Council's response (Environmental Health Department) to Noise and Nuisance Issues raised in Cranbrook Basements (Documents 53 and 54) Representation, RBKC, April 2014

Comments on ADC Acoustics report:

- 1.0 In this section Introduction this is not consistent with the aims of the report
- 2.0 In this section last paragraph: our Planners do not and we, (EH) do not suggest conditions regarding construction noise. For major sites and large developments we usually condition the submission of a CEMP or DCMP. In these documents control of noise, vibration and dust are required to be addressed by the applicant.
- 3.0 In this section there is no indication of the activities these plant items will be used for, in particular the circular saw. We have not seen the use of an electric truck to remove and cart away spoil.
- 4.0 In this section our planning conditions do not cover construction methods or operating hours for noisy plant see 2.0 above.

The illustration given of noise impact does not assess the noise impact on adjoining or attached dwellings and is for noise propagation outdoors.

The use of an air spade for only 10minutes a day does not look to be realistic and does not match the use of the compressor for 1hr a day.

Comments on 24 Acoustic report:

- 3.0 In this section a BS5228 assessment period of 12 hours has been used for LAeq calculations; this does not reflect the stated working day (08:00 17:00), which is a 9-hour day. The on-time for the air spade in this report is 4% of a 12 hour day, nearly 30minutes; the ADC report advises 10minutes in a ten hour day?
- 4.0 In this section the report makes clear in this section, and explicitly in section 6, that percussive or piling equipment is not used on site (this implies that only underpinning is used, never contiguous piles and that basements that extend into the garden have excavations supported by normal poling boards and shored walling methods rather than steel sheet piles). It also says only cutting/sawing type plant is used for removing existing concrete. Experience suggests that this may not be a typical method, and that the use of breakers for removal of footings and concrete obstructions is more common and more disruptive. In any event cutting of concrete by circular saw is itself noisy. We also have experience of the larger basement extensions formed by contiguous piling.

It is also not clear that the noise breakout through the open window is the result of an internal reverberant noise field or that the PWL at the open

window propagated to the external free field is a result of the internal reverberant level.

Electrically powered vehicles are listed as a quieter method that *can* be used for deliveries and collections from the site – no evidence of their use is provided and they have not been witnessed in operation by members of the team at any site.

The illustration given of noise impact does not assess the noise impact on adjoining or attached dwellings and is for noise propagation outdoors.

Additional Environmental Health Comments on Responses

- 5. Although the Environmental Health (EH) department has some control on construction noise through the application of the Control of Pollution Act (COPA), this does not necessarily reduce the noise impact of basement extension works on neighbours. Through a Notice under the above Act the Environmental Health department can control hours of noisy work and also attach reasonable conditions to a Notice on how the works are to be done. Nevertheless the construction techniques normally used would to a large extent (these are generally limited to underpinning or for large extensions contiguous piling) constitute the best practicable means to carry out those works and forming the basement. These are inherently noisy; noise, vibration and other disturbance is, therefore, a daily reality for those residents closely affected by the works even though a COPA notice may be in force on the site. The Environmental Health department do what they can through the powers that they have under the Control of Pollution Act but this can never diminish the actual reality of daily noise and disturbance and inconvenience caused.
- 6. The Environmental Health controls that do exist to mitigate construction impact are used largely in response to complaints and problems when these have been experienced and notified to EH. Basement extension projects are significant construction projects. These projects are not inherently well suited for control under the COPA which was not, we consider, drafted for this scale of next door neighbour project in mind. Sustainable development requires a balance to be struck between economic, social and environmental factors. The social role involves promoting healthy communities whilst the environmental role involves minimising pollution in all its forms. Both of these strands need to be taken into account and a suitable balance struck.
- 7. The basement extensions carried out in RBKC are for the most part in normally quiet residential roads. The impact, of what is in effect a major civil engineering project being carried out next door is often significant. This is often compounded by such projects following each other consecutively or being undertaken concurrently in the same road.
- 8. DIY or other refurbishment works by employed builders carried out by householders is a category of complaint that Environmental Health noise and nuisance teams are very familiar. However in terms of 'home improvements', or modest above ground extensions, basement extensions are on a different

scale and constitute a major civil engineering construction on residents' doorsteps.

9. Limiting basement extensions to one floor should also have the affect of limiting the basement formation to relatively shallow underpinning only and help to ensure excavation by manual means. This will assist in limiting the duration of the construction phase and minimise the duration of the works and to a large extent ensure the basement construction methodology minimises noise and vibration. It will also limit the amount of spoil removal and therefore the number of trucks visiting the site to carry it away. These are all impacts that are currently experienced in tight knit residential streets which have a high population density.