



TECHNICAL NOTE ADDENDUM

DATE:	15 December 2025	CONFIDENTIALITY:	Internal
SUBJECT:	Review of design amendments to Hotspur Press to assess impact on local air quality		
PROJECT:	Hotspur Press	AUTHOR:	Harry Warman
CHECKED:	Stephen Himson	APPROVED:	Katie Armstrong

INTRODUCTION

An air quality assessment¹ (hereafter referred to as the ‘2024 Air Quality Assessment’) was previously prepared by Tetrattech on behalf of Manner House Limited (Manner) to assess the potential air quality impacts of the proposed partial demolition of Hotspur Press in Manchester to enable the construction of a new purpose-built student accommodation building (the ‘Proposed Development’). The planning application for this work, which includes the 2024 Air Quality Assessment, can be found on the Manchester City Council’s planning portal². However, since the original planning application, Manner has implemented changes to the design of the scheme and to the demolition work required for the project, which could lead to potential changes to the impact on local air quality.

Manner have contracted WSP to review the proposed changes and assess whether the design modifications will affect the magnitude of impact to local air quality. The updated development description has been revised from a partial demolition of the pre-existing structure to full demolition. Due to the increased scale of demolition, certain construction elements of the project have been altered to accommodate this change, such as a reducing the thickness of the perimeter walls, which has resulted in a slight increase in the Gross Internal Area (GIA).

The new development description is stated as follows: ‘*Demolition of the former Hotspur Press Complex (Medlock Mill) and redevelopment of the site to provide Purpose Built Student Accommodation (Sui Generis Use Class) above ground floor commercial or community uses (Use Classes F(e), F2(a)(b) and E(b)), within a part 4/5-storey and part 35-storey (plus ground floor and roof parapet level), associated ancillary internal and external amenity space, public realm (including a new public square), hard and soft landscaping and associated highway works.*’

The aims of this technical note are, as follows:

- Summarise the proposed design changes that could impact local air quality;
- Review any policy or legislation changes that may have occurred since the initial air quality assessment and assess their relevance to the proposed changes;
- Confirm the baseline air quality data is still applicable to ensure initial assessment is robust and conservative;
- Provide a qualitative assessment of the revised design against the outcomes of the initial construction dust assessment;

¹ Tetrattech (2024) Hotspur Press, Manchester, M1 5QR Air Quality Assessment

² Manchester City Council (2024) Manchester City Council’s planning portal, application reference: 138805/FO/2023 [online] available at: <https://pa.manchester.gov.uk/online-applications/applicationDetails.do?keyVal=S5K1HCBCH3Y00&activeTab=summary> accessed: November 2025

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- Produce a qualitative assessment of the revised design on the predicted operational traffic flows and subsequent impacts on the local air quality; and
- Identify any additional mitigation measures that may be required for the operational and construction phase of the project.

REVIEW OF ALTERATIONS

It is understood that there are four proposed changes that may have an impact on local air quality. The proposed changes are as follows:

- Full demolition of the existing structure will take place instead of a partial demolition;
- Construction of a new podium structure to support the building, instead of using the existing podium;
- Reduction in wall thickness, resulting in an increase in the GIA; and
- A reduction in the total number of cycle parking spaces to 6% of the total parking provisions.

Other changes are proposed in the design; however, most of these are architectural adjustments to accommodate the full demolition and the decision to not use aspects of the existing site. It is assumed that these changes will result in no changes to the predicted air quality effects.

It is also understood that key aspects of the design, such as the number of dwellings, development dimensions and site boundary are understood to remain unchanged. Therefore, it is assumed that no changes are required to the assessment of operational traffic emissions in the 2024 Air Quality Assessment.

UPDATES TO 2024 AIR QUALITY ASSESSMENT

The 2024 Air Quality Assessment evaluated road traffic emissions as well as construction and demolition dust impacts. The assessment was required to support the planning application relevant to the partial demolition and construction of the Purpose-Built Student Accommodation².

Legislation and Policy Review

WSP has reviewed the legislation and policies referenced in the 2024 Air Quality Assessment to confirm that they remain valid. There is only one policy document that has been updated since the 2024 Air Quality Assessment was undertaken, which is the National Planning Policy Framework (NPPF), dated December 2024³. However, it is noted that the amendments made to the NPPF have no material impact on the results of the 2024 Air Quality Assessment.

