Marquee
The British Muslim Heritage Centre
100-106 College Road
Manchester

Acoustic Planning Report
1456/APR1
Revision 1

26 August 2026

For:

Mylahore

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1.0 Introduction

Lighthouse Acoustics has been appointed by Mylahore to undertake an environmental sound survey at the existing marquee site situated at The British Muslim Heritage Centre, 100-106 College Road, Manchester and to undertake an assessment of amplified music/speech and patron sound levels from the existing marquee to the nearest noise sensitive receptors.

The survey methodology, results and assessment are presented in this report.

2.0 Objectives

To establish the Local Authority's acoustic requirements for amplified music/speech and patron sound levels and atmospheric plant noise emission levels from the existing marquee.

To visit site to undertake a detailed environmental sound survey in order to establish existing environmental sound levels at the site.

To undertake a visual inspection of the existing marquee structure.

To undertake a sound insulation test to establish the level of sound insulation offered by the existing marquee structure.

To undertake an assessment of amplified music/speech levels from the existing marquee to the nearest noise sensitive receptors and provide limiting amplified music/speech levels required within the existing marque in order to achieve the requirements of the Local Authority.

To undertake an assessment of patron sound from the existing marquee to the nearest noise sensitive receptors and provide comments on the calculated sound levels

To undertake manned measurements of atmospheric sound emissions from the 1No. existing kitchen extract fan.

To undertake an assessment of atmospheric sound emission levels from the 1No. existing kitchen extract fan to the nearest noise sensitive receptors and to propose mitigation measures where required in order to achieve the requirements of the Local Authority.

3.0 Site Description

The existing marquee site is situated at The British Muslim Heritage Centre, 100-106 College Road, Manchester and comprises a canvas roof structure and glazed side walls with solid panel side walls to the kitchen area to the rear.

The site is bound by College Road to the north, residential properties to the east, Clarendon Road to the south and residential properties to the west along College Drive.

The nearest noise sensitive receptors are existing residential properties situated to the west of the site along College Drive.

The site plan below indicates the site boundary and the surrounding environment.



Site plan indicating the site boundary and the surrounding environment

4.0 Local Authority Requirements

4.1 Entertainment Sound

With regard to entertainment venues, Section 3.7.1.2 of the Planning & Noise Technical Guidance document (dated October 2022) produced by Manchester City Council states the following:

> *"Entertainment noise ($L_{Aeq,5min}$) should be controlled to 5dB below the typical background noise level (L_{A90}) in each octave band at the nearest noise sensitive location."*

4.2 Patron Sound

We are unaware of any requirements that Manchester City Council have for sound emissions due to people talking. As such, it is proposed that L_{Aeq} patron sound levels should not exceed the L_{A90} background sound levels at the nearest noise sensitive receptors by more than 5dB.

4.3 Building Services Sound

With regard to noise and vibration from fixed plant/equipment, Section 3.7.1.5 of the Planning & Noise Technical Guidance document (dated October 2022) produced by Manchester City Council states the following:

> *"The noise assessment should be based on BS 4142: 2014 and any application for fixed plant, equipment or machinery must demonstrate that:*
>
> ***'Externally mounted ancillary plant, equipment and servicing shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB (L_{Aeq}) below the typical background (L_{A90}) level at the nearest noise sensitive location."***

5.0 Environmental Sound Survey

5.1 Measurements

Automated environmental sound measurements were undertaken from 13:00 hours on Friday 20 March 2026 to 10:00 hours on Tuesday 24 March 2026. During this period the L_{Amax}, L_{Aeq} and L_{A90} sound pressure levels were measured continuously over 15 minute periods along with the corresponding octave band sound pressure levels.

5.2 Weather Conditions

At the start of the survey period there was a light easterly breeze (<3m/s) and the sky was clear. There was no rainfall and road surfaces were dry. The temperature was approximately 16°C.

At the end of the survey period there was a light easterly breeze (<3m/s) and the sky was scattered cloud. There was no rainfall and road surfaces were dry. The temperature was approximately 12C.

