

Note

Project UCL Temporary Facilities - Chenies Mews
 Subject Response to Planning Application Objection
 Project no 033111
 Date 21 July 2015

Revision	Description	Issued by	Date	Reviewed
00	For Issue	PL	22 Jul 15	MH

This note has been issued to provide responses to the objections received relating to Planning Application: 96A-98 Chenies Mews, WC1: ref. 2015/3414/P. The responses relate solely to comments made with regards to the Noise Impact Assessment conducted by Buro Happold.

Comment	Response
<p>1.3 Description of the Proposed Development Site "The surrounding area is of mixed use with student accommodation and University Buildings". No mention of residential property.</p>	<p>Noted. However, comfort should be taken from the fact that the student accommodation is treated as comprising rooms for residential purposes and therefore require the same level of consideration with respect to noise intrusion as the residential properties in the area.</p>
<p>2.1 Noise Sensitive Receptor Locations "Existing noise sensitive receivers (NSRs) include a combination of student accommodation and UCL buildings as shown in Fig 2". There are families with young children living 10 to 15 metres from the property.</p>	<p>The Buro Happold noise assessment calculations assumed a distance between the mechanical plant and the nearest NSR was 10 metres. Therefore, the maximum calculated noise levels shown in the report would also apply to the additional residential premises located 10 to 15 metres from the property identified by the objection.</p>

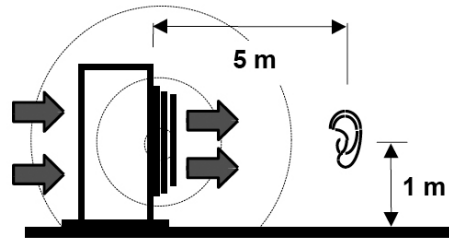
<p>3 Acceptable Noise Levels 3.1 Policy Background: The key planning policies for the London Borough of Camden include...Planning policies and decisions should aim to: “avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development”.</p> <p>If the Application is successful, the Consolidated Construction Welfare facility will have an adverse impact on health and quality of life of residents for a period of 5 years.</p>	<p>The report titled Chenies Mews, UCL Temporary Facilities; Noise Impact Assessment dated 18 May 2015 is an assessment of the noise emissions from the mechanical plant and equipment installed to serve the temporary facilities.</p> <p>With this in mind, the assessment was conducted in accordance with British Standard 4142:2014 – <i>methods for rating and assessing industrial and commercial sound</i>.</p> <p>A noise survey was conducted on-site over a 24-hour period to establish the background sound level of the surrounding area. The lowest measured L_{A90} background sound level was used to establish the acceptable noise emission assessment criterion. Selecting the lowest L_{A90} level found in a 24-hour period is considered to be the most stringent approach to establishing an acceptable noise level criterion.</p> <p>In Section 11 <i>Assessment of the impacts</i> of BS 4142:2014, an initial estimate of the impact of the specific sound is obtained by subtracting the measured background sound level from the Rating Level (noise emission from the mechanical plant).</p> <p>BS 4142 goes on to say that the lower the Rating Level is compared to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.</p> <p>The London Borough of Camden has acceptable noise level criteria of 5 dB lower than the L_{A90} background noise level. Therefore the specific sound will have low impact, depending on the context.</p> <p>Noise mitigation measures have been put in place such that noise emissions from the plant are 5 dB below the lowest L_{A90} background level. Therefore the background sound level will increase by 1 dB, during the quietest period, which is not perceptible by most people.</p> <p>It should be noted that this increase will only occur during the lowest background period (typically during the early morning) and not for the remainder of the day/night.</p>
<p>4 UCL Temporary Facilities Noise Emission</p> <p>4.1 Mechanical Plant and Equipment selected to serve UCL Temporary facilities include: 1 Heat Recovery Ventilation Unit, 1 Variable Refrigerant Flow Condenser Unit and 1 Close Control Unit Condenser Unit.</p> <p>Table 4 shows there is “No Spectrum Available for the Uniflair CAP0251 Close Control unit Condenser unit”</p> <ul style="list-style-type: none"> • When will this information be available? • Are there any spectrum data on similar Control Unit Condenser units? 	<p>Noise emission spectrum data has been obtained for the CAP0251 (attached). The sound pressure level at a distance of 5 m has been converted to a sound power spectrum for direct comparison with the assumed data used in the noise impact assessment. The comparison is shown in the table below. Although there are differences in individual third octave spectrum levels, the overall noise level emitted by the CAP0251 is the same as that assumed in the assessment. Bearing in mind that overall levels are used for comparison with the lowest measured L_{90} the outcome of the assessment remains the same.</p>

