



The Sheridan Suite Oldham Road Manchester

Environmental Noise Impact Assessment Report

22616/ENIA1

18 March 2025

For:

The Sheridan Suite
371 Oldham Road
Manchester
M40 8RR



Environmental Noise Impact Assessment Report 22616/ENIA1

Document Control

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1.0 Introduction

An expansion of the Sheridan Suite events venue on Oldham Road, Manchester has been proposed so that it may also operate as a restaurant. The current events venue is used periodically (at most twice a week) and has a maximum capacity of approximately 2000 guests, the restaurant expansion would entail seven days a week operation with operations ending between 23:00 – 01:00 hours each night and would have a maximum capacity of approximately 700 guests.

Hann Tucker have been asked to undertake an acoustic survey to determine what noise impact this expansion will have on the surrounding properties. We will be primarily focusing on noise generated by additional plant, operational (music & internal) noise and noise from use of the car park.

This report presents the survey methodology and results. The survey data may be used as the bases for various acoustic assessment purposes.

2.0 Objectives

To establish background noise levels, by means of detailed critical period fully automated environmental noise monitoring, the existing A-weighted (dBA) L_{90} , L_{eq} and L_{max} environmental noise levels at a selected accessible street level position.

To establish existing source noise levels, by means of detailed critical period daytime and night-time fully manned environmental noise monitoring, the existing A-weighted (dBA) L_{90} , L_{eq} and L_{max} environmental noise levels at selected accessible street level positions in and around the site.

To measure L_{eq} , L_{90} and L_{max} octave band spectra noise levels during the daytime and night-time periods whilst the venue is in operation at each measurement position in order to obtain a more detailed description of the noise climate.

Based on the results of the noise survey, and with reference to the requirements of the Local Authority, to recommend suitable plant noise emission criteria.

To assess noise output from the proposed restaurant operations (including music & internal noise, road traffic and internal noise egress) to the nearest noise sensitive properties and comment upon the acceptability.

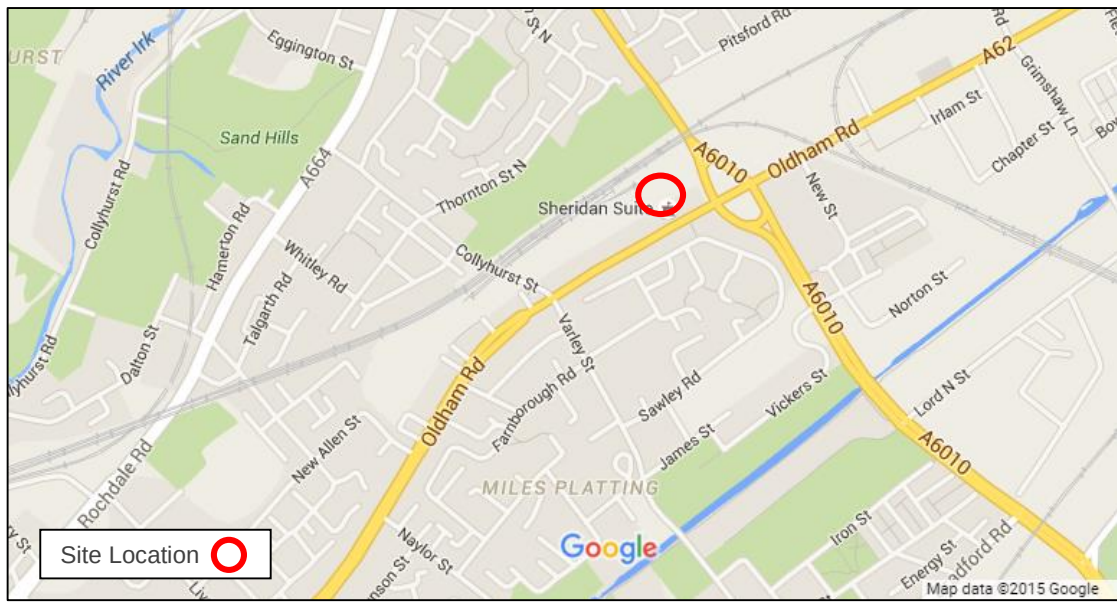


In the event of non-compliance, to propose measures to mitigate the noise as appropriate.

