

[REDACTED]

[REDACTED]

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk

From: Carol Reynolds <Carol.Reynolds@arun.gov.uk>

Sent: 21 July 2021 08:06

To: James Stokes [REDACTED]

Subject: FW: Boklok Littlehampton - Acoustic Comments to EHO response

Dear James/Torben,

Thank you for your email, upon which I make the following comments/observations, noted in 'black.' I also note your statement that recommendations of your report will need to be integrated within the overall (final) design of the new buildings.

Please note that I will be on annual leave for two weeks from 27th July 2021.

Kind regards

Carol

Carol Reynolds

Senior Environmental Health Officer
Environmental Health Department

T: 01903 737678

E: carol.reynolds@arun.gov.uk

Please note my normal working days are Tuesday to Friday

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk



Sign up to our newsletter [here](#)

Business Support during Coronavirus click [here](#)

From: James Stokes [REDACTED]
Sent: 14 July 2021 17:37
To: Carol Reynolds <Carol.Reynolds@arun.gov.uk>

[REDACTED]

Subject: RE: Boklok Littlehampton - Acoustic Comments to EHO response

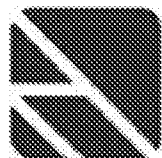
CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Carol

Thanks for getting back to us on this with your feedback.

To provide responses or further questions to your points, we have provided our comments below in red.

Kind regards



James Stokes

Senior Acoustic Consultant
RBA Acoustics Ltd.



Winner of the 2020 award for Building Acoustics

LONDON: 44 Borough Road, London, SE1 0AJ



MANCHESTER: Bloc, 17 Marble Street, Manchester, M2 3AW



Read our Privacy Policy [here](#)

From: Carol Reynolds <Carol.Reynolds@arun.gov.uk>
Sent: 29 June 2021 20:18
To: Anita Gardner <Anita.Gardner@arun.gov.uk>
Subject: FW: LU/116/21/PL (Rosemead Housing S of Littlehampton Academy)

Environmental Health:
Noise.

An assessment of the acoustic compliance has been submitted in a noise report provided by RBA Acoustics dated 8th March 2021, ref: 10383.RP01.APR.2 Rev2, upon which I make the following comments. Unfortunately, the report is not acceptable to this Department in its current format.

1. Fitzalan Link Road.

The resulting façade incident noise levels at the worst affected apartment units and houses facing the Fitzalan Link Road are stated to be :-

*Apartment units: 59 dB LAeq, 16hr i.e. during daytime hours and 54dB LAeq during the night with an LAfmax of 71dB.

* Houses at north-western corner: 57dB LAeq (daytime) and 52dB LAeq (night-time), with a LAfmax of 69dB.

a.The report considers double glazed units providing an Rw of 34dB with equivalent through frame, acoustically treated trickle ventilators and 'ventilation to Boklok standards,' but this is unspecified. Please provide suitable description of this standard.

Please clarify in which section/page of the report you are referring?

Thank you . Tables 8 & 9 and Page 2 (Open windows and mechanical ventilation)

b. I would support the acoustician's recommendations for a Level 2 AVO Assessment for all High Risk flats and for Low/Medium Risk houses (Table 10) so that the requirement for more robust ventilation and acoustic attenuation measures may be fully assessed. We await this report.

Level 2 AVO assessments are not typically undertaken at Planning stage, as this requires detailed information that is not necessarily available at Planning Stage. As such, we would suggest that this could be suitably covered through a Condition requiring that an AVO Level 2 assessment is undertaken.

Noted

c. Please ensure that the report states the number of times the LAfmax exceeds 60dB during 23:00 to 07:00 hours. I would refer you to the Planning Pro PG which states that the façade level of 60dB LAfmax, should be exceeded no more than 10 – 15 times during the night-time period. Please average such measurements over a period of not greater than 5 minutes.

This data does not exist as the proposed Fitzalan Link Road is not operational. Its therefore also not possible to measure the future maximum noise events.

Noted: In this case and since completion of the apartment block is likely to exceed that time during which the link road will be commissioned, then a condition can be put in place to ensure a suitable noise assessment and that this criteria is given due weight.

NB: Advice from EH Housing, 29th June 2021, may mean reconsideration of balcony doors originally envisaged for the apartment units.

2. Children's Day Nursery

It is considered that any assessment of a children's day nursery should not be over reliant on LAeq (BS8233) compliance, as the LAeq measure is likely to underestimate any adverse impact. Please provide a noise survey which properly describes the noise characteristics of the site and likelihood of potential detriment to the amenity of the new housing development from this activity, rather than a theoretical exercise.

Such a survey/report should provide an account of the hours of outdoor use and annotated time history graphs of the outdoor activity of the children to include dB and one minute LAfmax levels. Please describe the character of the noise. Only when the true impact is presented can the appropriateness of any mitigation be explored.