Table 1 Comparison of Uniflair Noise Spectrum

Description	Octave Band Frequency - Hz								dBA
	63	125	250	500	1k	2k	4k	8k	
Uniflair spectrum used in calculation	76	76	76	68	64	60	57	49	71
Noise spectrum provided by Uniflair	77	70	75	71	60	60	55	N/A	71

DATI TECNICI

LIVELLO PRESSIONE
SONORA CAP
MONOCIRCUITO
ORIZZONTALE
50 HZ



TECHNICAL DATA

SOUND PRESSURE
LEVELS CAP 50 HZ
SINGLE CIRCUIT
HORIZONTAL

TECHNISCHEN DATEN

LÄRMDRUCKPEGEL
CAP EINKREISIG
WAAGRECHT
50 HZ

DONNÉES
TECHNIQUES

PRESSION
ACOUSTIQUE CAP
MONO-CIRCUIT
HORIZONTAL
50 HZ

DATOS TECNICOS

NIVEL DE PRESIÓN
SONORA CAP
MONOCIRCUITO
HORIZONTAL
50 HZ

	Velocità ventilatori Fan Speed Ventilator Drehzahl Vitesse de rotation Velocidad de rotación	Portata d'aria Air volume Luftleistung Débit d'air Caudal de aire								dB(A)
			[%]	[m³/h]	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	

CAP 0251	43	1343	44,9	37,9	43,4	39,2	28,6	27,8	23,6	39,4
	56	1863	48,9	41,9	47,4	43,2	32,6	31,8	27,6	43,4
	70	2323	51,6	44,6	50,1	45,9	35,3	34,5	30,3	46,1
	100	3049	54,6	47,6	53,1	48,9	38,3	37,5	33,3	49,1
CAP 0331	43	1242	44,5	37,5	43,0	38,8	28,2	27,4	23,2	39,0
	56	1710	48,5	41,5	47,0	42,8	32,2	31,4	27,2	43,0
	70	2116	51,1	44,1	49,6	45,4	34,8	34,0	29,8	45,6
	100	2743	54,2	47,2	52,7	48,5	37,9	37,1	32,9	48,7
CAP 0361	43	1404	45,2	38,2	43,7	39,5	28,9	28,1	23,9	39,7
	56	1966	49,3	42,3	47,8	43,6	33,0	32,2	28,0	43,8
	70	2480	52,1	45,1	50,6	46,4	35,8	35,0	30,8	46,6
	100	3299	55,1	48,1	53,6	49,4	38,8	38,0	33,8	49,6
CAP 0511	43	2633	47,0	40,0	45,5	41,3	30,7	29,9	25,7	41,5
	56	3654	51,0	44,0	49,5	45,3	34,7	33,9	29,7	45,5
	70	4594	53,7	46,7	52,2	48,0	37,4	36,6	32,4	48,2
	100	6113	56,8	49,8	55,3	51,1	40,5	39,7	35,5	51,3
CAP 0661	43	2477	46,5	39,5	45,0	40,8	30,2	29,4	25,2	41,0
	56	3416	50,5	43,5	49,0	44,8	34,2	33,4	29,2	45,0
	70	4221	53,2	46,2	51,7	47,5	36,9	36,1	31,9	47,7
	100	5502	56,2	49,2	54,7	50,5	39,9	39,1	34,9	50,7
CAP 0801	43	4010	48,4	41,4	46,9	42,7	32,1	31,3	27,1	42,9
	56	5545	52,5	45,5	51,0	46,8	36,2	35,4	31,2	47,0
	70	6926	55,1	48,1	53,6	49,4	38,8	38,0	33,8	49,6
	100	9127	58,2	51,2	56,7	52,5	41,9	41,1	36,9	52,7
CAP 1011	43	3727	48,1	41,1	46,6	42,4	31,8	31,0	26,8	42,6
	56	5130	52,1	45,1	50,6	46,4	35,8	35,0	30,8	46,6
	70	6340	54,7	47,7	53,2	49,0	38,4	37,6	33,4	49,2
	100	8252	57,7	50,7	56,2	52,0	41,4	40,6	36,4	52,2
CAP 1301	43	4953	48,5	41,5	47,0	42,8	32,2	31,4	27,2	43,0
	56	6808	52,5	45,5	51,0	46,8	36,2	35,4	31,2	47,0
	70	8430	55,1	48,1	53,6	49,4	38,8	38,0	33,8	49,6
	100	10980	58,2	51,2	56,7	52,5	41,9	41,1	36,9	52,7