3.0 Site Description

3.1 Location

The site is located on Oldham Road, Manchester and falls within Manchester City Council's jurisdiction. See Location Map below.

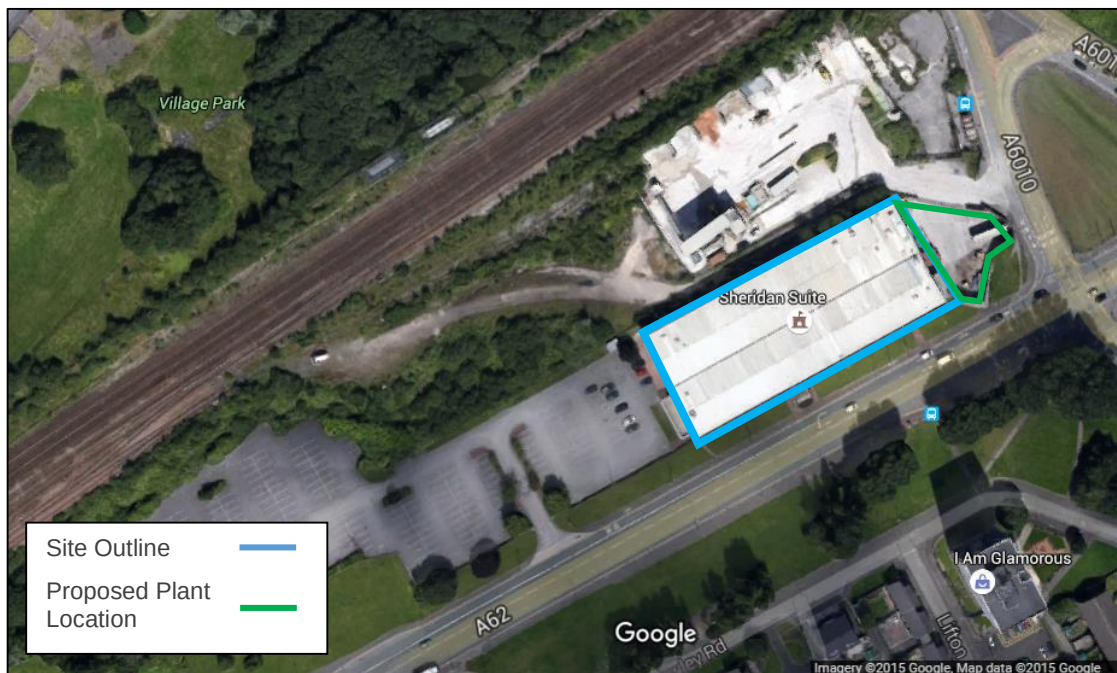


Location Map (Map Data ©2015 Google)

3.2 Description

The Sheridan Suite is situated along Oldham Road (A62), to the East is the junction of Oldham Road and Hulme Hall Lane (A6010) and to the South is Oldham Road and residential properties. To the North is a cement manufacturing facility and to the West is The Sheridan Suite car park.

To the North of the Sheridan Suite is a train line which has a combination of passenger (more frequent) and freight trains (less frequent) passby at an approximate frequency of one train every 20 minutes until 23:15 hours.



Site Plan (Imagery ©2015 Google, Map Data ©2015 Google)

4.0 Acoustic Terminology

For an explanation of the acoustic terminology used in this report please refer to Appendix A enclosed.

5.0 Relevant Standards & Legislation

5.1 Noise Policy Statement for England

The Government's Noise Policy Statement for England (March 2010) sets out the long term vision for Government noise policy, which is to "*Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development*".

The NPSE includes three primary aims to be achieved through effective management of environmental, neighbour and neighbourhood noise; (1) avoid "significant adverse" impacts on health and quality of life, (2) mitigate and minimise "adverse" impacts on health and quality of life, and (3) where possible, contribute to the improvement of health and quality of life.

