

Climate Impact Assessment, Appendix 4 , Proposed 40mph Speed Limit Hague Lane, Wentworth

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 for this scheme	Not applicable for this scheme	Not applicable for this scheme
Emissions from transport?	Decrease	Evidence indicates that reducing speed limits can lead to lower vehicle emissions by smoothing traffic flow and reducing acceleration and braking behaviour. However, outcomes vary depending on traffic conditions, vehicle types and driver behaviour. For this scheme, a small net reduction in emissions is anticipated. Temporary increases in emissions will arise from staff travel, site visits and construction activities associated with scheme delivery.	Temporary increases in emissions will arise from staff travel, site visits and construction activities associated with scheme delivery	Use of local contractors and suppliers where possible	Given small impacts and infeasibility of monitoring carbon emissions arising from small scale traffic interventions, no monitoring is proposed. Council officer travel is included with the council's net zero 2030 greenhouse gas emissions accounting.

Emissions from waste, or the quantity of waste itself?	None	The scheme will result in increased signing, which will need to be disposed of at end of their useful life. The impact of this on emissions is considered small owing to small scale nature of schemes.	Negligible impact due to the scale of works.	Scheme will be designed to minimise additional infrastructure and material use. Use of durable materials to reduce replacement frequency.	Given the small scale of the scheme, no scheme-specific carbon monitoring is proposed. Impacts will be captured indirectly through borough-wide transport and emissions monitoring and contractor performance management processes. Waste management is controlled through contractor processes and monitored via contract management arrangements.
Emissions from housing and domestic buildings?	None	Not applicable for this scheme	Not applicable for this scheme	Not applicable for this scheme	Not applicable for this scheme
Emissions from construction and/or development?	Increase	All highway schemes have construction emissions arising from the supply, installation, maintenance and operation of the schemes. The scale nature of these works is expected to be very small.	Impacts are expected to be very small in the context of overall borough emissions due to the limited scale of interventions.	Construction and delivery activities will result in minor short-term increases in emissions. However, the operational impact of the scheme, particularly the reduced speed limit, is expected to result in a small reduction in transport emissions over time. Overall, the net carbon impact is expected to be low and proportionate.	Construction emissions are not monitored at individual scheme level but are considered through broader programme and contractor performance management.

Carbon capture (e.g. through trees)?	None	Not applicable for this scheme	Not applicable for this scheme	The scheme is designed to avoid impacts on existing trees and green infrastructure. No tree removal is planned with these works. Opportunities for additional planting have not been identified due to the nature of the intervention.	Not applicable for this scheme
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Identify any emissions impacts associated with this decision which have not been covered by the above fields:

No additional significant emissions impacts have been identified beyond those outlined above. Given the small scale and localised nature of the schemes, any further impacts are expected to be negligible and proportionate. This will be kept under review as schemes are developed and implemented.

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

No significant impacts on climate resilience or adaptive capacity have been identified at this stage, given the small scale and localised nature of this scheme.

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

Primary environmental impacts for this scheme are a result of materials and construction work, and the effect of a speed limit change on vehicle emissions.

CO₂ emissions have not been quantified, reflecting the small scale and localised nature of the proposed works. At high level it is anticipated these will fall into three categories:

- Transport emissions, arising from staff travel and contractor activity during design and delivery
- Construction emissions, associated with materials, plant use and installation works
- Operational emissions, linked to the ongoing maintenance of highway assets

These sources are expected to result in minor increases in emissions, primarily during the construction phase, with limited ongoing operational impacts.

On account of the small-scale nature of the proposed works, the net carbon impact is anticipated to be low and proportionate to the scale of intervention measures. Where possible, emissions will be minimised through efficient design, material use and delivery practices.

Supporting information:

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Please outline any research, data or information used to complete this Climate Impact Assessment.	Tettamanti, T., Varga, B., Rottenstreich, O. and Emanuel, D. 2025. On the relationship of speed limit and CO2 emissions in urban traffic. <i>Transportation Research Interdisciplinary Perspectives</i>. [Online]. 32, article no.: 101513 [no pagination]. [Accessed 12 June 2026]. Available from: https://doi.org/10.1016/j.trip.2025.101513.
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 661 Arthur King Principal Climate Change Officer