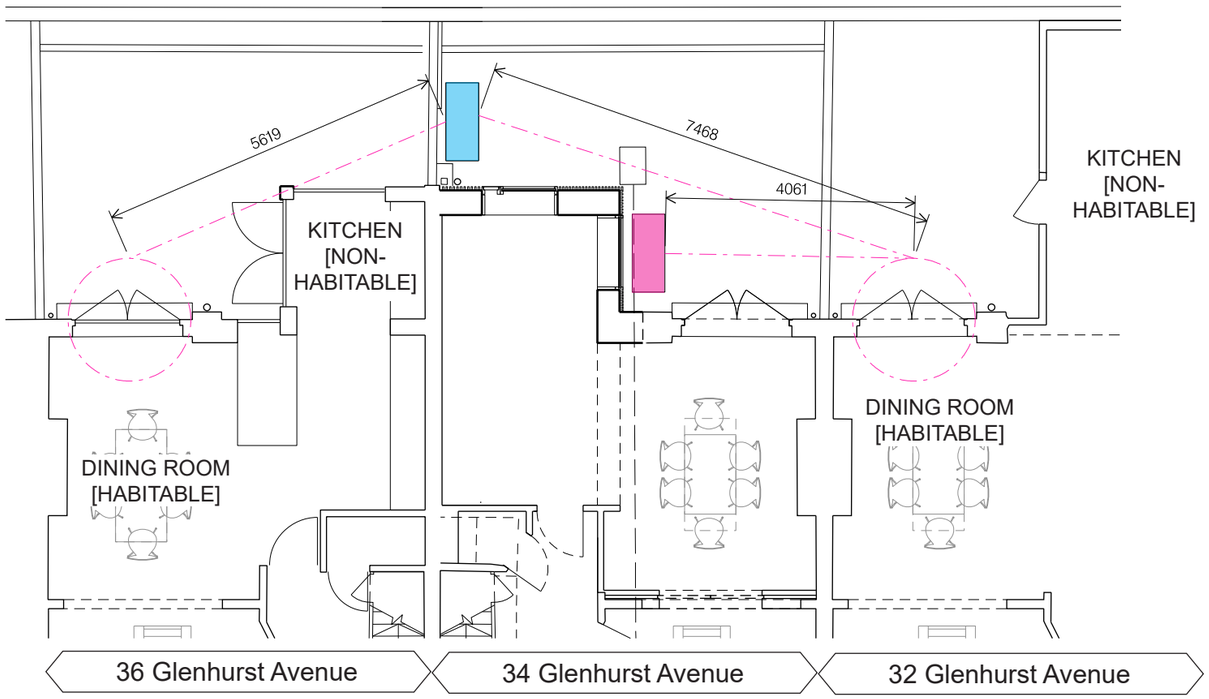
ASHP
LOCATION A
- requires planning permission due to location <1m from boundary, which suggests rating levels (at source?) of 10dB below daytime background, as set out in acoustic report = 26 dB LA,r,T. *

[* Camden Local Plan (2017) sets out compliance with
BS 4142: 2014 + A1: 2019 Methods for Rating and Assessing Industrial and Commercial Sound.]

ASHP
LOCATION B
- permitted development due to location >1m from boundaries, noise levels to be in accordance with MSC 020 (microgeneration scheme planning standards), i.e. to be below 40dB at receptors



	Location A	32 Glenhurst	36 Glenhurst
1	A-weighted sound power level of the heat pump	57	57
2	Directivity	Q8	Q8
3	Distance from heat pump to assessment position	7	5
4	dB reduction	-17	-16
5	Solid barrier dB reduction	0 dB	-10 dB
6	Sound pressure level at assessment position (1+4+5) [heat pump noise]	40	31
7	Background noise level	40 dB(A)	40 dB(A)
8	Difference between background noise and heat pump noise (7-6)	0 dB	9 dB
9	Adjustment figure & round up - FINAL RESULT	41 dB	41 dB
10	Is the FINAL RESULT equal to or lower than 42 dB(A)?	YES	YES

	Location B	32 Glenhurst	36 Glenhurst
1	A-weighted sound power level of the heat pump	57	57
2	Directivity	Q8	Q8
3	Distance from heat pump to assessment position	4	7
4	dB reduction	-14	-17
5	Solid barrier dB reduction	0 dB	-10 dB
6	Sound pressure level at assessment position (1+4+5) [heat pump noise]	43	30
7	Background noise level	40 dB(A)	40 dB(A)
8	Difference between background noise and heat pump noise (7-6)	3 dB	10 dB
9	Adjustment figure & round up - FINAL RESULT	45 dB	40/41 dB
10	Is the FINAL RESULT equal to or lower than 42 dB(A)?	NO	YES

34 Glenhurst Avenue

ASHP additional information - Revision A

Commentary
We want to locate our air sourse heat pump in location A, as per the adjacent diagram. MSC 020 requirements for accoustics, as set out within permitted development regulations, can be met with ASHP location A. However, as location A is within 1m of the boundary, it is not allowed under permitted development.

We looked at a second loaction (location B), which is more than 1m from any boundary, however the MSC 020 requirements for acoustics cannot be met and the location is impractical.

On the basis that location A is within 1m of the boundary, we cannot install the heat pump under permitted development. Reducing the sound power level of the heat pump to the level set out in the acoustic report in line with planning guidance [BS 4142] is not practicable due to the size of the enclosure that would be required to achieve the reduction. This requirement is onerous; the planning requirement far exceeds the the acoustic requirement set out under permitted develpment.

We really want to install the heat pump in location A because:
- it provides an unobtrusive location that does not impact visual amenity for neighbours
- it allows optimum amenity of garden use for 34 Glenhurst Avenue
- it is proven to meet approved MSC 020 acoustic standards
- it provides heating and hot water to 34 Glenhurst Avenue using the least energy possible for the building (the ASHP having been sized based on a detailed analysis of the thermal upgrades proposed to the property)
- the ASHP runs on electricity only and therefore can run with zero emissions if renewable energy is sourced, and would
- therefore would support Camden's Climate Action Plan.

Location A is as the application documentation. It is suggested that permission for this location may reasonably be granted with the points as set out above considered.

Left above: Plan extract showing potential ASHP locations. N.B. configuration of neighbouring properties internal layout indicative only - location of receptors and room use is accurate

Left below: Applicant comparative analysis of ASHP locations in line with MSC 020 - See also MSC installer analysis.

Revision A notes:
Floor plan for 36 Glenhurst Avenue updated to reflect recent changes to layout. N.B. calculations not affected.