

By E-mail

Mr. Ganga Bhusal
Director
Goldstar Accountants
63 London Street
Reading, RG1 4PS

Our Ref: 2438w-SEC-00001-02

26th November 2021

Dear Ganga

63 London Street, Reading – Air Quality Statement

Background

Southdowns Environmental Consultants has been appointed by Goldstar Accountants to prepare an Air Quality Statement to support the planning application for the proposed development at 63 London Street (211731/FUL).

As part of the planning process, an air quality statement was requested by the Case Officer at Reading Borough Council (RBC) on the 27th of October 2021. This request states the following:

“3. Air Quality Statement (Section 2) – This is required where new sensitive uses (such as residential) are to be constructed in an Air Quality Management Area (AQMA). The site is within an AQMA. The statement should show how detrimental effects on that use will be mitigated. Mitigation measures should be detailed in any planning application.”

The Proposed Development

The current building at 63 London Street comprises four floors with the first three currently used as office space, ground to 2nd floor, and the third floor a currently inaccessible loft space.

The proposed development includes the conversion of the 3rd floor of the site from unused loft space to a residential flat. Appendix A presents the drawing of the proposed development.

Local Policy

Relevant air quality policy set out in Reading Borough Council (RBC) current local plan policy EN15 [1] states that:

“Where a development would introduce sensitive uses (such as residential, schools and nurseries, hospitals, care facilities) into, or intensify such uses within, an Air Quality Management Area, detrimental effects on that use will be mitigated. Mitigation measures should be detailed in any planning application.”

Whilst policy CR6 relating to central Reading in which the proposed development is located states;

“Proposals for new residential development within the central area will be required to demonstrate how the issue of potential noise disturbance from neighbouring land uses and other sources, and air quality implications of residential development, have been considered and if necessary, mitigated.”



Baseline Conditions

The proposed development is located within Reading Air Quality Management Area (AQMA). This AQMA has been declared for exceedances of the air quality objective for nitrogen dioxide (NO₂) (annual mean concentrations: 40 µg/m³). Therefore, NO₂ is the key pollutant used for this assessment.

RBC operates an air quality network of three automatic stations and 60 diffusion tubes [2]. The nearest NO₂ monitoring stations to the proposed development site are summarised in Table 1.1. These air quality monitoring stations are within 300m of the proposed development site.

Site ID	X, Y	Distance to Proposed Site (metres)	Type	NO ₂ Annual Mean Concentration (µg/m ³)					
				2015	2016	2017	2018	2019	AQO
44 Crown Street	471717, 172856	244	Roadside	36	37	35	34	29	40
King Oak Flats	472015, 173223	245	Roadside	33	33	31	32	28	40
Red Cow	471685, 172853	262	Roadside	38	38	35	38	31	40
Trinity Hall, Sidmouth Street	472071, 173157	265	Roadside	<u>100</u>	–	–	37	34	40
Wycliffe Church	472071, 173157	265	Roadside	–	49	40	37	39	40

TABLE 1.1: DIFFUSION TUBE MONITORING ANNUAL MEAN NO₂ CONCENTRATIONS

Notes: Exceedances of the annual mean NO₂ AQO are highlighted in **bold**.

Exceedances of the 60 µg/m³ NO₂ concentration are highlighted in **bold** and underlined.

RBC 2020 Annual Status Report [2].

The nearest monitoring locations, 44 Crown Street, King Oak Flats and Red Cow, to the proposed development site have remained below the annual mean AQO for NO₂ between 2015 and 2019. Trinity Hall and Wycliffe Church sites both met objective in 2018 and 2019. However, these two stations exceeded the AQO in 2015, 2016 and 2017.

Defra LAQM-TG16 [3] guidance states that when the annual mean NO₂ concentration is below 60 µg/m³, the short term (one-hour) AQO for NO₂ (hourly mean 200 µg/m³ not to be exceeded more than 18 times in a calendar year) is unlikely to be exceeded. Table 1.1 shows that annual mean NO₂ concentrations have been below 60 µg/m³ at all monitoring locations close to the proposed development site for all reported years, except for the monitoring location at Trinity Hall in 2015.

NO₂ monitoring stations presented in Table 1.1 are located on busy A-roads junctions, A329 Queens Road, A327 Southampton Street, A4 Crown Street next to traffic lights. London Street, opposite the proposed development site, is a single lane one-way street including a two-way bus lanes and in the middle of two traffic lights.

The Department for Transport [4] has reported the annual average daily traffic flows have remained relatively constant at London Street and all surrounding roads between 2015 and 2019.