5.2 National Planning Policy Framework

The National Planning Policy Framework (NPPF, March 2012) sets out the Government's planning policies for England and how these are expected to be applied. It sets out the



Government's requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

5.3 BS 4142:2014

BS 4142:2014 describes methods for rating and assessing the effects of outdoor sound levels, of an industrial and/or a commercial nature, *"on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident"*.

The impact of a specific sound is indicated by subtracting the existing background noise level from the rating level (i.e. noise level from the proposed items of plant/machinery/etc plus any acoustic feature corrections).

The standard states that:

- *"a difference of around +10dB or more is likely to be an indication of a significant adverse impact";*
- *"a difference of around +5dB is of marginal significance is likely to be an indication of 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".*

The noise from the new development is expressed in terms of a rating level and given as a $L_{Aeq, T}$ noise level. The existing background noise level is expressed in terms of a $L_{A90, T}$ noise level.

T is the assessment time interval, which is 1-hour for operations during daytime hours (07:00 to 23:00 hours) and 15-minutes for operations during night-time hours (23:00 to 07:00 hours).

A penalty should apply to plant emitting noise of a tonal, irregular or impulsive nature.

5.4 IoA Good Practice Guide on the Control of Noise from Pubs and Clubs

The Institute of Acoustics (IoA) present guidance on the control of noise from bars and restaurants in their "Good Practice on the Control of Noise from Pubs and Clubs". This document suggests the criteria should depend on the number of noisy events the pub will host per year. We understand The Sheridan Suite will operate throughout the week and may be active during the night-time hours (23:00 – 07:00 hours), therefore we would recommend the



following:-

- the broadband L_{Aeq} noise level from music should not exceed the prevailing L_{A90} ;
- the low frequency (one-third octave bands between 50-160Hz) L_{10} noise level from music should not exceed the L_{90} .

5.5 Calculation of Car Park Noise

In 2007, the Institute of Acoustics issued their latest draft version of their 'Draft Guidelines for Noise Impact Assessment'. The document describes a methodology for undertaking a noise impact assessment and a way of rating the significance of an impact based on the change in noise level. The impact significance (together with the subjective response for an average human) can be determined from the Table below, which is based largely on the IOA guide.

Noise Level Change (dB)	Subjective Response	Impact
0	No change	None
Up to 3	Barely perceptible	Minor
3 - 6	Noticeable	Moderate
6 - 10	Up to a doubling or halving of loudness	Significant
10 or more	More than a doubling or halving of loudness	Major

Unless stated, noise impacts are calculated outside the residential properties, although any subjective impacts apply to both internal and external noise levels (it is assumed the difference between the two, due to the sound insulation performance of the external residential façade, is constant).

5.6 Local Planning Authority Criteria – GD03 Environmental Information for Developers

5.6.1 Section 3.9.2 – Entertainment Venues

Noise from entertainment venues, for example noise from recorded music, live bands, or karaoke, can be particularly annoying for local residents and businesses if it is not adequately contained within the venue.

When considering the potential impact of a proposal for an entertainment venue consultants should consider the overall noise level (L_{Aeq}) and the 63 Hz and 125 Hz octave band noise levels (L_{eq}). Music noise in the 63 Hz and 125 Hz octave bands, which is often described as "bass noise", is particularly difficult to contain and the impulsive character of this low frequency music noise is particularly disturbing for local residents exposed to it.



A planning application for an entertainment venue should demonstrate that music noise from the proposal will not be audible inside residential properties nearby assuming that the residential properties in question have their windows open. The target noise criteria here should be 10dB (L_{Aeq}) below the existing L_{A90} in each octave band.

5.6.2 Section 3.9.4 – Noise and Vibration from Fixed Plant / Equipment

Noise from fixed plant, equipment or machinery can be very annoying and disruptive to people living nearby, particularly where that item involved emits a noise with impulsive or tonal characteristics. Many of the noise complaints EPP receive about noise from plant, equipment and machinery specifically concern the character of the noise emitted. Any noise survey needs to consider not only the overall level of noise emitted but also its particular characteristics.