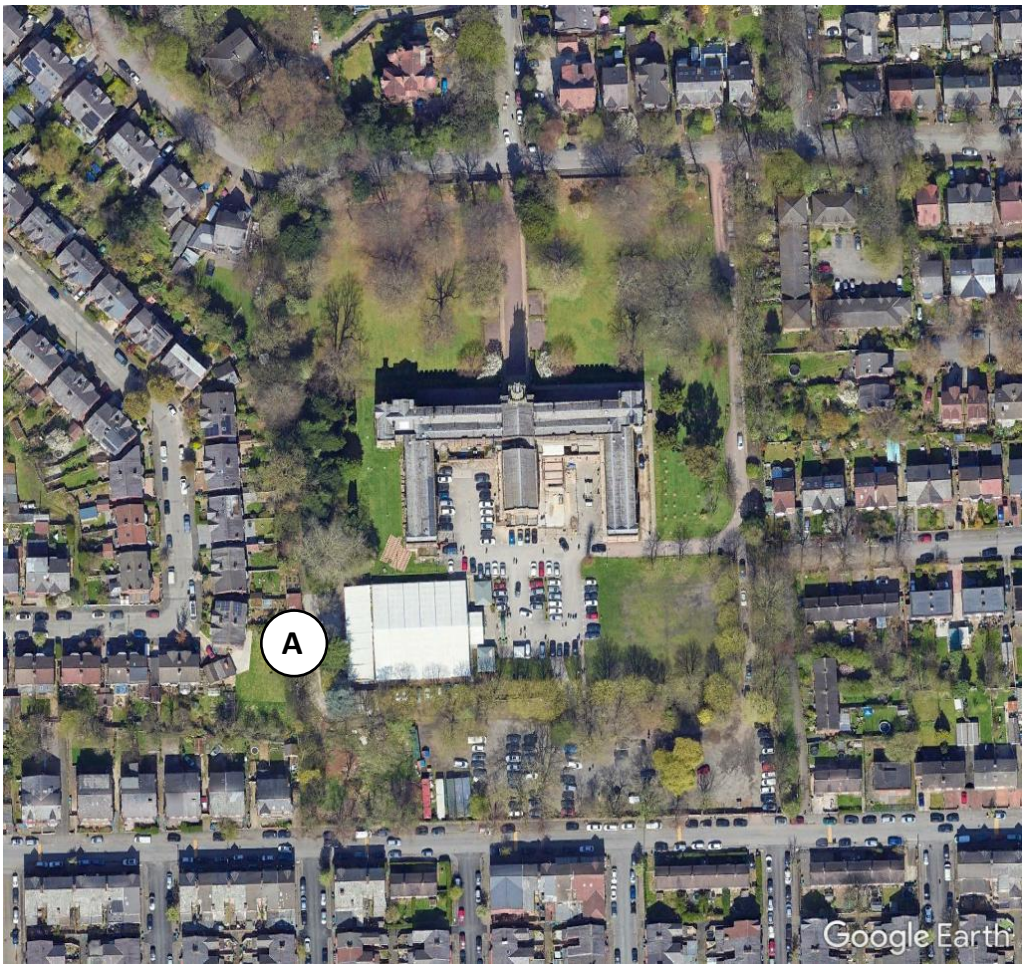
Based on publicly available weather data for the survey period it is understood that weather conditions remained similar for the duration of the survey with no periods of significant rainfall or strong breezes. The weather conditions during the survey period are therefore considered to be suitable for undertaking measurements of sound levels.

5.3 Measurement Position

Environmental sound levels were measured at a single position on-site as described in the table below.

Position	Description
A	Microphone situated on the western site boundary overlooking the residential properties at 2.5m above ground level in free field conditions..

The measurement position and site boundary are shown on the site plan overleaf.



Site plan showing measurement position and site boundary

Measurement Position A was selected in order to assess typical environmental sound levels representative of those at the nearest existing residential properties to the west of the site along College Drive.

