

Climate Impact Assessment, Appendix 5, Housing Delivery Programme - Wath Small Sites, Denman Road Development

Will the decision/proposal impact...	Impact	If an impact or potential impacts are identified:			
		Describe impacts or potential impacts on emissions from the Council and its contractors.	Describe impact or potential impacts on emissions across the Borough as a whole.	Describe any measures to mitigate emission impacts	Outline any monitoring of emission impacts that will be carried out
Emissions from non-domestic buildings?	None				
Emissions from transport?	Increase	<p>Vehicle movements to and from site generated during construction will create emissions, through the movement of building and waste materials and personnel.</p> <p>Addition of the homes to the Council's maintenance programme will also result in increased transport emissions in future years.</p>	<p>While it is possible that new households will increase vehicle movements, they may also reduce them, depending on where new residents work and access services. The development is within reasonable walking distance of shops and public transport stops. We do not know before a development is built where new residents will move from and whether this move will increase or decrease vehicle movements. However, it should be noted that the housing provision within this development includes provision for car parking as per planning policy. This does not in</p>	<p>Where appropriate, prospective contractors will be required to demonstrate how they will minimise and mitigate emissions from vehicle movements as part of the construction, during the tendering process. All new housing developments are subject to planning controls and the planning process at the plan and policy development and planning application stages takes into account vehicle movements.</p>	<p>Assessment of whether the new households increase or decrease carbon emissions through vehicle movements is not monitored at this time. Overall Borough emissions are reported annually but are subject to a 2 year lag.</p>

			itself discourage car use, but this issue is outside of the remit of this carbon impact assessment.		
Emissions from waste, or the quantity of waste itself?	Increase	Construction will generate waste materials through demolition, exporting of materials from groundworks and waste construction materials.	Although new households may not necessarily mean more people living in the Borough, they are likely to create a small increase in the overall volume of waste created and, in the distance travelled by waste collection vehicles.	Where appropriate, prospective contractors will be required to produce a plan demonstrating how they will minimise and mitigate vehicle emissions from the movement of waste, during the tendering process. This will include the recycling / re use of materials on site where possible.	Where appropriate, we will monitor contractor's implementation of wastes minimisation and management plans.
Emissions from housing and domestic buildings?	Increase	No direct emissions increase for the council.	This is a "no gas" development utilising Air-Source Heat Pumps (ASHP) therefore the carbon emissions will be greatly reduced and the development will be far more environmentally friendly than a traditional gas boiler. Properties designed using the Future Homes Standard should decarbonise as the grid becomes more renewable without additional retrofit and are estimated to be 75% more efficient than part L	<p>The Council will ensure that the new homes are high quality, energy efficient and able to meet the challenge of climate change.</p> <p>The use of modern methods of construction will be considered, where value for money can be demonstrated as well as carbon reduction.</p>	Construction will be monitored to ensure that specifications are met and, where appropriate, the energy performance of new buildings will be monitored once occupied to ensure that the stated performance standards are met.

			building regulations. However, as these are new builds, there will still be additional emissions until the National Grid becomes decarbonised and as part of the buildings' embodied carbon.		
Emissions from construction and/or development?	Increase	<p>Emissions will be increased from on-site vehicles and equipment and the lighting of the sites. Also, from the heating lighting and powering of site offices and cabins. The manufacture of construction materials will increase emissions.</p> <p>It is possible that some mature trees will be removed as part of the development of new sites</p>	<p>The emissions produced in the short term through construction and materials used will impact on Borough wide emissions. However, some of the building materials will be manufactured within the Borough, reducing emissions associated with transportation.</p> <p>Removal of trees without replacement could, depending on how they are disposed of, increase carbon emissions. This activity will also reduce the carbon sequestration capacity of the Borough.</p>	<p>The use of modern methods of construction will be considered for all new schemes, where value for money can be demonstrated as well as carbon reduction.</p> <p>Where trees are present on a development site they will be retained where possible. The planning process deals with protection of trees on development sites and where it allows their removal usually requires equivalent or better replacement.</p>	This will be monitored through the procurement process.
Carbon capture (e.g. through trees)?	Unknown	It is possible that some semi-mature trees will be removed as part of the development of new sites which will impact on the borough's ability to capture carbon. Some of	The balance between removal of mature trees and replanting as part of landscaping is not currently known.	As above.	Unknown

		the Council's own construction projects will include the planting of trees as part of any landscaping schemes.			
Identify any emissions impacts associated with this decision which have not been covered by the above fields:					
N/A.					

Will the proposal affect Council services' resilience to climate change, or the capacity of people living in the Borough to adapt to climate change?

*The climate in Rotherham is already changing, with visible impacts throughout the Borough. Hotter summers are increasing the risk of extreme temperatures such as those experienced in July 2022, as wetter winters and more intense rainfall are increasing the risk of floods such as those in 2007, 2019 and 2023. More information on climate change impacts in Rotherham is available from:*

<https://www.reports.esriuk.com/view-report/b8eb3cee8f764147a2cfcd69cf36238f/E08000018>

- Do actions recommended in the report affect the ability of Council services to continue during, or recover after extreme heatwaves, flooding and other climate-related hazards?*
- Will the proposal affect resident's capacity to adapt to climate change impacts?*
- Will the proposal affect the risk of climate change impacts in the Borough of Rotherham?*

Access to a long-term good quality home could help improve residents' resilience more generally. The inclusion of energy efficiency measures such as insulation could help make the homes more resistant during periods of extreme heat.

Provide a summary of all impacts and mitigation/monitoring measures:

Emissions will be generated from energy use associated with construction sites, the vehicle movements associated with construction personnel, materials and waste. The manufacture of construction materials will also generate emissions. New homes will generate new emissions mainly through lighting and heating and the powering of domestic appliances. These increases will be mitigated through the requirement for prospective contractors to demonstrate how they will reduce emissions from the above and monitored through the construction period. The Council will continue to ensure that new homes are as energy efficient as possible and employ the use of modern methods of construction where value for money can be demonstrated as well as carbon reduction. The actual energy performance of new homes will be monitored to ensure that they meet expected standards.

Supporting information:	
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Please outline any research, data or information used to complete this Climate Impact Assessment.	No relevant data or research used.
If quantities of emissions are relevant to and have been used in this form please identify which conversion factors have been used to quantify impacts.	No relevant data or research used.
Validation	Tracking Reference: CIA473  Katie Rockett Climate Change Officer