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specialist consultants

Ref: AS9808.171215.L1.2

19 December 2017

Kate Matthews



Dear Kate

AS9808 FORTESS GROVE, 28-34 FORTESS ROAD, LONDON

Inacoustic Review of report dated 22nd November 2017

Further to our submission of our Noise Impact Assessment (AS9808.170725.NIA1.1) for the above site, we have received and reviewed the concerns which have been raised, some of which include a review of our report prepared by 'inacoustic'.

We have been asked by Camden Council to provide a response to the points raised in order to demonstrate how these concerns have been considered and that our assessment is robust in terms of achieving the local authority's requirements.

In order to set this information out clearly we have picked out the main points under the headings below.

- 1. Unattended monitoring location;
- 2. Meteorological conditions;
- 3. Table 3.2 clarifications;
- 4. Assessment of plant noise emissions;
- 5. Vibration isolation;
- 6. Façade breakout & Direct, structure-borne and re-radiated sound transfer.

1. Unattended Monitoring Location

As noted in our report, a secure and accessible unattended monitoring location was not available on the Railey Mews façade. For reference, the monitoring location was at first floor free-field location. *

The noise survey was designed to establish baseline noise levels for the purposes of subsequent plant noise assessment. It follows that the survey is concerned with 'how noisy it isn't'. We have used a 5-minute measurement sampling time. There would only have to be a cumulative 30-second period (10% of 300 seconds, L_{A90} being the level exceeded 90% of the time) without

Head Office:

39-41 Romsey Road Winchester Hampshire

Tel: 01962 872130 mail@clarkesaunders.com

London Office:

London SE1 6DP

Tel: 0203 479 7867

Exeter Office:

Sowton Business Po Capital Court Bittern Road Sowton Exeter EX2 7FW

Tel: 01392 342978 exeter@clarkesaunders.com

www.clarkesaunders.com

Registered in England Company No. 3758093

Registered Office: Avebury House, St Peter St. Wincheste

Clarke Saunders Associates is the rading name of Alon Saunders

Nirectors: Van Saunders Sc (Hons) CSci CPhys FIOA d Clarke Eng (Hons) MIOA

MEMBERS OF THE ASSOCIATION



vehicle movements on the A400 for the L_{A90} to be unaffected by traffic on this road.

Whilst we are satisfied with our assessment using the acoustically equivalent location at which unattended monitoring was undertaken, the applicant, in response to these objections, has instructed CSA to undertake additional attended monitoring in Railey Mews to measure night-time background noise levels.

A visit to site was made on Sunday 3^{rd} December between 1.30am and 4.00am at the location shown in the attached site plan AS9808/SP1.1. Between 1.30am and 3.00am, background noise levels were typically between $L_{A90,5min}$ 35-37dB. From around 3.00am onwards the L_{A90} noise level decreased which coincided with the quietest time during the unattended survey. The lowest measurement results are shown in Table 1.1.

Time	LA90,5min	LA10,5min LAFmax,5min		L _{Aeq,5min}	
03:30	34	38	52	38	
03:35	34	40	55	39	
03:40	31	38	51	36	
03:45	34	39	48	37	
03:50	34	39	71	44	
03:55	33	37	45	36	

Table 1.1 – Results of additional noise survey measurements (Railey Mews – 03/12/2017)

This exercise was helpful in demonstrating that lowest background noise levels at the Railey Mews receptors are commensurate with those measured at the unattended monitoring position.

2. Meteorological conditions

We are satisfied that the measurements undertaken to establish lowest background noise levels were during periods when meteorological conditions were suitable.

The meteorological data referred to as a concern is from London City Airport which is a wide-open space adjacent to the Thames Barrier. This is not entirely representative of the prevailing wind conditions at a sheltered monitoring location in north-west London some 12 miles away.

It is however helpful to consider this data when noting that at around 03:00 hours on Thursday 15th June, the time at which the lowest measured background noise level occurred during the unattended survey, the windspeed at London City Airport was practically nil.

3. Table 3.2 clarifications

It is noted that there are some unfortunate typographical errors in our labelling of this information. Table 3.2, with the corrected information, has been reproduced below.

Measured spectral noise levels for these periods are shown in Table 3.2 below.

Freq (Hz)	63	125	250	500	1k	2k	4k	8k
Daytime L ₉₀	53	46	39	37	35	29	24	16
Night time L ₉₀	43	37	33	29	26	20	13	12

Table 3.2- Minimum L₉₀ linear spectral levels

[dB ref. 20µPa]

4. Assessment of plant noise emissions

The concept of mounting external building services plant with the plant area covered by an acoustically transparent louvre is relatively commonplace. There will be reflections given the orientation of the space and these have been considered in our calculation of the predicted noise emissions. The suggestion that the plant area is a 'reverberant' space is incorrect.

We are satisfied that the predicted noise emissions to the most critical residential receptor are robust and show comfortable compliance with Camden Council's requirements.

5. Vibration isolation

In our experience, vibration isolation is not normally a planning stage consideration which focusses on feasibility rather than detailed design. We would normally expect a standard vibration isolation condition as part of the consent.

Clearly, where necessary, plant will be isolated from the structure in order to minimise noise impact on adjacent sensitive receptors.

6. Façade breakout & Direct, structure-borne and re-radiated sound transfer

It should be noted that there is no change of use proposed as part of this application. The property has consent for B1 planning use and this shall remain.

Workshop Rear of 38-52 Fortess Road Fortess Grove London NW5 2HB Replacement of existing roof with acoustic louvred roof, and installation of louvres to Railey Mews elevation; replacement of existing single access door with double doors, and installation of internal electricity substation with associated access

Potential operational noise breakout through the east elevation to Railey Mews and via any ground floor occupied areas where there may be a shared party wall is considered as part of this application since there is no change of use.

Whilst it would be uncommon, the Council may consider that the UKPN Substation Installation could require a separate post-planning assessment for which written approval of any necessary attenuation measures would typically be conditioned as part of the consent. With the exception of the isolation of the transformer being conditioned under the earlier vibration consideration, a formal noise impact assessment of this type of installation is seldom considered necessary, even in residential buildings, due to the low

levels of noise generated from this type of plant. UKPN installations of this type are, by definition, selected for their suitability in relation to neighbouring uses.

Operational noise associated with the B1 use is part of its consented use. Previously the site has been B2 industrial use, which generally has a greater potential for noise impact. Any subsequent assessment of noise impact from such existing operational noise sources would be unnecessary.

We trust the above is of assistance. Should you have any queries, please do not hesitate to contact the undersigned.

Yours sincerely for CLARKE SAUNDERS ASSOCIATES

Daniel Saunders						
email:						
cc:						

Indicative Site Plan 18 December 2017



Figure AS9808/SP1.1

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