It is first worth noting the sound of children playing is generally considered to be a pleasant sound, and therefore significantly less likely to give rise to complaints or disturbance when compared to industrial/commercial sources at the same noise level. Furthermore, operating hours were

specified in the acoustic report as 08:30-17:30 meaning noise from children will not disturb residents during early morning or evening hours when future residents may be relaxing.

It is acknowledged that the initial noise survey was undertaken during the second Covid-19 lockdown and during a winter period so it was not possible to measure/observe outdoor nursery usage representative of the worst-case periods. For this reason, a highly onerous (worst-case) desktop assessment was provided in the acoustic report.

If an additional survey is required, can you please provide additional details on what would be deemed 'compliant' on the grounds of noise – For could you please confirm what noise levels are to be targetted for the L_{Aeq} and $L_{A_{fmax}}$ parameters; on what basis these criteria have been targetted and where these levels need to be achieved (i.e. garden/façade).

It is clear that the introduction of new housing at the immediate western boundary to a long-established children's day nursery, has the potential to impose restrictions on the business which would not have been necessary were houses not built here. BS8233 guidelines have limited application in this case as these apply to steady noise, such as from roads. However, an L_{Aeq} of 54dB two metres from the existing boundary fence, as stated in the acoustic report, is already approaching 55dB, i.e. that level at which serious annoyance of receptors can be anticipated.

I acknowledge difficulty in this case, in that there is no prescribed/agreed method of assessing the noise impact of such businesses, however Arun's experience is that nearby residents certainly do not perceive children's play in day care facilities as pleasant, leading to protracted investigation by this Department and new restrictions on these businesses through the Planning system. Rear gardens of only 11 metres to potentially impacted proposed houses, provide little distance attenuation, although the L_{Aeq} experienced inside rooms, through a partly opened window might falsely indicate that the level of noise is 'just' acceptable. Whilst the stated hours of operation of the nursery are useful, residents should expect to be provided with quiet enjoyment of their gardens/houses during day-time hours. The fact that the gardens are east facing and would be shadowed by the properties after noon, suggests a monitoring location of midway into the gardens where your further investigation may indicate required noise mitigation, such the provision of a suitable acoustic barrier to replace the existing fence which has obvious openings in its structure (i*).

You will be aware that I called onsite at Littlehampton Day Nursery, midday, Thursday, 8th and again at 15:00 hours Friday, 9th July 2021. Here the owner and I discussed the possibility of moving the children's play area east to an alternative site within the grounds. However, this would only serve to relocate any potential noise detriment/nuisance to existing houses east of the nursery.

My further onsite observations were that children's play cars emit an obvious rumbling noise, particularly to the tarmacked southern section of the playground and that the sound of these vehicles passing over a wooden bridge joining the north and south sections is particularly audible. I also listened, outside the nursery in the proposed new gardens at a distance of approximately 10 metres from and half-way along, the nursery fence. The above noise, from children's play vehicles, as well as the children's clearly audible speech and even clearer teachers' speech was apparent.

Noise from what appeared to be a television programme, was also clearly audible from an open window at Littlehampton Academy that afternoon (east of the eastern playground), although it was not possible to make out individual words. I note that the section of wooden fencing at the Academy southern boundary (referenced in the acoustic report, page 2 and section 4.2) is not continuous, with sections east and west of this consisting open metal mesh style fencing with little sound reduction capacity (ii*).

*The incomplete nature of these wooden fences, (i) and (ii) as above, means that they should be discounted from the acoustic model at the position of the school car park and eastern playground and class rooms; and possibly nursery playground too.

Please clarify whether it is also intended that the developer would provide a 1.8m solid wood or acoustic fence in these areas.

The fact that I found different sources of noise on consecutive days indicates that any noise measurement carried out in this case should be over a period of not less than 3, weekdays and consistent with the hours of operation. This will also be of benefit now that the nursery is fully operational to give better representation of the actual noise climate. Operation of the nursery, car parks should also be considered. I have already requested that such a report/assessment provides an account of the hours of outdoor use and annotated time history graphs of the outdoor activity of the children.

The *Agent of Change* principle allows a developer to put in place suitable arrangements with an existing business/s to remediate the possibly detrimental effect of imposing a new sensitive receptor/s as in this case. You may consider a new acoustic barrier along the western length of the nursery playground and/or an alternative lower noise surface to replace the not overly large tarmacked play-ground surface and bridge useful in this case.