5.4 Equipment

The following equipment was used to undertake the environmental sound survey.

Equipment	Manufacturer	Model	Serial No.	Calibration Date
Class 1 Sound Level Meter	Casella	633C	0721320	06/11/2025
Preamplifier	Casella	495	001414	06/11/2025
Microphone	Casella	251	1025	06/11/2025
Class 1 Sound Calibrator	Casella	120/1	3864878	05/11/2025
Environmental Noise Kit	Casella	6847	-	-
Microphone Extension Cable	Casella	C6717/5	-	-
Weather Protection System	Casella	6737	-	-

Field calibration checks were performed on the sound level meter prior to and on completion of the survey and were found to be within acceptable tolerance limits.

5.5 Results

5.5.1 Time History Graph

The results of the environmental sound survey are presented on Time History Graph 1456/THG1 enclosed at the rear of the report.

5.5.2 $L_{A90,T}$ Background Sound Levels

The lowest representative $L_{A90,15min}$ background sound levels measured at each position during the operating hours of the marquee (11:00 to 22:30 hours) are detailed in the table below.

Position	Lowest Representative $L_{A90,15min}$ Background Sound Level (dB)
	Daytime (11:00–22:30)
A	35

The corresponding $L_{90,15min}$ octave band sound levels at each measurement position are presented in the tables below.

Position	Lowest Representative $L_{90,15min}$ Background Sound Level (dB) at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
A	40	37	35	33	30	24	16	13	35

5.6 Discussion of Sound Climate

At the start and end of the survey period the dominant sound source at Position A was noted to be frequent road traffic along Clarendon Road and frequent aircraft flyovers. During lulls in road traffic along Clarendon Road, road traffic from the surrounding road network contributed towards the measured sound climate.

Whilst we are unable to comment on dominant sound sources or individual sound events during the survey period, based on the surrounding environment it is likely that road traffic remained the dominant sound source.

6.0 Marquee Sound Insulation Measurements

6.1 Test Procedure

Lighthouse Acoustics visited site on Tuesday 24 March 2026 to undertake sound insulation tests of the existing marquee construction.

The existing marquee comprises a canvas roof structure and glazed side walls with solid panel side walls to the kitchen area to the rear.

6.2 Equipment

The following equipment was used to undertake the sound insulation tests.

Equipment	Manufacturer	Model	Serial No.	Calibration Date
Class 1 Sound Level Meter	Bruel & Kjaer	2250	2626230	01/11/2024
Preamplifier	Bruel & Kjaer	ZC-0032	21309	01/11/2024
Microphone	Bruel & Kjaer	4189	2621208	04/11/2024
Class 1 Sound Calibrator	Casella	120/1	3864878	05/11/2025

Field calibration checks were performed on the sound level meter prior to and on completion of the tests and were found to be within acceptable tolerance limits.

The existing in-house loudspeaker system was used to generate the pink noise used for the tests.

6.3 Test Locations

Airborne sound insulation testing of the existing marquee construction was undertaken between the following locations.

Test Ref.	Source Location	Receive Location
1	Within main marquee space	1m from southern site boundary

6.4 Test Conditions

The windows and doors to the marquee were closed for the duration of the tests.

6.5 Background Noise

During the testing, background noise was noted to be due to frequent road traffic along Clarendon Road and frequent aircraft flyovers. Receive and background measurements were therefore taken during lulls between vehicle and aircraft passby's.

6.6 Test Results

The results of the airborne sound insulation tests are presented in the table below.

Element	Existing Marquee Level Difference D (dB) at Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
West Facade	16	29	30	32	43	40	39	44

7.0 Amplified Music/Speech Level Assessment

7.1 Operating Hours

It is understood that the proposed operating hours of the marquee are 11:00 to 22:30 hours. Amplified music/speech levels are therefore assessed against the lowest representative $L_{90,15min}$ octave band background sound levels measured at each position during the proposed operating hours of between 11:00 to 22:30 hours.

