

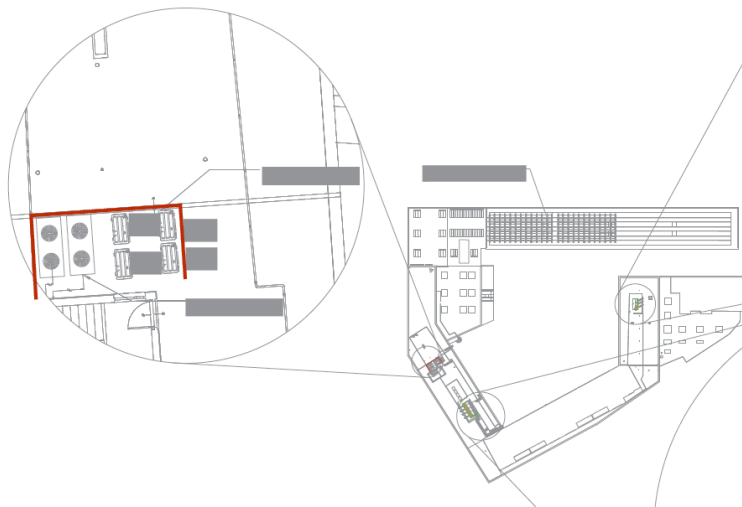
London Borough of Camden
c/o Heritage Surveys
Unit 11H, 22 Carlton Road
South Croydon
Surrey
CR2 0BS

29 May 2020
Ref: 17/0372/L1

Dear sir/madam,

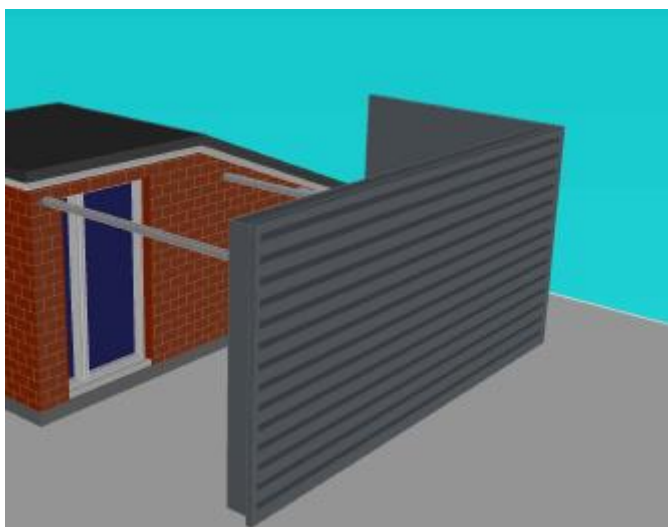
78 Holmes Road (planning reference 2017/3789/P)
Acoustic Barrier Review

Cole Jarman have previously undertaken a plant noise assessment for the site at 79 Holmes Road, London (ref. 17/0372/R02-0). As part of the mitigation strategy a new 2.5m acoustic barrier was recommended to the plant zone as marked up in red below:



This barrier was initially stated to need to be solid and imperforate with no holes or gaps so to not compromise its effectiveness as a noise mitigation measure.

Conversely the barrier that has been installed on site is of the following layout, still at 2.5m in height but utilising an acoustic louvre and not including the panel on the eastern side. The image shown is from the north-east direction.



The sound insulation data as provided by the manufacturer is as follows:

	Sound Reduction Index, <i>R</i> at Octave Band Centred Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Acoustic louvre	5	4	3	6	12	16	13	12

T1 Acoustic louvre sound reduction index

The manufacturer's data is presented as a sound reduction index and so needs to be converted to provide representative insertion losses (i.e. the loss that the on-site installed performance that the louvre would provide, rather than the laboratory performance). The acoustic conditions of the rooms within where the louvre was tested are not available and so calculation of an indicative insertion loss is not possible. Instead, the insertion loss values have been pessimistically estimated as being half of the sound reduction index values, as below.

	Sound Reduction Index, <i>R</i> at Octave Band Centred Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Acoustic louvre	2	2	1	3	6	8	6	6

T2 Acoustic louvre sound reduction index



Noise levels have been calculated at the assessment positions, defined in the plant noise assessment report, taking into account the mitigating effects on-site acoustic louvre barrier, whilst still also considering noise over the top of the louvre. The results of the calculations are as presented below, alongside the relevant night-time noise limits:

Assessment Position	Noise Limit, dB(A)	Calculated Rating Noise Level, dB(A)
AP1	38	35
AP2	35	34
AP3	36	35

T3 Plant noise emission levels at the nearest residential properties

With the on-site louvre in place, the noise limits are calculated to be achieved at the assessment positions and therefore the installed mitigation is appropriate.

Yours sincerely

Tim Fox