

From: Matthew Phillips
To: planning_admin
Date: 02/12/2010 15:55
Subject: Fwd: Re: P/2010/0856 - Air conditioning unit Rowlands Chemist Ruabon
Place: planning_admin
Attachments: RUABON PHARMACY AC Kogan Acoustic Report Nov 2010.pdf; Ruabon AC location REVISED elevations.pdf; Ruabon AC location REVISED section.pdf; P1160851.JPG; P1160854.JPG

Please add email and attachments as amended plans for above.

>>> Andrew Design Service <andrewdesignservice@yahoo.com> 02/12/2010 15:04 >>>
Matthew

Sound levels

Your EHO Nick Minshall has recommended a Condition "The rating level of any noise generated by air handling plant associated with this development shall not exceed the pre-existing background level by more than 5dB(A) at any time. The noise levels shall be determined in the rear garden of the nearest noise sensitive premises. Measurements and assessment shall be made in accordance with BS4142 :1997 Method of Rating Industrial Noise Affecting Mixed Residential and Industrial areas."

We are happy for this Condition to be applied to an Approval.

Please find attached report from Kogan Acoustic Consulting with the results of their measurements and assessment be made in accordance with BS4142

You will see that the sound testing was carried out between 06.45 - 09.20 hours - this was based on my discussions with Nick Minshall that the quietest background period during the operating hours of the unit (07.30- 18.00 hours) would be during the early morning time.

The Report says " Assessing the noise environment according to BS4142 indicates that installing the air-conditioning unit on the rear wall of the pharmacy and assuming all data provided by the manufacturer is correct, we conclude that complaint by local residents "are unlikely".

In our basic summary of the findings is -

The test results show an L90 average background noise of 46 - 48dB(A)

The manufacturer's data states sound level of 50dB(A) cooling & 51dB(A) heating.

Therefore the unit sound should not exceed the pre-existing background level by more than 5dB(A)

This is without any additional measures being applied. As noted in the Report there are options available to further reduce the unit sound levels. If after installation there should be any complaints raised then further on site tests could be conducted to confirm the predicted data and, if necessary, some or all of these options implemented.

Siting.

We have looked again at the siting of the unit. Whilst it could be located on the ramp wall at the lower level (as shown in the submission) the Acoustic Engineer has suggested mounting at low level on the building wall.

This has the advantage of being more distant from the boundary - 2.9m rather than 1.3m - which allows more diminution of sound over distance (accepted reduction of 6dB for each doubling of

distance - unit sound 51dB(A) at 1.0m less 6dB = 45 dB(A) at 2.0m

Visually it was thought the ramp wall location would be preferred to keep the units more out of view from the gardens. However you will see from the attached elevations that the existing fence will virtually obscure the unit if mounted on the building wall at low level.

This location has the advantage of allowing additional acoustic barrier / enclosure to be added around the unit if found necessary - whereas this would make access passed the unit very tight if mounted on the ramp wall. See attached photos.

We would ask that this revised siting is accepted as a minor amendment to the application.

Please could you give your feedback on the above and confirm your recommendation to the Planning Committee.

Do you require paper copies of the Report and Drawings for your file or will the attached pdf documents be sufficient?

Regards

Malcolm Andrew
ANDREW DESIGN SERVICE
Architectural, Surveying and Planning Consultants

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