7.2 $L_{90,T}$ Octave Band Background Sound Levels

The lowest representative $L_{90,15min}$ octave band background sound levels measured at each position during the proposed operating hours of the marquee (11:00 to 22:30 hours) are detailed in Section 5.2.2.

7.3 Marquee Sound Insulation

The octave band sound insulation levels provided by the existing marquee construction are detailed in Section 6.6.

7.4 Nearest Noise Sensitive Receptors

The nearest noise sensitive receptors to the existing marquee are existing residential properties situated to the west of the site along College Road.

7.5 Calculation

The indicative operational sound limits within the marquee that are required in order to achieve 5dB below the typical background noise level in each octave band at the nearest noise sensitive receptors have been calculated using the following formula:

$$L_{prev} = L_p - 5 + SRI$$

Where:
L_{prev} is the reverberant indicative operational sound limit in the space, dB;
L_p is the lowest representative background sound level measured at the receiver, dB;
SRI is the composite Sound Reduction Index of the radiating façade of the space, dB.

7.6 Indicative Operational Sound Limits

Indicative operational sound limits within the marquee that are required in order to achieve 5dB below the typical background noise level in each octave band at the nearest noise sensitive receptors are presented in the table below.

Period	L_{eq} Reverberant Indicative Operational Sound Limits (dB) at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
11:00 – 22:30	51	61	60	60	68	59	50	52	69

For the marquee in-house loudspeaker system, amplified music levels should be limited by means of an electronic noise limiter/compressor. The device should be capable of limiting individual one third octave bands over the frequency range 20Hz to 20kHz and controlling the number of speakers/zones required.

In order to set the device to achieve the requirements of the Local Authority a commissioning visit will be required in conjunction with an acoustic consultant upon completion of the fit-out works and prior to the operation of the banqueting venue. The devices should be lockable once set to prevent tampering. Upon completion, a commissioning report should be issued to the Local Authority specifying details of the devices installed and the limits that they have been set to.

8.0 Patron Sound Assessment

8.1 Operating Hours

It is understood that the proposed operating hours of the marquee are 11:00 to 22:30 hours. Patron sound is therefore assessed against the lowest representative $L_{A90,15min}$ background sound level measured at each position during the proposed operating hours of between 11:00 to 22:30 hours.

8.2 $L_{A90,T}$ Background Sound Level

The lowest representative $L_{A90,15min}$ background sound level measured at each position during the proposed operating hours of the marquee (11:00 to 22:30 hours) are detailed in Section 5.2.2.

8.3 Marquee Sound Insulation

The octave band sound insulation levels provided by the existing marquee construction are detailed in Section 6.6.

8.4 Nearest Noise Sensitive Receptors

The nearest noise sensitive receptors to the existing marquee are existing residential properties situated to the west of the site along College Road.

8.5 Sound Source Data

For the marquee, it is assumed that half of the people in the space will be talking at any one time. Of these people it is assumed that half will be talking with a normal voice whilst half will be talking with a raised voice.

The sound pressure levels for 1No. person talking with normal and raised voices at 1m are detailed below and will each be applied to a quarter of the total number of seats in the spaces.

Source Description	L_{eq} Sound Pressure level (dB) at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
1No. person talking with normal voice at 1m	42	47	57	60	54	49	44	39	60
1No. person talking with raised voice at 1m	46	51	62	66	62	57	51	43	67

It is understood that up to 300No. patrons may be present within the marquee during an event.

8.6 Calculation

The patron sound breakout level at the nearest noise sensitive receptors has been calculated using the following formula:

$$L_p = L_{prev} - SRI$$

Where:
L_p is the calculated operational sound level at the receiver, dB;
L_{prev} is the reverberant patron sound level in the space, dB;
SRI is the composite Sound Reduction Index of the radiating area of the space, dB;

8.7 Calculated Patron Sound Levels

Calculated L_{Aeq} patron sound levels at the nearest noise sensitive receptors are presented in the table below along with the lowest representative $L_{A90,15min}$ background sound level and the difference between them.