³ UK Government (2024) The National Planning Policy Framework [online] Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> Accessed: December 2025

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Baseline Air Quality

In the 2024 Air Quality Assessment, monitoring data from Manchester City Council 2019 was used to quantify the local baseline air quality. However, the Greater Manchester Authority has since published the 2024 Annual Status Report (ASR)⁴, which provides updated monitoring data from diffusion tubes and automatic monitors in the area. A record of the monitoring data for Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀) at the monitoring site presented in the 2024 Air Quality Assessment are presented in **Table 1** and **Table 2** below and compared to the relevant Air Quality Objectives (AQO).

Table 1 – NO₂ monitoring data within 2km of the development (µg/m³)

Site ID	Site Address	Site Type	X	Y	Annual Mean Concentrations µg/m ³					
					2019	2020	2021	2022	2023	2024
MAN1	Manchester Oxford Road	Kerbside (Automatic)	384239	397276	59.0	36	44	43	40.9	44.2
MA29ANO	Oxford Street	Roadside	384119	397503	55.4	39.0	44.8	49.8	49.6	51.3
MA77NO	Hewitt Street	Urban Background	383576	397489	43.7	26.9	30.8	33.1	31.6	28.4

Bold text represents exceeds in the Air Quality Objectives (AQO) of 40 µg/m³
All monitors are within an Air Quality Management Area

Table 2 – PM₁₀ monitoring data within 2km of the development (µg/m³)

Site ID	Site Address	Site Type	X	Y	Annual Mean Concentrations µg/m ³					
					2019	2020	2021	2022	2023	2024
MAN1	Manchester Oxford Road	Kerbside (Automatic)	384239	397276	26.0	18.0	18.0	18.0	17.5	20.5

Bold text represents exceeds in the Air Quality Objectives (AQO) of 40 µg/m³
All monitors are within an Air Quality Management Area

The concentrations of NO₂ recorded at MAN1 and MA29ANO in 2024 exceeded the annual mean AQO of 40µg/m³, however the concentrations of NO₂ are lower than the concentrations recorded in 2019. The PM₁₀ concentration recorded at MAN1 in 2024 is below the annual mean AQO of 40µg/m³. Additionally, the concentration recorded in 2024 is lower than that recorded in 2019. Therefore, it is judged that the baseline 2019 concentrations of NO₂ and PM₁₀ utilised in the 2024 Air Quality Assessment are judged to be conservative.

⁴ Greater Manchester Authority (2024) Greater Manchester Air Quality Annual Status Report [online] Available at: https://downloads.ctfassets.net/tlpgbvy1k6h2/1DjJeKrZKA1elyT5pVcAl/8494037e574f88380d1b25149b99ff6b/Greater_Manchester_Air_Quality_Annual_Status_Report_2024.pdf Accessed: December 2025

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In addition to the above, Defra provides mapped background pollutant concentrations for the UK on a 1km x 1km grid. The Defra mapped concentrations⁵ of background pollutants included in the 2024 Air Quality Assessment are compared against the latest Defra background concentrations for 2024 in **Table 3**.

Table 3 – Published Defra Mapped Background Air Quality Concentrations

Year	Annual Mean Concentrations $\mu\text{g}/\text{m}^3$			
	NO _x	NO ₂	PM ₁₀	PM _{2.5}
2019	39.95	26.07	13.47	8.69
2024	29.31	20.43	14.30	8.03

The mapped background concentrations of NO_x, NO₂ and PM_{2.5} have all shown a decrease between 2019 and 2024, demonstrating that the background concentrations of these pollutants used in the 2024 Air Quality Assessment are judged to be conservative. There is a slight increase of 0.83 $\mu\text{g}/\text{m}^3$ in the mapped concentration of PM₁₀ reported for 2024, compared to 2019. This may be due to an increase in tyre wear as cars become heavier and are undertaking longer journeys on average as well as increases in domestic fuel burning. However, as the increase is relatively small (approximately 2% of the AQO) and the background concentrations are well below the AQO of 40 $\mu\text{g}/\text{m}^3$ it is judged that utilising the 2024 background PM₁₀ concentrations would not materially impact the results of the 2024 Air Quality Assessment.

Overall, the current air quality concentrations that have been measured or mapped in the vicinity of the site remain similar to those reported in the 2024 Air Quality Assessment and are considered unlikely to materially impact the results of the 2024 Air Quality Assessment.

