User guidance:

- The first section of this form guides users through considering major areas where emissions are likely to occur. If emissions are impacted in a way not covered by these categories, please identify this at the bottom of the section
- The first section should be filled as such:
 - Impact: identify, in relation to each area, whether the decision of the proposal does the following: reduces emissions, increases emissions, or has no impact on emissions. If it is uncertain this section can be labelled impact unknown
 - If **no impact on emissions** is identified: no further detail is needed for this area, but can be added if relevant (e.g. if efforts have been made to mitigate emissions in this area.)
 - Describe impacts or potential impacts on emissions: two sections deal respectively with emissions from the Council (including those of contractors), and emissions across Rotherham as a whole. In both sections please explain any factors that are likely to reduce or increase emissions. If impact unknown has been selected, then identify the area of uncertainty and outline known variables that may affect impacts.
 - In most cases there is no need to quantify the emission impact of an area after outlining the factors that may reduce or increase emissions. In some cases, however, this may be desirable if factors can be reduced to a small number of known variables (e.g. if an emission impact is attached to a known or estimated quantity of fuel consumed).
 - Describe any measures to mitigate emission impact: regardless of the emission impact, in many cases steps should be taken in
 order to reduce mitigate all emissions associated with each area as far as possible; these steps can be outlined here (For example: if a
 proposal is likely to increase emissions but practices or materials have been adopted in order to reduce this overall impact, this would
 be described here).
 - Outline any monitoring of emission impacts that will be carried out: in this section outline any steps taken to monitor emission levels, or steps taken to monitor the factors that are expected to increase or reduce emission levels (for example, if waste or transport levels are being monitored this would be described here)
- A **summary paragraph** outlining the likely overall impacts of the proposal/decision on emissions should then be completed this is not required if the proposal/decision has no impact across all areas.
- The supporting information section should be filled as followed:
 - Author/completing officer
 - Research, data, or information may refer to datasets, background documents, literature, consultations, or other data-gathering exercise. These should also be added to the supporting documents section of the cabinet report
- Carbon Impact Assessments are to be appended to the associated cabinet reports
- Prior to publishing reports, Carbon Impact Assessments should be sent to <u>climate@rotherham.gov.uk</u> for feedback
- Report authors may also use the above email address to direct any further queries or to access further support regarding completing the assessment

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 Rotherham 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?	No impact				
Emissions from transport?	Unknown impact	Additional emissions will be associated with transport from contractors erecting signing and markings associated with the restrictions.	The reduction in speed limit to 30mph can be expected to result in increased carbon emissions, as it can be expected to reduced vehicle speeds below the optimum for carbon emissions of circa 40mph. However it should be noted that these emissions estimates are based on cruising speeds, and may not be reflective of all impacts e.g. those associated with acceleration and deceleration. It is plausible that admitting HGVs to the bus lane may enable smoother flow of these vehicles in peak periods, reducing carbon emissions, but there is insufficient evidence to state this with confidence.	None	The border scheme will be monitored under its extant M&E plan as agreed with the funder. This can be used to produce 'after' estimates of emissions impacts, but this will cover impacts beyond the scope of the decision and this may not pick up all displacement impacts.

Emissions from waste, or the quantity of waste itself?	Increased emissions	3	None	None	None
Emissions from housing and domestic buildings?	No impact				
Emissions from construction and/or development?	Increase emissions	Manufacture, supply and installation of traffic signs and road markings will generate additional carbon emissions.		Designers have been advised to use signing and lining sparingly to reduce impacts	
Carbon capture (e.g. through trees)?	No impact				

Identify any emission impacts associated with this decision that have not been covered by the above fields:

The following is given for context – its does not relate to the Traffic Orders on which a decision is taken, but on the broader impacts of the cycleways scheme.

Based on AMAT calculations in respect of saved vehicle-mileage, and tailpipe average car emissions on the local network in Rotherham of 155 g·km-1 (from SCTRM1 / Eneval), it is estimated that the scheme will save 1,403 kg CO2 per annum (opening year). This is equivalent to approximately 0.3% of 454,995 million kg CO2 p.a. estimated to be emitted by cars and taxis along the length of the scheme area. However, this is offset by a forecast increase in emissions of 3,798 kg CO2 per annum arising from reassignment of traffic as a consequence of the capacity reduction at Clifton Roundabout. This gives a net increase in carbon emissions in opening year of 2,395 kg. note SCRTM has not been updated to reflect reductions in traffic levels observed post-covid, and as such this may be a pessimistic forecast.

Please provide a summary of all impacts and mitigation/monitoring measures:

A (likely very small) increase in emissions is forecast as a consequence of the recommendation, associated with -

- Works to change signing and lining indicating (all measures); and,
- In the case of the 30mph speed limit, less optimal vehicle speeds from a carbon perspective.

Supporting information:

Spe			
Completed by:	Nat Porter, Interim Group Lead, Transport Planning, Policy and Programmes		
(Name, title, and service area/directorate).	Regeneration & Environment		
Please outline any research, data, or information used	Broom Road Cycleways, full business case		
to complete this [form].	SCRTM1 emissions analysis (SYSTRA, 2022)		
	Speed Limit Appraisal Tool (DfT, 2013)		
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		
Tracking [to be completed by Policy Support / Climate Champions]	CIA107		