Receptor	Descriptor	Sound Level (dB)
West	Calculated Patron Sound Level $L_{Aeq,T}$	34
	Lowest Representative $L_{A90,15min}$ Background Sound Level	35
	Difference	-1

As can be seen, the calculated patron sound levels at the nearest noise sensitive receptors are likely to achieve the proposed requirement of not to exceed the L_{A90} background sound levels at the nearest noise sensitive receptors by more than 5dB.

9.0 Atmospheric Plant Sound Emission Measurements

9.1 Plant Location

The 1No. existing kitchen extract fan is situated within the building and is ducted to an exhaust louvre situated in the west façade of the marquee at approximately 2m above ground level.

9.2 Measurements

Lighthouse Acoustics visited site on Tuesday 24 March 2026 to undertake manned sound measurements of the 1No. existing kitchen extract fan.

The 1No. existing kitchen extract fan was understood to be operating at design duty for the duration of the measurements. Measurements were undertaken of the L_{Aeq} sound pressure levels over periods of 1 minute for the 1No. existing kitchen extract fan (due to steady noise).

9.3 Weather Conditions

During the measurement period there was a light easterly breeze (<3m/s) and the sky was scattered cloud. There was no rainfall and road surfaces were dry. The temperature was approximately 12C.

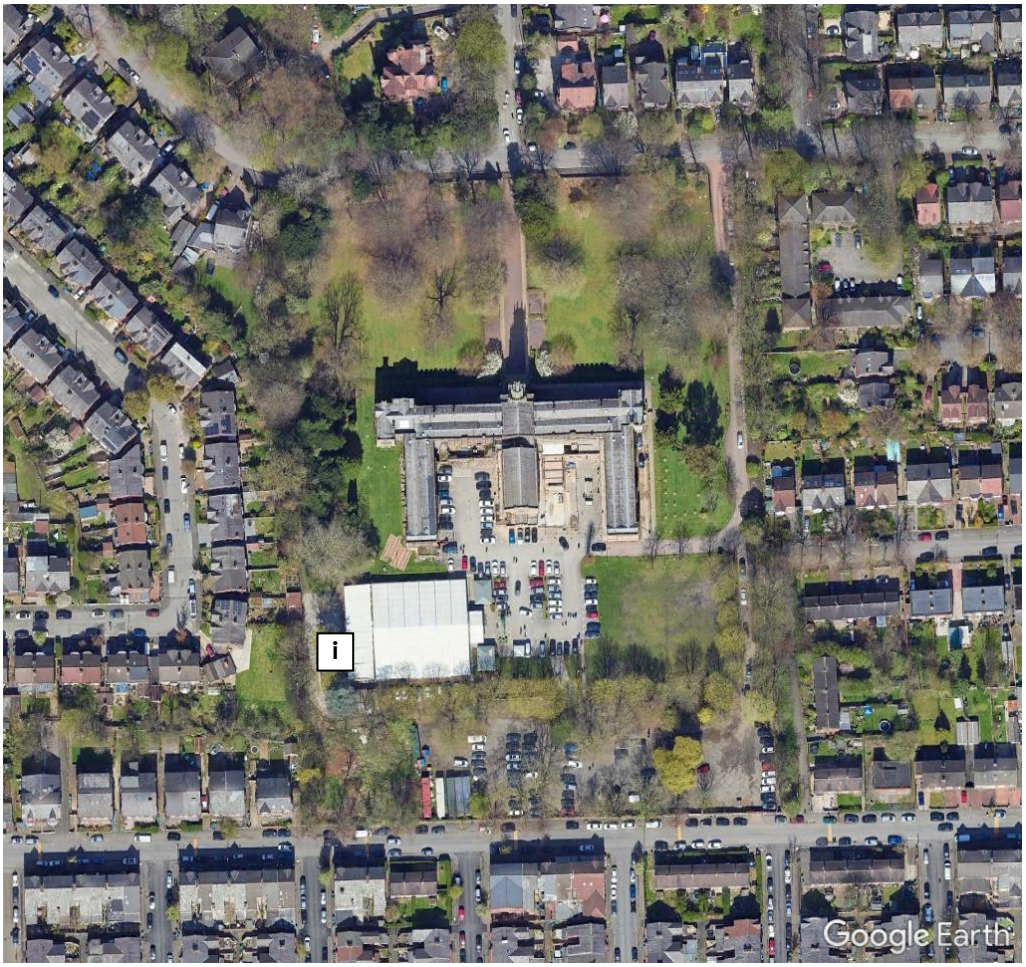
The weather conditions during the measurement period are therefore considered to be suitable for undertaking measurements of sound levels.

