Variation of conditions 2 & 3 of 17/10966/FUL

37 HIGH STREET, WESTBURY, BA13 3BN

Acoustician and Ventilation Specialist Proposals

KSD Architecture

Proposal

Noise Report - Reference: 13645 Version 1

Section 11 - Recommendations

The results from the mechanical noise assessment show that the mechanical plant currently installed at Best Kebab will have a likely adverse impact on the nearest noise sensitive receptor when background levels in the surrounding area are reduced due to other establishments closing, and mechanical plant being turned off.

To be 5dB under the lowest LA90, 1hour background level as requested by the local authority, any mitigation measures must provide at least 13.5dB attenuation. In order to more accurately identify these mitigation measures, a suitable mechanical ventilation consultant should be contacted.

While the design of the extraction system itself is the responsibility of others; it is respectfully noted that attention should be paid to the following as a principle of good practice:

1. The fan assembly should be isolated from the ductwork by means of a flexible collar to reduce the likelihood of structural borne noise and vibration.
2. Consideration should also be paid to airborne noise from the supply system, where this is external to the building.
3. Attenuation may be required on both the supply side and delivery side of the fan assembly. This may be in the form of silencers at the fan or acoustic louvres at the exhaust point.
4. As the majority of the external noise is from the outlet on the roof of Best Kebab, any mitigation measures to the roof cowl itself should be considered.

Ventilation Specialist Consultant Ali&Co's Proposal

Proposal:

Following the engineer's site visit, we intend to implement all of the recommendations provided by the noise engineer:

11.1 - Our plan involves replacing the existing fan and and lowering to the ceiling floor and placing it on a Tico anti-vibration mat. Additionally, we will connect the duct to the fan using duradine/flexible connections.

11.2 - While the supply system already features attenuation, we propose adding a 45-degree bend to redirect airflow. 1 x 450

45degree bend with mesh

11.3 - Although the extract currently has an attenuation (1D), we propose removing it and replacing it with two silencers. One silencer will be fitted internally, and we will create space on the roof for an additional (1D) silencer. 2 x Flanged type 500 1D Silencer

11.4 - We will replace the existing cowl with a vertical discharge cowl to help reduce the breakout noise from the exhaust. 1 x 500 Jet Cowl

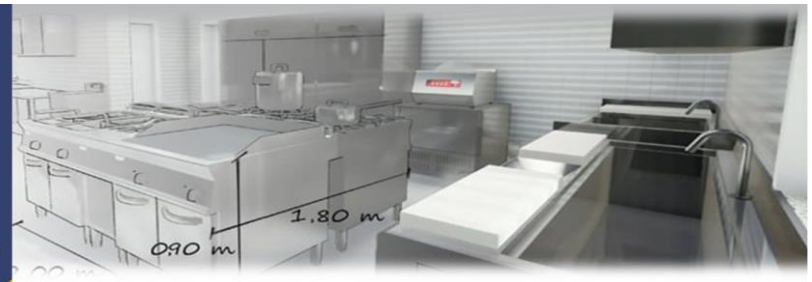
In addition to the above, we propose fitting filters to manage odour control.

Proposal

Sketch Drawing

ALI & Co

Commercial Kitchen Solutions



Proposal

Confirmations

From: Ali Topchelari <alirezaandco@gmail.com>
Sent: 28 March 2023 09:58
To: Kemal Gundogdu <kgundogdu@ksdarchitecture.com>
Subject: Re: Fw: KSD014 - 37 High Street - Acoustic Report 13645 Version 1

Morning Kemal

We've had this chart done from a recent estimation where reducing of 35db innit entirety is required.

If you see the reduction where 13db equates to the silencer length is 1m.

So if we put two 500mm long silencers this will give us the result needed to pass.

On top of flexible joints and a new jet cowl I believe it will have the desired effect.

Kind regards

Peter Overton

RE: Fw: KSD014 - 37 High Street - Acoustic Report 13645 Version 1

Jack Holmes <jack@sprattandhamer.co.uk>
Fri 31/03/2023 12:11
To:Kemal Gundogdu <kgundogdu@ksdarchitecture.com>
Cc:James Sayce <james@sprattandhamer.co.uk>

Hi Kemal,

Thanks for sending that over.

The proposals are certainly in line with what we would expect to see. The level reduction stated by the ventilation designer does comply with our initial report and therefore would result in a low noise impact.

Regards,
Jack Holmes
Acoustic Consultant
07718 703 211

KSD
Architecture