Climate Impact Assessment, Appendix 4, **DELEGATED OFFICER DECISION REPORT - PROPOSED IMPLEMENTATION OF 20MPH SPEED LIMIT ZONE – B6066 ROTHERHAM ROAD, MAIN ST AND ADJACENT ROADS, CATCLIFFE, ROTHERHAM**

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	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance
Emissions from transport?	Decrease	There is expected to be very minimal additional emissions associated with the development of this scheme.	A 2023 study by Future Transport Research found a 26% reduction in CO_2 when capped at 20mph vs 30mph in real-world, stop-start urban traffic environments.	Not applicable in this instance	Not applicable in this instance
Emissions from waste, or the quantity of waste itself?	None	No impact expected. This particular scheme doesn't involve excavation, simply the addition of double yellow lines and a 'H' marking.	Not applicable in this instance	The Council's Direct Services Organisation will be expected to work with contractors to ensure carbon emissions are minimised as far as practicable, including actively seeking opportunities to cut emissions from existing operation.	Not applicable in this instance
Emissions from housing and domestic buildings?	None	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance

Emissions from construction and/or development?	Increase (Slight)	All highway schemes have construction emissions arising from the supply, installation, maintenance, and operation of the schemes. Thermoplastic road markings have a greenhouse gas emissions factor of 5.7 tCO2e per tonne. They are also a leading source of ocean plastic pollution. The scale of this is expected to be minimal on this occasion given the scale of works involved.	No impact expected beyond the contribution from RMBC and its contractors.	The Council's Direct Services Organisation will be expected to work with contractors to ensure carbon emissions are minimised as far as practicable, including actively seeking opportunities to cut emissions from existing operation.	Not applicable in this instance
Carbon capture (e.g. through trees)?	None	The proposed scheme does not include Carbon Capture measures due to the nature of works involved	No impact expected.	Not applicable in this instance	Not applicable in this instance
Identify any emissions impacts associated with this decision which have not been covered by the above fields: None					

Will the proposal affect Council services' resilience to climate change, or the capacity of people living in the Borough to adapt to climate change? There will be no effect on the Council's services or residents' resilience to climate change or their ability to adapt to climate change in the future.

Provide a summary of all impacts and mitigation/monitoring measures:
Increases associated with the development, construction, maintenance, and operation reflect the systemic nature of the carbon emissions problem; whilst the energy and construction systems are emitters of carbon, any additional activity utilising these systems can be expected to result in no increases in emissions. The proposal relates to the implementation of a 20mph speed limit on the B6066 Rotherham Road, Main St and adjacent roads, Catcliffe, Rotherham. This could result in a decrease in carbon emissions due to reduced acceleration demand. There could be one off minor increases as a result of contractor transport and the addition of road markings. The changes are thought likely to be very small in the context of overall transport emissions in Rotherham, and very small in the context of the NZ2030 and NZ2040 targets, and remaining carbon budgets.

Supporting information:	
Climate Impact Assessment Author	Simon Quarta Engineer Planning, Regeneration & Transport Regeneration and Environment
Please outline any research, data or information used to complete this Climate Impact Assessment.	• Future Transport Research. 2023. *Urban transport modelling – An investigation into the effects of urban traffic, speed limits and driving style on travel times, fuel efficiency and CO2 and NOx emissions*. [Online]. [Accessed 21 April 2026]. Available from: https://futuretransport.info/wp-content/uploads/2023/04/Urban-Transport-Modelling-2023-04-20.pdf.
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.	
Validation	Tracking Reference: CIA 631 Arthur King Principal Climate Change Officer