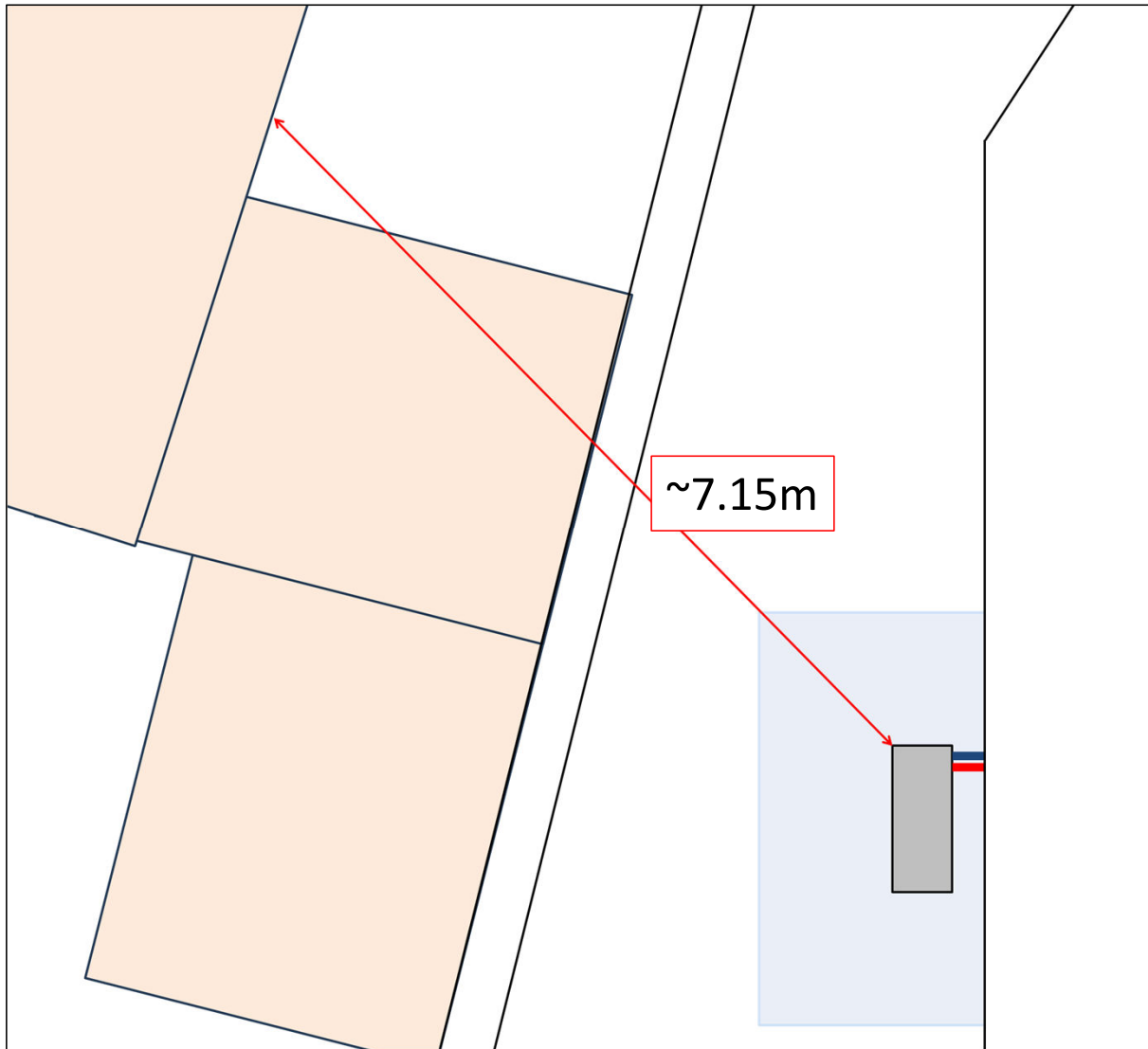


ASHP

Vaillant aroTHERM plus 10kW ASHP
H1565 x W1100 x D450mm

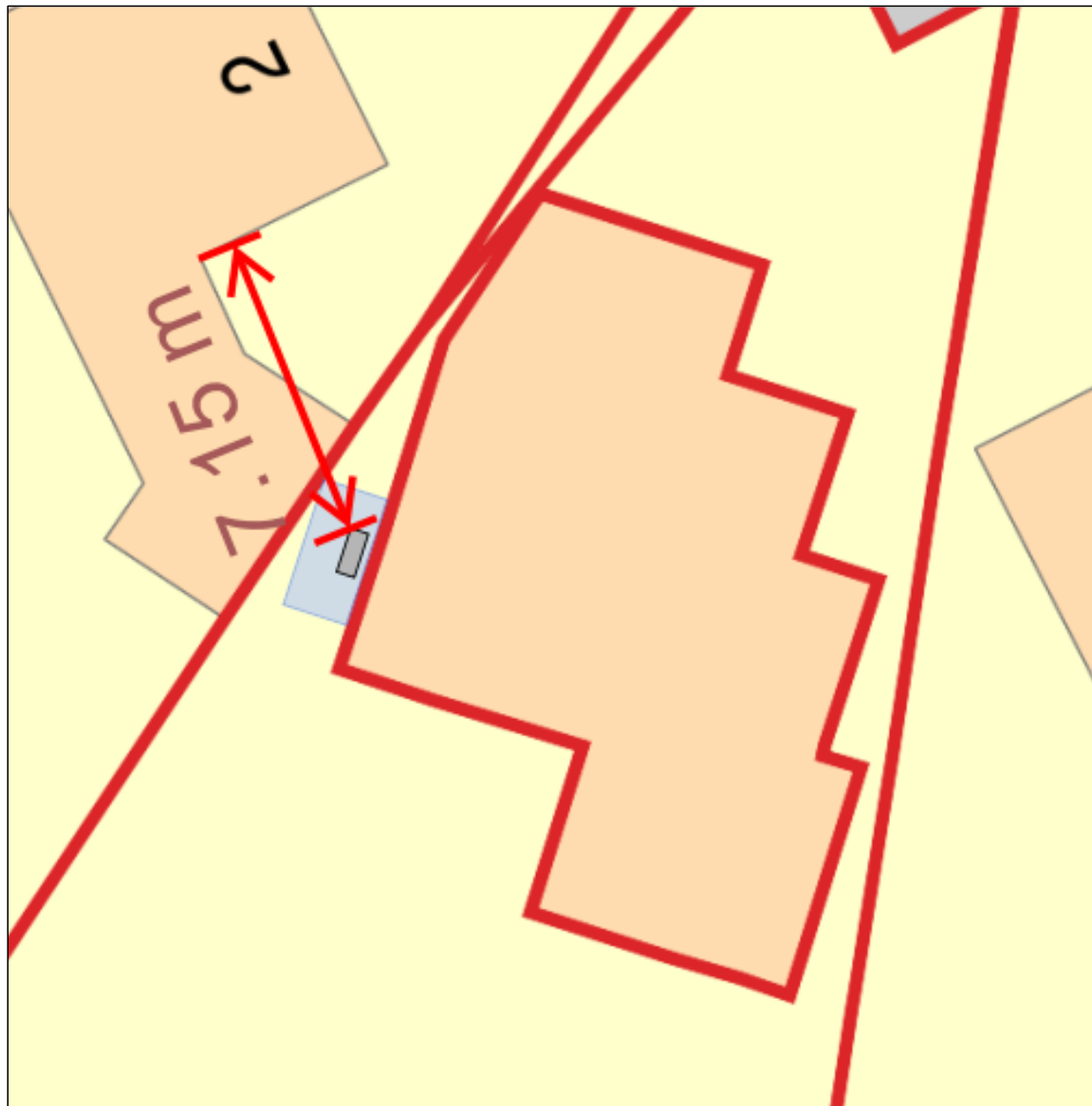


Client: 23-10-14 John Davies

Address: 4 South Rise, Cardiff, CF14 0RH

Project: Vaillant aroTHERM plus 10kW ASHP

Detail: HP location – Plan view



ASHP

Vaillant aroTHERM plus 10kW ASHP
H1565 x W1100 x D450mm

~7.15m to nearest
neighbouring living
window. See separate
drawing for scale version.