Any application for fixed plant, equipment or machinery must demonstrate that the noise will:

- a) Achieve a noise level (L_{Aeq}) of at least 5 dB below the background noise level (L_{A90}) at the nearest noise sensitive location at the quietest time the equipment will be in operation; and
- b) Not contain any discernable tonal characteristics at the nearest noise sensitive location at the quietest time the equipment will be in operation.

With respect to part b) this can be achieved by providing product information from the manufacturer or supplier of the equipment demonstrating the equipment does not contain any significant tonal element. This information would ordinarily be in the form of octave band noise level data. Where information of this kind is not available a consultant may choose to measure the octave band noise levels generated by the equipment in question where the equipment has already been installed elsewhere.

6.0 Methodology

The survey was undertaken by Nathan Green BSc (Hons) AMIOA.

6.1 Unmanned Survey

6.1.1 Procedure

Fully automated environmental noise monitoring was undertaken from approximately 19:00 hours on Tuesday 1 December 2015 to 00:15 hours on Wednesday 2 December 2015. To establish background noise levels that are representative of the area around The Sheridan Suite.

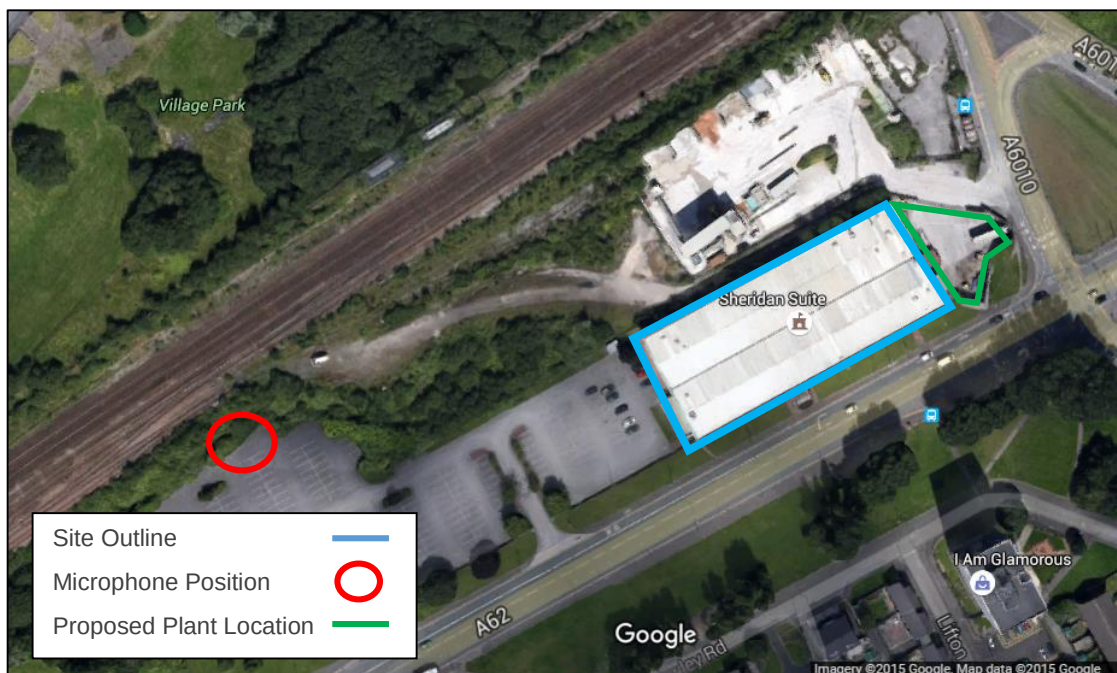


Measurements were taken continuously of the A-weighted (dBA) L_{90} , L_{eq} and L_{max} sound pressure levels over 15 minute periods.

During the survey period the wind conditions were calm and the sky was generally clear. There was no rain during the survey. Road surfaces were dry throughout the entirety of the survey period.