9.4 Measurement Position

Measurements were undertaken at the following position on-site as described in the table below.

Position	Measurement	Location
i	Kitchen Extract Fan Exhaust Termination	1m from existing exhaust termination at 2.0m above ground level

The measurement position is shown on the site plan below.



Site plan showing measurement position

9.5 Equipment

The following equipment was used to undertake the sound level measurements.

Equipment	Manufacturer	Model	Serial No.	Calibration Date
Class 1 Sound Level Meter	Bruel & Kjaer	2250	2626230	01/11/2024
Preamplifier	Bruel & Kjaer	ZC-0032	21309	01/11/2024
Microphone	Bruel & Kjaer	4189	2621208	04/11/2024
Class 1 Sound Calibrator	Casella	120/1	3864878	05/11/2025

Field calibration checks were performed on the sound level meter prior to and on completion of the survey and were found to be within acceptable tolerance limits.

9.6 Results

The results of the sound level measurements are presented in the table below.

Position	Measurement	Plant	Measured Sound Pressure Level (dB)
A	Kitchen Extract Fan Exhaust Termination	Individual On	$L_{Aeq,1min}$ 74dB

Subjectively, there was no tonality, irregularity or impulsiveness noted to the atmospheric plant noise emissions from the 1No. existing kitchen extract fan.

9.7 Discussion of Sound Climate

Atmospheric plant sound emission levels from the 1No. existing kitchen extract fan was subjectively clearly audible at Position i above the residual noise climate which comprised frequent road traffic along Clarendon Road and frequent aircraft flyovers. During lulls in road traffic along Clarendon Road, road traffic from the surrounding road network contributed towards the measured sound climate

10.0 Atmospheric Plant Sound Emission Assessment

10.1 Operating Hours

It is understood that the 1No. existing kitchen extract fan has the potential to operate between 11:00 to 22:30 hours.

In order to undertake a worst case assessment, it is assumed that the 1No. existing kitchen extract fan will operate for the full 1 hour daytime assessment period.

10.2 Assessment

The table below details the calculated rating level at the nearest noise sensitive receptors along with the lowest representative background sound level and the difference between them.

Descriptor	1No. Kitchen Extract Fan
Measured Sound Level at 1m L_{Aeq} (dB)	74
Percentage on-time (%)	100
On time correction (dB)	0
Distance to Receptor (m)	30
Distance Loss (dB)	-30
Specific Sound Level at Receptor L_{Aeq} (dB)	44
Character Correction (dB)	0
Rating Level L_{Ar} at Receptor (dB)	44
Lowest Representative Background Sound Level L_{A90} at Receptor (dB)	35
Difference (dB)	+11

The calculated rating level at the nearest noise sensitive receptors is 11dB above the lowest representative background sound level and 16dB above the requirements of the Local Authority.

10.3 Mitigation Measures

In order to reduce atmospheric plant sound emissions from the 1No. existing kitchen extract fan so that it achieves the requirements of the Local Authority it shall be fitted with an atmospheric silencer as specified in the Silencer Schedule 1456/SS1 enclosed at the rear of the report.

