



## Accrue (Forum) 1 LLP

Date: 10<sup>th</sup> March 2020

### AIR QUALITY NOTE – GREAT STONE ROAD, OLD TRAFFORD

Resource and Environmental Consultants (REC) Limited (Ltd) was commissioned by Accrue (Forum) 1 LLP in October 2017 to undertake an Air Quality Assessment (AQ104548r2) in support of a proposed residential development. Following the submission of the original Air Quality Assessment, the scheme has been amended and a revised application is to be made.

The revised scheme comprises the redevelopment of the existing site to provide 333 residential dwellings and 98 car park spaces.

Critically, and as confirmed by the appointed transport consultants, the traffic analysis associated with the original assessment considered an indicative scheme of 433 units and 226 car park spaces, which is in excess of the revised application detailed above. Given the proposed decrease to the number of units and car park spaces, as well as the robust analysis of the previous assessment it is not considered that impacts associated with the revised application would surpass those previously considered.

Additionally, given the two-year interim period since the original air quality assessment, the majority of the data and toolkits utilised throughout the assessment procedure have been amended.

Amendments to the predicted background pollutant concentrations produced by DEFRA, as well as monitored pollutant concentrations undertaken by the Trafford Metropolitan Borough Council (TMBC) may have implications on the original assessment. The following sections provide a summary of these changes and the effects these may have on the conclusions of the original assessment. Table 1 provides a comparison of predicted DEFRA background pollutant concentrations utilised within the previous assessment (2016), against those predicted for 2018.

**Table 1 Comparison of Background Pollutant Concentrations**

Pollutant	Predicted Background Concentration ( $\mu\text{g}/\text{m}^3$ )		
	2016 (2017 Basemaps)	2018 (2017 Basemaps)	Change
NO <sub>x</sub>	39.03	35.64	3.39
NO <sub>2</sub>	25.51	23.01	2.50
PM <sub>10</sub>	13.44	11.96	1.48

DEFRA 1km x 1km Grid Square – 380500, 395500

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As indicated in Table 1, predicted background concentrations have reduced considerably since 2016. Subsequently, it is considered that the associated development impacts would have reduced accordingly when compared to the previously assessed scheme. A comparison of 2016 and 2018 monitoring results are provided in Table 2.

**Table 2 Comparison of Monitored Pollutant Concentrations**

Site Name		Type	NGR (m)		Annual Mean NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )		
			X	Y	2016	2018	Change
<b>Automatic Analysers</b>							
TRF2	Trafford A56	Urban Traffic	379413	394014	33.0	29.0	-4.0
<b>Passive Diffusion Tubes</b>							
Trafford 20	A56 Chester Road AQMA	Urban Traffic	379418	394009	30.0	30.2	+0.2
Trafford 20a	A56 Chester Road AQMA	Urban Traffic	379418	394009	32.0	29.8	-2.2
<b>Net Change</b>							<b>-6.0</b>

Similar to background concentrations, the monitored data presented in Table 2 indicates that pollutant concentrations have undergone a net decrease within the study area since the completion of the original assessment, with a negligible increase at one monitoring location (20). The reductions to both background concentrations predicted by DEFRA, and monitored NO<sub>2</sub> concentration undertaken TMBC, would consequently lead to a further reduction of associated impacts. Subsequently, the conclusions provided within the original assessment (AQ104548r2), which were deemed **not significant**, remain valid.

Finally, the use of 2020 traffic data and 2016 emission factors utilised with the original assessment is considered to provide an absolute worst-case scenario, which does not consider future improvement to emission factors due to the current shift to low emission vehicles, supported by national government targets. This approach would lead to overestimations of actual pollutant concentrations and subsequently associated impacts. Therefore, a sufficient level of confidence can be placed within the predicted emission levels and associated assessment conclusion.

The overall significance of operational phase road traffic emission impacts on annual mean NO<sub>2</sub> concentrations, decreased unit allocations and car park spaces would again be determined **not significant** with a high level of confidence.

Based on the above, Air Quality impacts associated with the proposed scheme will not exceed those previously predicted, and should therefore not form a constraint to planning permission for the proposed development.

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**Note prepared by Sian Grimsley, Air Quality Technician at REC Ltd, 10<sup>th</sup> March 2020**  
**Reviewed by Josh Davies, Senior Air Quality Consultant at REC Ltd.**