



# Harefield Academy

TVC0024-ESS-XX-XX-RP-ME-0005

Plant and Ventilation Extraction Statement



# Harefield Academy, Uxbridge

## Plant and Ventilation Extraction Statement

August 2023



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**Revision**

P01

**Date**

24/08/23

**Originator**

TE

**Approver**

MC

**Description**

Preliminary Issue

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# Introduction

The new Harefield Academy is a school for pupils with special educational needs, located in Uxbridge. The new building is on an existing school site; however, the site is located within a residential area within the Green Belt of Greater London. Therefore, minimising the impact of plant and ventilation is a key consideration in the design of the project.

The impact of three key areas should be considered in the design of the primary plant and ventilation. These areas are:

- Air Quality
- Noise
- Odour

## Air quality

In line with The London Plan Policy S11 improving air quality, the NOx emissions from plant needs to be considered. Within the new Harefield Academy, the primary plant for the heating system is air to water heat pumps, and cooling is supplied through refrigerant DX systems. Therefore, there are no direct NOx pollutants produced from the heating and cooling systems.

## Noise

The London Plan Policy D13 Agent of Change places the responsibility for mitigating impacts from existing noise and other nuisance-generating activities or uses on the proposed new development. Boroughs should ensure that Development Plans and planning decisions reflect the Agent of Change principle and take account of existing noise and other nuisance-generating uses in a sensitive manner when new development is proposed nearby.

In line with the guidance given in BS4142, the accumulative noise emissions from all plant will be designed to be below the background noise at one metre outside the nearest affected window in order to reduce the potential for complaints from local residents. The noise criteria for accumulative noise emissions from building services plant at one metre outside the nearest affected window will be advised by the Acoustic Consultant.

External ventilation plant will be located on the roof below the level of the parapet which assists in reducing the acoustic impact on the local area.



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# Odour

Along with noise, the Agent of Change policy details that the other nuisances to the local area should be taken into account for new developments and put the emphasis on the developer to ensure that in the design of the project the impact to the local area is minimised, rather than putting the emphasis on the local residents to make their annoyances known.

One factor that can be considered a nuisance is odour produced from commercial kitchens. Harefield Academy has a commercial kitchen for the production of school meals for the pupils and staff. The kitchen extract fan will be located, and discharge on the roof of the property. There is a considerable distance from the discharge of the kitchen extract to the adjacent residential area. If necessary, the kitchen ventilation system will be filtered, with odour control as appropriate.