Since the extract fan unit is situated within the marquee this may be installed either within the marquee between the kitchen extract fan and exhaust louvre (if space allows) or externally. If installed externally, any ductwork between the atmospheric silencer and penetration of the facade should be acoustically lagged comprising 50mm (min.) mineral wool slab (min. 16kg/m^3) wrapped with a polymeric heavy mass barrier material of at least 10kg/m^2.

11.0 Additional Guidance

In order to minimise sound emissions from the marquee the following guidance should be incorporated.

- All staff should be trained on the noise management measures employed by the venue to minimise amplified music/speech sound emissions from the premises.

- Musicians/DJs/Announcers should be made aware of the noise management measures in advance of any performance.

- External windows and emergency escape doors should be kept closed at all times during operational hours and may only be opened outside of operating hours in order to provide purge ventilation to internal spaces.

- During operational hours, internal spaces should be ventilated by mechanical means. The ventilation systems should be suitably attenuated to minimise sound breakout via the system itself.

- All external entrance/escape doors should be in a good state of repair with seals to the head and jambs and drop seal to the threshold.

- The main entrance lobbied doors should be fitted with self-closing devices. Door supervisors should ensure that one door set is closed at all times in order to minimise sound emissions from the premises.

- Musicians/DJs/Announcers should only be permitted to use the in-house loudspeaker system and not their own portable loudspeaker system.

- Internal loudspeakers should face away from external doors and windows.

- The existing 6No. speakers are situated at high level and directed towards the centre of the marquee. It would be preferable to replace these with a greater number of smaller speakers situated closer to the guests. This would allow clear amplified music/speech at lower volume levels. The viability of wireless table speakers should therefore be investigated.

- Door supervisors or staff should regularly monitor and manage external areas to ensure that customers are not causing a disturbance to local residents. Rowdy behaviour from customers should not be tolerated and anyone behaving in an anti-social way should be asked to leave the premises.

- Deliveries, refuse collections and storage/disposal of waste/recyclables in external areas should be restricted to normal working hours between 08:00 and 18:00 hours Monday to Friday and 08:00 and 13:00 Saturdays.

- A contact telephone number should be made available to local residents which they can use to report noise disturbances to the venue should they occur.

12.0 Conclusions

The Local Authority's acoustic requirements for amplified music/speech and patron sound levels from the existing marquee have been established.

A detailed environmental sound survey has been undertaken in order to establish existing environmental sound levels at the site.

A visual inspection of the existing marquee structure has been undertaken.

A sound insulation test has been undertaken to establish the level of sound insulation offered by the existing marquee structure.

An assessment of amplified music/speech levels from the existing marquee to the nearest noise sensitive receptors has been undertaken. Indicative operational sound limits within the existing marque that are required in order to achieve the requirements of the Local Authority have been proposed.

An assessment of patron sound from the existing marquee to the nearest noise sensitive receptors has been undertaken. The calculated patron sound levels are likely to achieve the proposed requirement.

Manned measurements of atmospheric sound emissions from the 1No. existing kitchen extract fan have been undertaken.

An assessment of atmospheric sound emission levels from the 1No. existing kitchen extract fan has been undertaken to the nearest noise sensitive receptors and mitigation measures have been proposed where required in order to achieve the requirements of the Local Authority.



