## Climate Impact Assessment, Appendix 3, Thrybergh Country Park – Full Business Case and Tender Evaluation Report

|  |          | If an impact or potential impacts are identified:   |   |   |  |
|--|----------|---|---|---|--|
| Will the decision/proposal Impairment  | Impact   | 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 | Refurbishment of the Thrybergh Country Park café building will improve its energy efficiency and hence decrease emissions from electricity use and heating. | Following the completion of the works, the operation of the building is anticipated to improve the energy efficiency of the building, however, the overall effect on emissions from nondomestic buildings across the borough is too complex to estimate. Main emission benefits have been accounted for in this document. | An upgrade to the conservatory, including the installation of a new roof, is intended to improve its energy efficiency. Some upgrades to the kitchen equipment e.g., replacing the existing bench fryer with a new air-fryer, are intended to achieve higher operational energy efficiency. Design and construction that mitigates emissions will be prioritised. Investment in low carbon, energy-efficient design and delivery is a priority in the upgrades to RMBC Country Parks. The use of locally sourced materials will be encouraged to reduce carbon footprint. | The café building is to be operated by the Council, hence greenhouse gas emissions from energy use will be monitored through the Council's building energy management software and reported as emissions within scope of its 'Net Zero by 2030' climate change target.  If, at any point in the future, the café is instead let as a concession to a tenant responsible for paying its own energy bills, then the Council will need to request energy use data (i.e., utility bills, smart meter data), to monitor scope 3 greenhouse gas emissions arising from the concession. |

| Emissions from transport?                              | Increase | There will be an increase in vehicle movements on site during the construction phase. | Enhanced facilities are intended to attract visitors, which may increase car journeys within Rotherham. If visits to Thrybergh Country Park displace longer journeys to culture, leisure and tourism sites outside the Borough of Rotherham, then total emissions from transport might decrease. However, only emissions from travel within the Borough are within scope of the Climate Impact Assessment.  It should also be noted that an anticipated increase in journeys to | Car parking provision will likely be reduced during the construction phase and other forms of transport will be encouraged.  Sustainable travel to leisure sites and green spaces is encouraged and is being considered within the remit of the Council's transport infrastructure strategy. | The main contractor is committed to minimising emissions and monitors compliance as part of their internal reporting and monitoring processes.  The country park's management monitors the car park occupancy as part of monitoring the visitor numbers hence some estimates as to the transport emissions can be generated from these data as necessary. |
|--|----------|---|---|--|---|
|  |          |   | increase in journeys to the country park, possibly undertaken by car, is intended to be further offset though the Council's sustainable travel strategy, enabling and promoting an uptake of the sustainable travel options by the population of the Borough.   |  |   |
| Emissions from waste, or the quantity of waste itself? | Increase | The construction process will generate waste.   | An improved hospitality offer will aim to increase visitor numbers and hence the amount of waste generated on site.   | Rescoping the scheme from construction of a new café to refurbishment of the existing building avoids a  | The café building is to be operated by the Council, hence procurement rules will require the site's contract for waste  |

significant quantity of waste that otherwise would have been generated by demolition.

The main contractor is committed to minimising waste in order to mitigate negative impact of construction activities on local ecologies.

Waste segregation and diversion from landfill during redevelopment, applying the waste hierarchy in operation.

Food waste will be minimised through careful menu design and stock management processes.

Commercial premises are required to separate their food waste, dry mixed recycling and residual waste for separate collection and treatment. collection to be awarded to the Council's commercial waste service, Rotherham Business Waste. As an internal customer of Rotherham Business Waste, the café's emissions from waste could be estimated from weighbridge analysis and the combined capacity of its bins.

If, at any point in the future, the café is instead let as a concession to a tenant responsible for procuring its own waste disposal contract, then the Council will need to specify in its lease agreement that the tenant should provide for separate food, dry mixed recycling and residual waste collections as a minimum and should evidence this requirement with regular (at least annual) estimates of the amount of waste collected from the site.

| Emissions from housing and domestic buildings?  | None     | N/A  | N/A  | N/A   | The main contractor monitors compliance with their waste reduction objectives as part of their internal reporting and monitoring processes.  N/A |
|---|----------|--|--|---|--|
| 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. The embodied energy required to produce construction materials will increase emissions. | The overall effect on emissions from construction across the borough is difficult to estimate. However, construction projects impact wider areas primarily through increased greenhouse gas emissions, air pollution, water pollution stemming from material production, site operations and transportation. Due to the nature of the scheme the borough-wide impact is going to be limited in time (up to 4 months) and in severity as it is primarily a refurbishment project. | Rescoping the scheme from construction of a new café to refurbishment of the existing building avoids a significant quantity of embodied carbon emissions from construction materials.  Refurbishment works will use Modern Methods of Construction to reduce waste and improve efficiency.  Responsible construction waste management.  Locally sourced materials and resources where possible.  The preferred bidder is committed to reducing their carbon omissions and climate impact | RMBC will monitor works and ensure that the main contractor is complying with all relevant regulations.  |

|                                      |         |  | through their operational efficiency and in accordance with their ISO14001 accredited environmental management system. |   |
|--------------------------------------|---------|--|--|---|
| Carbon capture (e.g. through trees)? | Unknown | Emissions will be partly offset through tree planting and extensive soft landscaping. No existing trees are removed as part of the scheme. | A number of trees have been incorporated in the landscaping design to contribute to the carbon capture.                | Impact will be 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:

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

Improved country park's offer intended to boost the visitor footfall and enhance people's access to green spaces. Therefore, it helps to indirectly mitigate some of the risk from extreme heatwaves, as a result of climate change.

The new layout of the café building allows for natural crossflow ventilation to the main areas by opening up internal walls, which makes the building better adapted for higher temperatures through improved ventilation.

There is a small risk that Rotherham's climate could become habitable for breeding populations of disease vectors such as the Asian tiger mosquito in the next two decades. In view of the proximity of Thrybergh Reservoir, the Service need to be aware of this risk, which might need to be mitigated if it materialises in the long-term.

Improved drainage on site will contribute to mitigation of the climate change impacts associated with wetter winters and more intense rainfall.

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

The planting/ soft landscaping element of the scheme will support carbon reduction. Transport emissions are expected to increase due to increased footfall following the redevelopment works, wayfinding is being improved to encourage active travel through public transport and on foot. Improvements, which will form part of the wider masterplan for the site, will see enhancements to the current pedestrian access to the site is this is currently seen as a barrier to users. More energy efficient design of the upgraded building.

| Supporting information:   |   |
|---|---|
| Climate Impact Assessment Author  | Tanya Shvab Regeneration & Development Project Manager RiDO Regeneration and Environment  |
| Please outline any research, data or information used to complete this Climate Impact Assessment.   | Earlier carbon impact assessments appended to the Cabinet reports listed below have been reviewed and taken into consideration:  • Cabinet report 16 May 2022                                   |
|   | <ul> <li>Cabinet report 7 August 2023</li> <li>Cabinet report 29 July 2024</li> </ul>   |
|   | The current assessment has been informed by the review of the detail of the scheme, including, but not limited to the designs submitted to obtain a planning approval and the tender documents. |
|   | A consultation with the Climate team prior to the submission of the current CIA has been undertaken and their recommendations reflected in the assessment.                                      |
| 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 453   |
|   | Arthur King Principal Climate Change Officer  |