6.1.2 Measurement Position

The noise level measurements were undertaken at the selected position to assess typical background noise levels around the site. The microphone was attached to a pole and position approximately 2 metres above ground height and can be seen on the plan below.



Plan Showing Unmanned Measurement Positions (Imagery ©2015 Google Map Data ©2015 Google)

6.1.3 Instrumentation

The instrumentation used during the survey is presented in the table below:

Description	Manufacturer	Type	Serial Number	Latest Verification
Type 1 Data Logging Sound Level Meter	Larson Davis	824	3053	LD calibration on 22/08/2015
Type 1 Calibrator	Larson Davis	CAL200	3083	LD calibration on 20/04/2015



The sound level meter was located in an environmental case with the microphone connected to the sound level meter via an extension cable. The microphone was fitted with a Larson Davis windshield.

The sound level meter, including the extension cable, was calibrated prior to and on completion of the survey. No significant change was found to have occurred (no more than 0.1 dB).

6.2 Manned Survey

6.2.1 Procedure

Fully manned environmental noise monitoring was undertaken from approximately 19:00 hours on Tuesday 1 December 2015 to 00:10 hours on Wednesday 2 December 2015. To identify the existing noise contribution from current sources attributed The Sheridan Suite.

Measurements were taken of the A-weighted (dBA) L_{90} , L_{eq} and L_{max} sound pressure levels over periods of not less than 5 minutes with atypical noises were excluded as far as reasonably possible. The noise levels measured are therefore assumed to be representative of the noise climate during the hour in which the measurements were taken

In addition, at each position typical L_{90} , L_{eq} and L_{max} octave band spectra (from 63Hz to 8kHz) were taken during both the daytime and night-time period in order to gain a more detailed description of the prevailing noise climate.

6.2.2 Measurement Positions

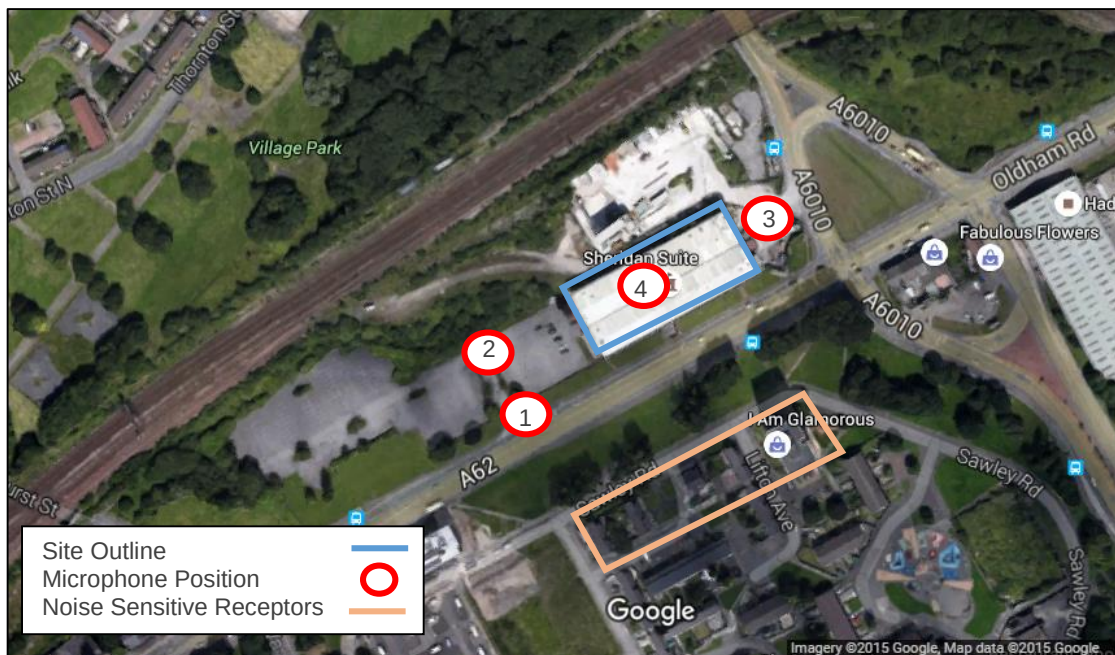
The noise level measurements were undertaken at 4No. positions around the development site. The measurement positions are described in the table below.