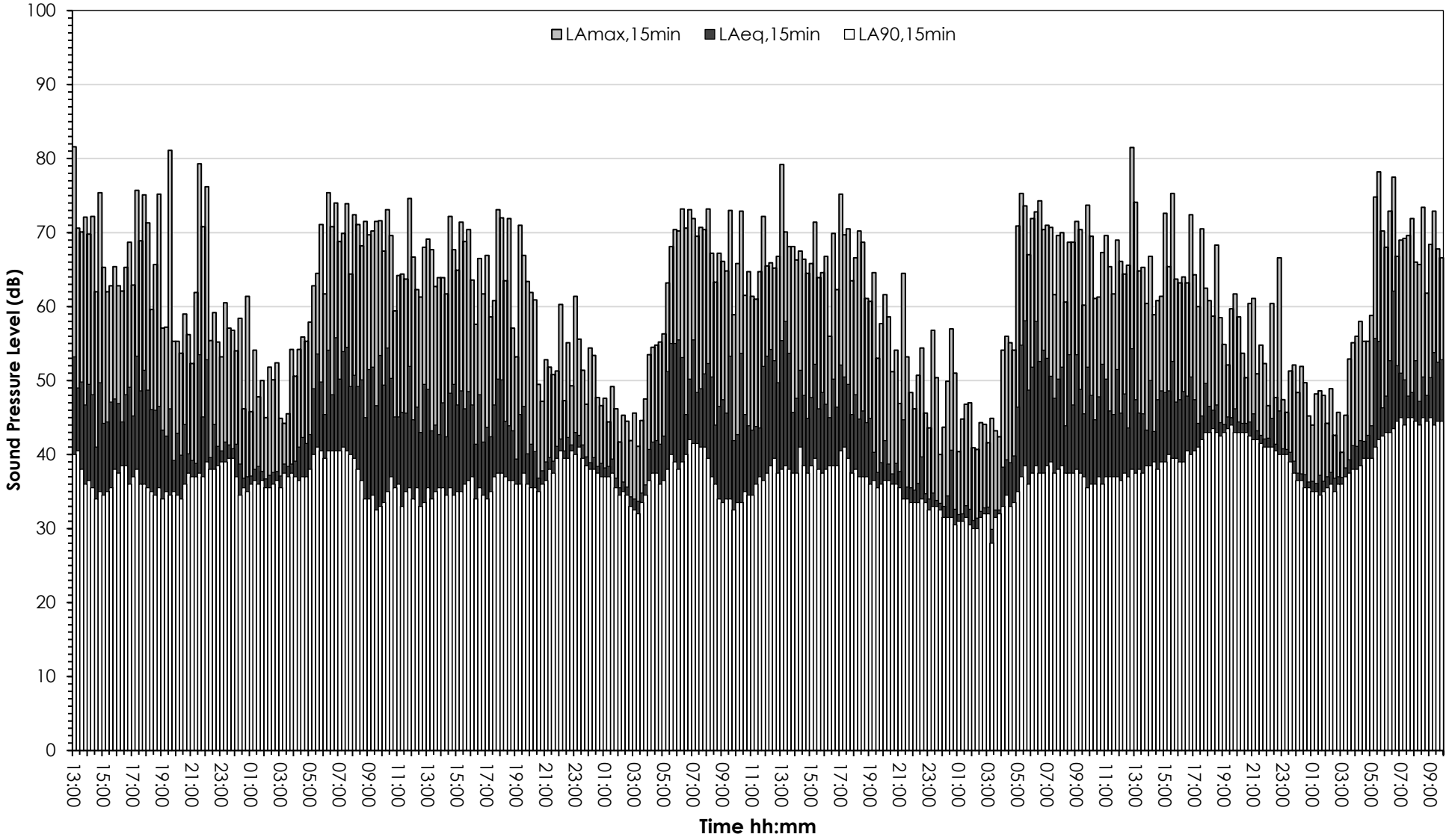
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1456/THG1

Marquee, The British Muslim Heritage Centre, 100-106 College Road, Manchester

Time History Graph - Friday 20 March 2026 to Tuesday 24 March 2026

$L_{Amax,15min}$, $L_{Aeq,15min}$ & $L_{A90,15min}$ Noise Levels at Position A



Ref: 1456/SS1

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Comments:

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Plant Ref.	Description	Inlet/Outlet	Vol. (m^3/s)	Typical Length (mm)	Face Velocity (m/s)	Pressure Drop (Pa)	Insertion Loss (dB) at Octave Band Centre Frequency (Hz)							
							63	125	250	500	1k	2k	4k	8k
-	Existing Kitchen Extract Fan	Exhaust	-	1800	<4.5	<55	9	17	27	43	48	43	36	23