

Climate Impact Assessment, Appendix 5 Mainline Station and Strategic Acquisition

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	N/A	N/A	N/A	N/A
Emissions from transport?	Increase	Potential of council staff and land surveyors undertaking site surveys. This would be minimal impact.	Possible emissions from transport from surveying professionals visiting site to carry out land valuations.	Valuations of land that could possibly be completed without visiting site to mitigate transport emissions. Land surveyors to share transport to reduce emissions.	N/A
Emissions from waste, or the quantity of waste itself?	None	N/A	There will not be an impact on emissions as the current building users will remain as tenants in situ for the foreseeable future so waste levels will remain the same	N/A	N/A
Emissions from housing and domestic buildings?	None	N/A	There is currently no housing on the site. This CIA is for the progression of the Masterplan only; therefore, no further emissions are expected.	N/A	N/A

Emissions from construction and/or development?	None	N/A	No construction will be taking place on the site at this time.	N/A	N/A
Carbon capture (e.g. through trees)?	Decrease	N/A	N/A	N/A	N/A
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?

Extreme weather event mitigation/ CC resilience. The Rotherham Gateway Masterplan includes plans for the attenuation of flood water from extreme rainfall events, it also includes the removal of some impenetrable hard standing, replacing it with rain scaping. Furthermore, this site was specifically chosen as large parts of the station floormat whilst they appear to be in flood zone two (1 in 100-year event) the land has in reality been raised to mitigate this risk by the previous developer of the site. In terms of mitigating the risks from extreme heat events the masterplan also includes the planting of street trees and biodiverse rain scaping: both these nature-based solutions will mitigate the 'urban heat island effect' by providing shade and limiting the amount of heat retaining hard standing such as concrete and tarmac, which would otherwise contribute to the urban heat island effect.

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

Embodied Carbon and Construction Impact: The construction phase of the new station will involve significant embodied carbon, which includes emissions from the production and transportation of building materials, as well as the energy used during construction. Additionally, increased rail traffic will contribute to carbon emissions, although rail is proven to be a more carbon efficient mode of transport compared to the use of the private car.

Long-term Benefits: over its lifetime, Rotherham Gateway station is expected to significantly increase the use of public transit, reducing the local reliance on private cars. As previously stated, Rail and Tram use emits far fewer greenhouse gases (GHG) and nitrogen oxides (NOx) per

passenger kilometre compared to private vehicles. Increased public transport connectivity and use via Rotherham will therefore contribute to lower overall emissions in the Borough.

Active Travel Routes: The development of Active Travel routes as part of the Rotherham Gateway will both support reduction in overall carbon emissions for shorter journeys/decrease private car use and also improve the health and wellbeing of the Borough's residents.

Conclusion

The approval of the Masterplan document is a crucial step towards improving sustainable transportation infrastructure provision in Rotherham. While the decision to approve the masterplan has minimal carbon impact, the subsequent development will involve careful assessment and mitigation of carbon emissions. The long-term benefits of increased public transport use for regional (tram-train) and national (mainline) journeys and active travel routes will contribute to lower Borough wide emissions and improve the boroughs overall economic resilience and wellbeing.

Supporting information:	
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Please outline any research, data or information used to complete this Climate Impact Assessment.	N/A
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.	Not applicable at this stage.
Validation	Tracking Reference: CIA 447 Arthur King Principal Climate Change Officer