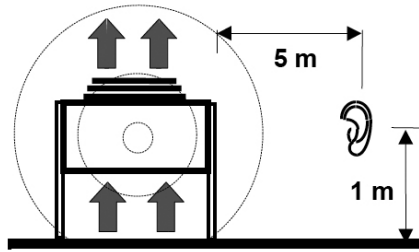
I

GB

D

F

E


DATI TECNICI

 LIVELLO PRESSIONE
 SONORA CAP
 MONOCIRCUITO
 VERTICALE
 50 HZ

TECHNICAL DATA

 SOUND PRESSURE
 LEVELS CAP 50 HZ
 SINGLE CIRCUIT
 VERTICAL

TECHNISCHEN DATEN

 LÄRMDRUCKPEGEL
 CAP EINKREISIG
 SENKRECHT
 50 HZ

**DONNÉES
 TECHNIQUES**

 PRESSION
 ACOUSTIQUE CAP
 MONO-CIRCUIT
 VERTICAL
 50 HZ

DATOS TECNICOS

 NIVEL DE PRESIÓN
 SONORA CAP
 MONOCIRCUITO
 VERTICAL
 50 HZ

	Velocità ventilatori Fan Speed Ventilatorendrehzahl Vitesse de rotation Velocidad de rotación	Portata d'aria Air volume Luftleistung Débit d'air Caudal de aire								
			[%]	[m³/h]	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz
CAP 0251	43	1343	41,6	34,8	33,7	30,9	24,1	20,0	14,0	31,7
	56	1863	47,1	40,3	39,2	36,4	29,6	25,5	19,5	37,2
	70	2323	51,1	44,3	43,2	40,4	33,6	29,5	23,5	41,2
	100	3049	57,3	50,5	49,4	46,6	39,8	35,7	29,7	47,4
CAP 0331	43	1242	41,2	34,4	33,3	30,5	23,7	19,6	13,6	31,3
	56	1710	46,6	39,8	38,7	35,9	29,1	25,0	19,0	36,7
	70	2116	50,6	43,8	42,7	39,9	33,1	29,0	23,0	40,7
	100	2743	56,8	50,0	48,9	46,1	39,3	35,2	29,2	46,9
CAP 0361	43	1404	42,0	35,2	34,1	31,3	24,5	20,4	14,4	32,1
	56	1966	47,5	40,7	39,6	36,8	30,0	25,9	19,9	37,6
	70	2480	51,5	44,7	43,6	40,8	34,0	29,9	23,9	41,6
	100	3299	57,8	51,0	49,9	47,1	40,3	36,2	30,2	47,9
CAP 0511	43	2633	43,7	36,9	35,8	33,0	26,2	22,1	16,1	33,8
	56	3654	49,2	42,4	41,3	38,5	31,7	27,6	21,6	39,3
	70	4594	53,2	46,4	45,3	42,5	35,7	31,6	25,6	43,3
	100	6113	59,5	52,7	51,6	48,8	42,0	37,9	31,9	49,6
CAP 0661	43	2477	43,3	36,5	35,4	32,6	25,8	21,7	15,7	33,4
	56	3416	48,6	41,8	40,7	37,9	31,1	27,0	21,0	38,7
	70	4221	52,6	45,8	44,7	41,9	35,1	31,0	25,0	42,7
	100	5502	58,8	52,0	50,9	48,1	41,3	37,2	31,2	48,9
CAP 0801	43	4010	45,2	38,4	37,3	34,5	27,7	23,6	17,6	35,3
	56	5545	50,6	43,8	42,7	39,9	33,1	29,0	23,0	40,7
	70	6926	54,6	47,8	46,7	43,9	37,1	33,0	27,0	44,7
	100	9127	60,9	54,1	53,0	50,2	43,4	39,3	33,3	51,0
CAP 1011	43	3727	44,8	38,0	36,9	34,1	27,3	23,2	17,2	34,9
	56	5130	50,2	43,4	42,3	39,5	32,7	28,6	22,6	40,3
	70	6340	54,2	47,4	46,3	43,5	36,7	32,6	26,6	44,3
	100	8252	60,4	53,6	52,5	49,7	42,9	38,8	32,8	50,5
CAP 1301	43	4953	45,3	38,5	37,4	34,6	27,8	23,7	17,7	35,4
	56	6808	50,6	43,8	42,7	39,9	33,1	29,0	23,0	40,7
	70	8430	54,6	47,8	46,7	43,9	37,1	33,0	27,0	44,7
	100	10980	60,8	54,0	52,9	50,1	43,3	39,2	33,2	50,9