There being no standard method of assessing the noise impact of children's nurseries, then it is essentially for you to propose a mutually acceptable assessment method to predict the annoyance effect of characteristic noise from this business. Playground shouting tends to be loud, unpredictable and intermittent, occurring in short bursts lasting only a few seconds but recurring repeatedly. You may therefore wish to consider a BS 4142 assessment based around the $L_{A_{f,max}}$ of the children's shouting, corrected for the character of the noise, in which case the objective for noise mitigation should be that the Rating Level is no more than 5dB above the background sound level. You may also wish to have reference to guidelines provided in the case of animal boarding establishments which have similar considerations in respect of noise not traditionally considered to be industrial or commercial. Examples are Northern Ireland IOA Irish Branch Paul McCullough Dog Barking Assessment Methodology (June 2020) <https://youtu.be/U8PLvtCQ38>, or Supplementary Planning Guidance – South Holland 1999

3. External Amenity Areas.

I note, figure 8, that daytime noise level predictions for those houses and flats to the north west and west of the site indicate a level between 55 and 60 dB L_{Aeq} .

The report suggests that higher noise levels in external amenity areas should be acceptable since the development site is considered to be an urban area with close proximity to a strategic transport network. I would suggest that this is not a suitable characterisation of the area, which is suburban in nature and only in peripheral proximity to the A259. As such, suitable mitigation should be provided to ensure that the noise level in amenity areas is equivalent to 50 dB L_{Aeq} , the level at which moderate annoyance, rather than 55dB L_{Aeq} where serious annoyance is anticipated.

There are no external amenity areas with noise levels 55-60dB, $L_{Aeq,16hr}$.

Figure 5 does not appear to concur with this statement since that area shown in yellow (north and west of flats and houses) would seem to represent an $L_{Aeq,16hr}$ of greater than 55, but less than 60 dB; whereas Figure 8 indicates a level higher than 55dB L_{Aeq} but lower than 60 dB for flats alone (although the colour key does not seem to match with the noise contours).

Please also note my comments as above, that contrary to paragraph 4.2 of the acoustic report, the existing wooden fences to the school carpark and eastern school grounds; and nursery, are incomplete/inadequate and should be discounted from any acoustic modelling.

The noise will be dominated by the Fitzalan Link Road which is by its very nature part of the strategic transport network – This has also been confirmed by RGP the team's appointed Traffic Consultants.

I accept that the Fitzalan Link road is part of the strategic transport network, but it will not have the same use as for example, the A259 to its immediate north. Your own report (page 4) points out that the nearest existing major road is the A259.

4. Balconies. It is agreed that should only small balconies be provided, then BS 8233 recommendations would not apply. This guidance would however apply where the balconies are used as general amenity space.

Noted

5. Electrical substation.

The acoustic report should include assessment of the proposed electrical substation on this site.

From experience this is unlikely to have any audibility at the nearest units, hence why this has not been assessed to date.

If necessary, this can be included, however due to the fire and ventilation requirements/constraints which are inherent to substation enclosures, no acoustic mitigation will be possible.

Thank you, please include. Any necessary mitigation would therefore need to rely on distance attenuation.

6. Littlehampton Academy Playground.

Specifically, Littlehampton Academy playground immediately to the north of proposed houses and Littlehampton Day Nursery. Thank you, the acoustic report provided is considered sufficient in this case.

Noted

Please see my note, as above, included under Point 2. Children's Day Nursery.

Please add the following Conditions to this application

Noise

1. Noise in habitable rooms.

Prior to the commencement of the development hereby approved, a scheme shall be provided to demonstrate that the internal noise levels within the residential units will conform to the "Indoor ambient noise levels for dwellings" guideline values specified within Table 4 under section 7.7.2 of BS 8233:2014.

Details shall be compiled by a competent acoustician on sound insulation and noise reduction for buildings and shall be submitted to and approved in writing by the Local Planning Authority. The scheme should take into account the correct number of air changes required for noise affected rooms and L_{Amax} as specified here and in the Planning Pro PG. The works specified in the approved scheme shall then be carried out in accordance with the approved details prior to occupation of the premises and be retained thereafter.

Reason: To protect the amenity of local residents in accordance with Policy QE DM1 of the Adopted Arun Local Plan 2011 – 2031

2. Noise in Amenity Spaces.

Prior to the commencement of the development hereby approved, a scheme will be provided to demonstrate that the external noise levels within the curtilage of residential units and amenity areas for the site will conform to the "Design criteria for external noise" upper guideline value of 55 dB L_{Aeq,T} and preferably with the desired L_{Aeq,T} level of 50 dB as specified in section 7.7.3.2 of BS 8233:2014.

Guidance on the noise mitigation works to be provided to ensure noise reduction for the proposed development shall be submitted to and approved in writing by the Local Planning Authority. The work



T: 01903 737678

E: carol.reynolds@arun.gov.uk

Please note my normal working days are Tuesday to Friday

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF

www.arun.gov.uk

Sign up to our newsletter [here](#)



Business Support during Coronavirus click [here](#)