Position No	Reason	Description
1	To assess noise contribution from Oldham Road	The microphone was situated at the corner of the car park entrance and Oldham road. The microphone was at an approximate height of 1.2 – 1.5 metres.
2	To assess the noise contribution from The Sheridan Suite car park	The microphone was situated within the car park of the Sheridan Suite. The microphone was at an approximate height of 1.2 – 1.5 metres.
3	To assess the existing plant noise levels	The microphone was situated in the rear plant area of The Sheridan Suite. The microphone was at an approximate height of 1.2 – 1.5 metres.



Position No	Reason	Description
4	As assess the internal noise levels associated with running an event which includes amplified music	Measurements were taken inside the venue whilst the venue was in operation. For internal measurements a spatial average was taken with the microphone at an approximate height between 1.2 – 1.5 metres.

These positions have been selected to assess the noise levels from the car park, plant area and operational noise of the venue to see how they contribute to the overall noise climate, the selected manned positions are shown on the plan below.



Plan Showing Manned Measurement Positions (Imagery ©2015 Google Map Data ©2015 Google)

6.2.3 Instrumentation

The instrumentation used during the manned survey is presented in the table below:

Description	Manufacturer	Type	Serial Number	Calibration
Type 1 Precision Sound Level Meter	Brüel and Kjær	2250	2600445	B & K calibration on 14/01/2015
Type 1 Calibrator	Brüel and Kjær	4231	2642557	B & K calibration on 14/01/2015

The sound level meter was mounted on a tripod and was fitted with a Brüel and Kjær microphone windshield.



The sound level meter was calibrated prior to and on completion of the survey. No significant change was found to have occurred (no more than 0.2 dB).

7.0 Results

7.1 Results of Unmanned survey

The results have been plotted on Time History Graphs 22616/TH1 enclosed presenting the 15 minute A-weighted (dBA) L_{90} , L_{eq} and L_{max} levels at each measurement position throughout the duration of the survey.

The results from the daytime and Night-time period of the unmanned measurement are presented in the table below.

Time	Operation of Venue	Typical Sound Level (dB)		
		$L_{Aeq, 15min}$	$L_{Amax, 15min}$	$L_{A90, 15min}$
Evening (19:00 – 23:00)	In Operation	59	75	51
Night-time (23:00 – 23:45)	In Operation	56	69	48
Night-time (23:45 – 00:15)	Not in Operation	55	69	46

7.2 Results of Manned survey

The fully manned survey measurements which include the A-weighted (dBA) L_{90} , L_{eq} and L_{max} sound levels are recorded below.

Position	Time	Operation of Venue	Sound Level (dB)		
			L_{Aeq}	L_{A90}	L_{Amax}
1	19:03 – 19:08	In Operation	74	60	83
	22:45 – 22:50	In Operation	71	57	86
	23:34 – 23:40	In Operation	70	58	84
2	19:15 – 19:21	In Operation	60	56	79
	22:37 – 22:43	In Operation	59	51	76
	23:28 – 23:34	In Operation	65	53	88
	23:59 – 00:05	Not in Operation	58	50	71
3	19:30 – 19:32	In Operation	67	64	71
	22:09 – 22:14	In Operation	62	55	68
4	19:22 – 19:24	In Operation	76	72	83
	22:03 – 22:08	In Operation	76	67	86

The advice which is offered in sections 9.0 through 11.0 have been based on the following results as well as drawings issued to us by Fasciato Architects on Wednesday 25 November 2015 which are listed in the table below.