Client: 23-10-14 John Davies

Address: 4 South Rise, Cardiff, CF14 0RH

Project: Vaillant aroTHERM plus 10kW ASHP

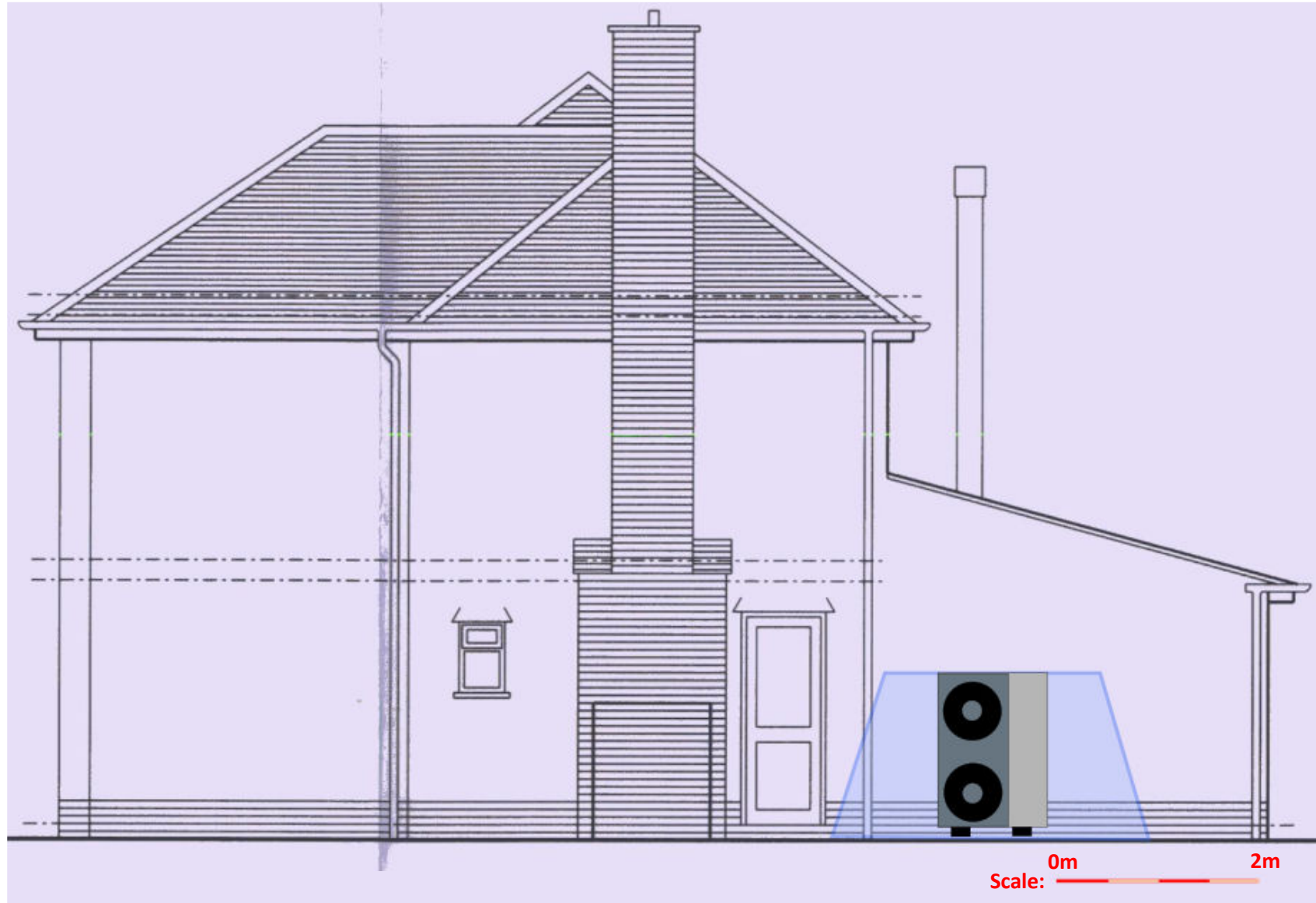
Detail: HP location – Plan view

Site Boundary



Client: 23-10-14 John Davies
Address: 4 South Rise, Cardiff, CF14 0RH
Project: Vaillant aroTHERM plus 10kW ASHP
Detail: Google Maps





Client: 23-10-14 John Davies
Address: 4 South Rise, Cardiff, CF14 0RH
Project: Vaillant aroTHERM plus 10kW ASHP
Detail: ASHP elevation plan view

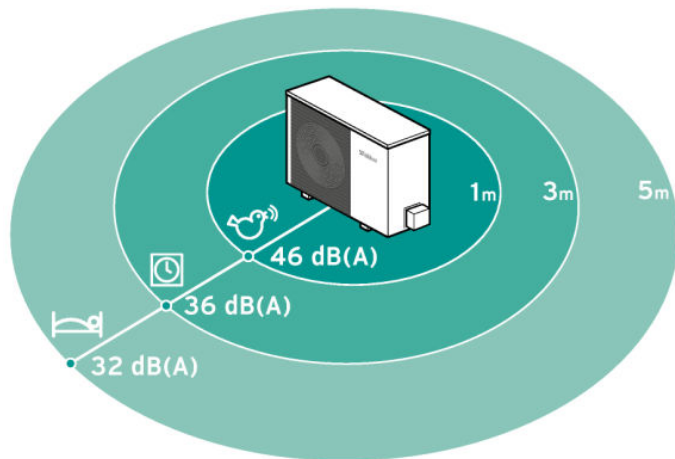


Client: 23-10-14 John Davies
Address: 4 South Rise, Cardiff, CF14 0RH
Project: Vaillant aroTHERM plus 10kW ASHP
Detail: ASHP elevation plan view

1. Sound power level (dB)	60
2. Sound pressure level (dB)	Q4 - "Two Reflective Surfaces"
3. Distance from heat pump to assessment position (meters)	6
4. dB Distance Reduction	-20
5. Barriers Between heat pump and assessment position	Barrier (no view)
6. Sound pressure level @ assessment position	30
7. Background noise level (dB)	40
8. Differential between 6. & 7.	10
9. Decibel Correction (dB)	40.4
10. Final Result (dB)	✓ 41.0
	Pass



Sound power



Model	Sound Power Level A7/W55	Sound Pressure Level		
		1m distance	3m distance	5m distance
aroTHERM plus 3.5kW	54 dB	46 dB(A)	36 dB(A)	32 dB(A)
aroTHERM plus 5kW	54 dB	46 dB(A)	36 dB(A)	32 dB(A)
aroTHERM plus 7kW	55 dB	47 dB(A)	37 dB(A)	33 dB(A)
aroTHERM plus 10kW	60 dB	52 dB(A)	42 dB(A)	38 dB(A)
aroTHERM plus 12kW	60 dB	52 dB(A)	42 dB(A)	38 dB(A)

Client: 23-10-14 John Davies
Address: 4 South Rise, Cardiff, CF14 0RH
Project: Vaillant aroTHERM plus 10kW ASHP
Detail: MCS 020_ASHP sound level assessment