

Appendix 3 – Expansion of Waverley Junior Academy

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?	Negative impact	<p>Waverley is an existing school building and is being expanded by way of building new classroom space. This will be 7 new classrooms, creating 210 school places. There are no communal areas (e.g., canteen, staff room) involved in the build.</p> <p>In 2021, the RIBA (Royal Institute of British Architects) published a second version of its 2030 Climate Challenge target metrics for new build schools. In a compliance approach i.e., for buildings designed to comply with then regulations, new schools were estimated to have an operational energy demand of 130 kWh/m²/year. For seven new classrooms of standard size (55 m²), this would indicate a <i>ca</i> 18% increase in the school's greenhouse gas emissions, compared with the financial year 2022/23.</p>	Emissions overall will remain at similar levels as the pupils will remain in Rotherham.	Additional classrooms will be designed to meet minimum Energy Use Intensity (EUI) targets for new buildings, as per the <i>School Output Specification, Technical Annex 2H: Energy</i> (Department for Education, November 2022) i.e., 52 kWh/m ² /year. Compared with an EUI of 130 kWh/m ² /year, this would avoid operational energy demand of <i>ca</i> 30,000 kWh/year, equivalent to one tenth of the school's annual greenhouse gas emissions (2022/23).	Waverley Junior Academy is a member of the Council's energy procurement portfolio; however, schools are not within scope of Net Zero 2030 (NZ30) greenhouse gas emissions accounting.

Emissions from transport?	Positive impact	Children will be attending school more locally and as such it is not envisaged that there will be any home to school transport requirement for pupils attending the school.	More children will be able to attend a school within the local community so it is envisaged there will be less journeys made by car to take children to schools in neighbouring communities.	Mitigating measures are considered via individual pupils' travel to school plans and monitored by the Transport team.	Ongoing monitoring of allocation of school placements on local offer day and distance that children will be required to travel to access.
Emissions from waste, or the quantity of waste itself?	Unknown	An increase in the amount of waste produced at the Waverley Junior Academy site is to be expected.	Waste levels across the borough will remain at similar levels to present.	Schools have a waste management process	Impact will be monitored by the school governing body and LA.
Emissions from housing and domestic buildings?	N/A	N/A	N/A	N/A	N/A
Emissions from construction and/or development?	Negative impact	In its 2030 Climate Challenge target metrics (v2, 2021), the RIBA estimates 'business as usual' embodied carbon from the construction of new school buildings at 1,000 kgCO ₂ e (carbon dioxide equivalent) per square metre. For seven new classrooms of 55 m ² , this indicates embodied carbon emissions of 55 tCO ₂ e, more than the school's entire annual emissions from electricity use and gas heating, in 2022/23.	There will be some short-term impact during development phase. This will be overseen by Asset Management Service.	Work will be planned and overseen by Asset Management Service.	Monitoring will be coordinated by Asset Management Service and the Academy Trust. A RICS Whole Life Carbon Assessment (WLCA) will be completed for the proposed seven new classrooms at the design stage and will be shared with the Climate Change Team.
Carbon capture (e.g. through trees)?	N/A	N/A	N/A	N/A	N/A
Identify any emission impacts associated with this decision that have not been covered by the above fields:					
None					

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

The proposed construction of seven new classrooms will have a local carbon impact at the Waverley Junior Academy site, from operational energy use in the new buildings and embodied carbon emissions from their construction. However, this may not be reflected in greenhouse gas emissions across the Borough of Rotherham, since no net change is expected in the number of school places. Ensuring the proposed new classrooms are designed to the Energy Use Intensity targets specified above will significantly mitigate the carbon impact from their operational energy use, while a RICS Whole Life Carbon Assessment can estimate embodied carbon emissions from their construction and inform future works.

Supporting information:

Completed by: (Name, title, and service area/directorate).	Sarah Whitby Head of Service Access to Education
Please outline any research, data, or information used to complete this [form].	References: <ul style="list-style-type: none">• RIBA (2021). <i>RIBA 2030 Climate Challenge: Version 2</i>: <https://riba-prd-assets.azureedge.net/-/media/Files/Climate-action/RIBA-2030-Climate-Challenge.pdf?rev=897af1b2ca864a269c8a48c4522746b7>• Department for Education (2014). <i>Area guidelines for mainstream schools: Building Bulletin 103</i>: <Area guidelines for mainstream schools (publishing.service.gov.uk)>• Department for Education (2022). <i>School Output Specification: Technical Annex 2H: Energy</i>: <GDB Annex 2H-Energy-A-C13 (publishing.service.gov.uk)>
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.	As referenced above, plus conversion factors for greenhouse gas reporting by UK organisations (data series), available from: Government conversion factors for company reporting of greenhouse gas emissions - GOV.UK (www.gov.uk)
Tracking [to be completed by Policy Support / Climate Champions]	Tracking reference: CIA 176 Arthur King Principal Climate Change Officer