions for electric car charging points as detailed within the planning guidelines/policy.</p>
Overall conclusion on the environmental and sustainability impacts of the proposal	<p>The regeneration of Ladywood will create a truly sustainable and vibrant urban neighbourhood that will be home to a diverse mix of homes and uses meeting the needs of all ages and backgrounds. The scheme provides energy efficient homes by incorporating energy saving features within the properties that help reduce energy use, including water usage, heat pumps and also will provide two new parks and improve neighbourhoods' biodiversity. The development can contribute to initiatives that can meet or exceed current targets and contribute positively to Birmingham's Route to Zero, Clean Air Zone, and climate action strategies.</p>			

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