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?	Decrease	As the project focuses on enhancement, maintenance and refurbishment of existing assets, any carbon impact is expected to be small. Underpass lighting will be updated to modern energy-efficiency standards.			Since the underpass lighting is not metered separately, detecting any change in carbon emissions may not be technically feasible. An estimated carbon saving might be available from the specifications of installed components.
Emissions from transport?	Decrease	It is not anticipated that construction works will require traffic management, however, if traffic movement is affected for a short period during the works, this might lead to more idling vehicles/driving in a low gear at busy times.	Outputs from the project are to enhance the existing pedestrian underpass at College Road Roundabout, improving its condition, environment and the overall experience for walking, wheeling and cycling. Another strand of the scheme is to improve the condition and accessibility of existing bus shelters across the Borough. These interventions may reasonably be expected to increase the attractiveness of active	Sustainable travel to leisure sites and green spaces is encouraged and is being investigated within the remit of the Council transport infrastructure strategy. This scheme directly responds to this priority.	The contractors will be required to report project emissions. The main contractor appointed will be required to abide by accepted standards to minimise emissions.

			travel and public transport modes and hence to decrease emissions from transport.		
Emissions from waste, or the quantity of waste itself?	Increase	The improvement works process will generate waste.	An improved pedestrian underpass environment will be developed which ultimately aims to improve safety and reduce anti-social behaviour therefore reducing the volume of waste including litter.	Promotion of waste segregation and diversion from landfill during the redevelopment process and adherence with local waste management practice during operation. Considering opportunities for recycling construction wastes is expected to from the contractor.	
Emissions from housing and domestic buildings?	None				
Emissions from construction and/or development?	Increase	Most projects involving construction/refurbishment works have impact on emissions. These include, traveling to site, operation of vehicles on site, operation of any other vehicles needed to construct/dig proposed components. During construction there will be an increase of vehicle movements to and on site. The embodied energy required to produce	The works are designed to minimise the impact on the surrounding areas.	Look to promote active travel and reduce single occupancy car journeys for site visits associated with construction/ development. The new construction works will use Modern Methods of Construction designed to reduce waste and improve efficiency. Responsible construction waste management.	Industry standard practices to be managed by contractor. RMBC will monitor works and ensure that the main contractor is complying with all relevant regulations.

		construction materials will increase emissions.		Locally sourced materials and resources where possible.	
Carbon capture (e.g. through trees)?	Unknown	Development is taking place in an area with surrounding trees and shrubbery: the scheme includes light vegetation management (tree crown lifting and shrub clearance) around the underpass approaches and removal of invasive vegetation from structures.	Carbon stored as biomass will be emitted as carbon dioxide on account of the removal of overgrown shrubbery in the scheme area; carbon emissions from composted green waste are 'biogenic' and are generally considered 'net zero' for the purpose of carbon accounting. Thinning undergrowth and raising trees' crown heights can increase other plants' productivity, growth rate and uptake of carbon dioxide, hence the indicated 'unknown' impact.	Potential for introduction of wildflower planting to surrounding carriageways. Tree pruning will have regard to the health and condition of the trees, which promotes their longevity as carbon stores.	Captured through qualitative assessment of project completion as per landscape design plans.
Identify any emissions impacts associated with this decision which have not been covered by the above fields: n/a at this stage.					

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 proposed improvements to the underpass will positively affect the Borough's capacity to adapt to climate change by enhancing accessibility and improving perceptions of safety along a key pedestrian route. Although the scheme involves limited vegetation management and improvements to drainage, the most significant impact is from providing a well-maintained, reliable outdoor walking route, which supports climate adaptation by ensuring that people can continue to travel safely during periods of heat, heavy rainfall, or other adverse weather. These

improvements may also offer intangible but meaningful benefits for community cohesion, which can strengthen local resilience in the event of climate-related shocks such as flooding or extreme heatwaves, both of which are expected to become more common due to climate change.

Provide a summary of all impacts and mitigation/monitoring measures: The limited vegetation works, including minor planting enhancements where feasible, will provide a small contribution to carbon reduction. Transport-related emissions will temporarily increase during construction but are not expected to rise in the long term. Improvements to wayfinding and the overall pedestrian environment will encourage active travel by supporting movement on foot and by public transport, helping to minimise transport-related emissions once the scheme is complete. In the long term, the active travel route through the roundabout will be integrated with a wider network of active travel infrastructure: promoting sustainable travel for commuting, leisure, shopping, socio-cultural and other purposes.

Supporting information:	
Climate Impact Assessment Author	Thomas Butler Project Support Officer RiDO Regeneration and Environment
Please outline any research, data or information used to complete this Climate Impact Assessment.	Project scope and advice of the Climate Change team.
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 636 Arthur King Principal Climate Change Officer