Assessment of Construction Phase

The 2024 Air Quality Assessment completed an assessment of the construction phase of the project using the Institute of Air Quality Management (IAQM) guidance on the Assessment of Dust from Demolition and Construction, dated February 2024⁶. This remains the current version of this guidance document. The 2024 Air Quality Assessment concluded that the construction phase of the project presented a '**medium risk**' with regards to dust emissions. Site-specific mitigation was advised, in accordance with the best practice measures proposed in the IAQM guidance.

The main change to the proposed construction phase is the shift from a partial demolition to a full demolition, which will increase the demolition volume. Manner have stated during consultation, that the

⁵ Defra Background Mapping data for local authorities. Available at: <https://uk-air.defra.gov.uk/data/iaqm-background-maps?year=2021>. Accessed December 2025.

⁶ IAQM (2024) Guidance on the Assessment of Dust from Demolition and Construction [online] Available at: <https://iaqm.co.uk/wp-content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf>. Accessed October 2025

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demolition volume is estimated to be 21,000m³. Based on the IAQM guidance⁷ screening criteria and the dust magnitude classification in the initial assessment, the demolition volume does not exceed 75,000 m³; Therefore, the dust emission magnitude for demolition is not expected to change and is predicted to be **‘medium’**, as previously assessed.

The revised design of the scheme is judged not to materially affect the footprint and construction volume of the building as the Gross External Area (GEA) and number of dwellings are understood to remain unchanged. Therefore, the dust emission magnitude during earthworks and construction is not expected to change and is predicted to be **‘small’** and **‘medium’** respectively, as previously assessed.

Based on the changes to the design of the scheme, which are relatively minor, it is assumed that there will be no significant effect on the daily number of HDVs arriving at and departing from the site during the construction phase. Therefore, the dust emission magnitude from trackout is not expected to change and is predicted to be **‘small’**, as previously assessed.

Overall, the amendments are expected to result in no change to the construction dust risk magnitudes during demolition, earthworks, construction and trackout and the dust risk on the nearby receptors will remain consistent with those identified in the 2024 Air Quality Assessment. In line with the IAQM guidance, the site-specific mitigation measures recommended in the initial air quality assessment will be sufficient to minimise dust impact on local receptors and no additional mitigation is anticipated to be required.

Assessment of Operations

The 2024 Air Quality Assessment included a quantitative assessment of operational emissions through detailed modelling of operational phase traffic movements. The maximum increase in NO₂ concentration at any of the existing receptors in the area was predicted to be 0.02µg/m³ at Flat 9, Cambridge Mill, 5 Cambridge Street (R14), which was considered to be a negligible impact.

For PM₁₀, the predicted maximum annual average exposure increase was <0.01µg/m³ at any of the nearby receptors and for PM_{2.5} it was a predicted increase of 0.01µg/m³, both of which were considered to be negligible impacts.

At any of the proposed residential receptors assessed, there was not predicted to be any exceedances of the AQOs for NO₂, PM₁₀ and PM_{2.5}.

Given the minimal changes in annual average concentrations for all three pollutants at the modelled receptors, the operational use of the building was predicted to have a negligible effect on the local air quality and no additional operational phase mitigation was proposed. WSP has not replicated any of the modelling completed by Tetrattech but has reviewed the locations of receptors included in the modelling and confirm they remain appropriate.

As a result of the proposed amendment to the design of the scheme outline in the **Introduction**, it is judged that there will be no material impact on the traffic flows associated with the operational phase of the development as the number of dwellings is understood to remain unchanged. Therefore, it is assumed that

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the impact on local air quality during the operational phase will not materially change and the impact magnitude will remain negligible, as concluded in the 2024 Air Quality Assessment. Furthermore, no further mitigation is anticipated to be required.

CONCLUSIONS

The changes in the revised design that may impact local air quality are full demolition of the existing structure instead of a partial demolition, construction of a new podium structure, a reduction in the wall thickness increasing the GIA, a reduction to the number of the cycle parking to 6% of the total number of parking spaces and small architectural changes to accommodate the full demolition.

Based on the proposed changes, it is estimated that there will be no change to the dust emission risk during the construction phase and no significant change to the impact magnitude of changes in NO₂, PM₁₀ and PM_{2.5} concentrations due to changes in traffic flows during the operational use of the building. Therefore, no additional mitigation measures are required for either the construction phase or the operational use of the proposed development beyond those outlined in the 2024 Air Quality Assessment.

It is judged that the results of the original Air Quality Assessment remain conservative and valid and no further assessment of impacts is required.