Site Name	Average Annual Daily Traffic Flows (AADT)				
	2015	2016	2017	2018	2019
A327, London Street	6,463	6,553	6,514	6,419	6,477
A329, Queens Road	20,279	20,773	19,676	19,529	19,688
A327, Southampton Street	16,765	17,148	17,140	17,004	17,151
A4, Crown Street	10,560	10,817	10,821	10,745	10,843

TABLE 1.2: ANNUAL AVERAGE DAILY TRAFFIC FLOWS

Source: Department for Transport (DfT) [4].

Reduction of annual mean NO₂ concentrations have been reported between 2015 and 2019 as a results of cleaner vehicle technologies and traffic management measures promoted by RBC to tackle air pollution within the AQMA. However, RBC has reported that there are still hotspots that will require further work (2).

The proposed development will introduce one new residential receptor at the loft, 3rd floor, of 63 London Street. The height of the receptor and the distance from the front facade of the property to the kerb of London Street is likely to reduce annual mean NO₂ concentrations when compared to those roadside monitoring locations reported by RBC, Table 1.1.

Based on the annual mean NO₂ concentrations, presented in Table 1.1, the annual average traffic flows estimates, Table 1.2, the distance to the kerbside and height of the new residential flat, the annual mean NO₂ concentrations are likely to be below the AQO.

Mitigation

Based on information presented in this letter, the proposed loft conversion will incorporate a ventilation strategy for the new residential property. The air intakes are proposed to be located at the rear façade of the property on the 3rd floor, and away from London Street (See Appendix A). Examples of the ventilation strategy include whole-house ventilation systems, and air inlets at the rear façade.

With the incorporation of a suitable ventilation strategy at the loft area of 63 London Street, residential users are unlikely to be exposed to poor air quality inside this property.

We hope the air quality statement presented in this letter is sufficient to support the planning application for the proposed loft conversion at 63 London Street. If you have any queries, please do not hesitate to contact us.

Yours sincerely,
on behalf of Southdowns Environmental Consultants Ltd

Jorge Gomez Perales
Principal Air Quality Consultant



REFERENCES

1. Reading Borough Council. 2019. Reading Borough Local Plan. Available at: https://images.reading.gov.uk/2019/12/Local_Plan_Adopted_November_2019.pdf
Accessed: 22/11/2021
2. Reading Borough Council. 2020. 2020 Air Quality Annual Status Report (ASR). Available at <https://www.reading.gov.uk/environment/air-quality-pollution-and-energy/2020-air-quality-annual-status-report-asr/>. Accessed 22/11/2021
3. Department for Environment, Food and Rural Affairs (Defra). 2018. Local Air Quality Management Technical Guidance (TG16). Available at: <https://laqm.defra.gov.uk/documents/LAQM-TG16-February-18-v1.pdf>. Accessed 22/11/2021
4. Department for Transport. Road Traffic Statistics. Available at: <http://www.dft.gov.uk/traffic-counts/>. Accessed: 19/11/2021

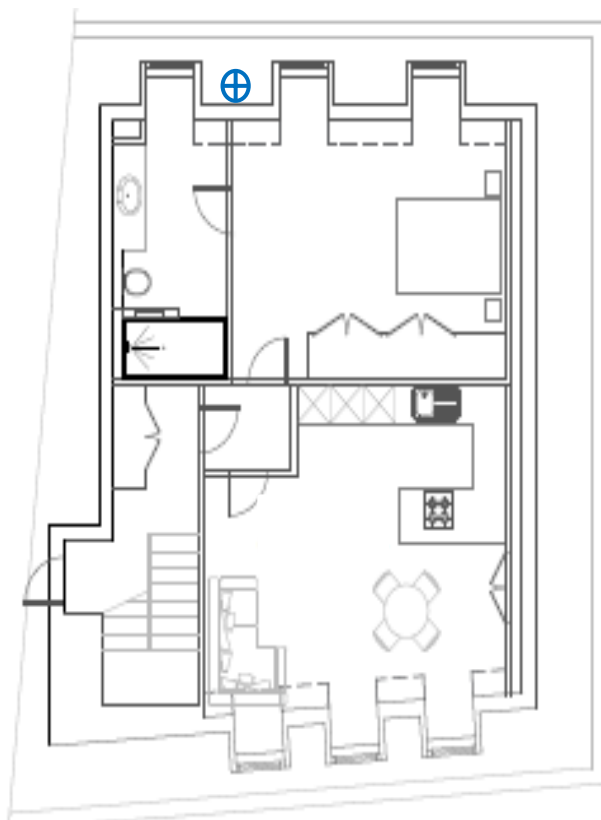


APPENDIX A: PROPOSED LOFT CONVERSION



Legend:

**Proposed Air Intake Area
(Rear Façade)**



Third Floor (1 Bedroom Flat, 55m²)

Source:
Createspace Design. Drawing No 1122. 29 September 2021

FIGURE A1: PROPOSED THIRD FLOOR PLANS