Author	Reference	Date
Fasciato Architects	Proposed GA's	25/11/2015
	Proposed Front Elevations	
	Proposed yard elevations	
	Proposed Rear Elevations	

8.0 Discussion Of Noise Climate

On arrival at the site at approximately 18:45 Oldham Road was very busy with a high volume of road traffic with only a small percentage of the overall cars moving into The Sheridan Suite car park. At this time the road traffic noise from Oldham Road was by far the dominant noise source within the area.

Traffic on Oldham Road reduced significantly between 19:00 – 20:00 hours and remained relatively low for the remaining duration of the survey.

For The Sheridan Suite car park the two busiest periods were between 18:45 – 19:30 hours, when the guests were arriving to the venue and 23:00 – 23:45 hours, when guests were leaving the venue.

When measuring outside at no point was music or other noise resulting from activity inside the building audible outside the venue however, on this evening a small number of guests were continually outside the main entrance of the building smoking. Whilst these guests would not be considered overtly loud or disruptive they were audible when in the car park and on The Sheridan Suite side of Oldham Road.

9.0 Plant Noise Emission Criteria

9.1 Proposed Limits

The existing plant which is located on the eastern façade of the building is inaudible at the nearest noise sensitive properties. Hence, based on Manchester City Council's criteria discussed in section 5.6.2, and the results of the environmental noise survey, we recommend that the following noise limits to be achieved by all new/replacement plant at 1 metre from the nearest noise sensitive residential window with all plant operating simultaneously.

Plant Noise Emission Criteria, L_{Aeq} (dB re 2×10^{-5} Pa)	
Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)
46	41



Upon selection of the plant penalties will need to be assessed and applied following BS 4142:2014 as mentioned in section 5.3.

9.2 Plant Data

We understand the following plant is proposed to be installed;

Function	Qty	Manufacturer	Model Number
Kitchen Supply Fan	1	JM Aerofoil	71JM/20/4/6/30
Display kitchen Extract Fan	1	JM Aerofoil	80JM/25/4/9/26
Main AHU	1	Teknogen	TKS 12X16
AHU Condensers	5	Daikin	ERQ250AW1
Office AC Units	3	Daikin	REYQ18T

The manufactures noise data per unit for the proposed plant is a follows;

Fan Description	Noise Source	Sound Power Level (dB re 1×10^{-12} W) per fan at design duty Octave Band Centre Frequency (Hz)							
		63	125	250	500	1k	2k	4k	8k
Kitchen Supply Fan	Inlet	83	87	86	85	81	91	77	73
	Outlet	85	88	86	86	82	81	78	74
	Breakout	75	67	60	61	57	53	58	51
Display kitchen Extract Fan	Inlet	90	82	85	88	88	83	80	76
	Outlet	92	82	85	87	88	83	81	77
	Breakout	82	61	59	62	63	55	61	54
Main AHU	Supply Inlet	88	87	84	80	78	79	65	51
	Supply Outlet	90	89	96	95	91	89	78	70
	Extract Inlet	92	91	98	99	96	92	84	77
	Extract Outlet	88	87	86	86	82	83	70	57
	Breakout	81	80	74	62	57	53	52	35
AHU Condensers	Breakout	78							
Office AC Units	Breakout	86							

*Assumed Sound Power Level

9.3 Assessment

In the following table we have calculated the combined sound pressure level of the proposed plant and determined the noise levels at the worst affected receiver.



Description	Sound Pressure Level (dB re 2x10 ⁻⁵ Pa) Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
SPL per unit at 10m	71	69	73	73	71	69	60	55	76
Distance Correction (80m)	-18	-18	-18	-18	-18	-18	-18	-18	
Façade Reflection	+3	+3	+3	+3	+3	+3	+3	+3	
Radiation Correction	+3	+3	+3	+3	+3	+3	+3	+3	
Resulting Noise Levels at Worst Affected Façade	59	57	61	61	59	57	48	43	64

It can be seen that the proposed plant will exceed the plant noise emission criteria in Section 9.1 by 18dB during the day and 23dB during the night-time. Appropriate mitigation measures will be discussed in the Section 9.4.

9.4 Noise Mitigation Measures

9.4.1 In-duct attenuation

In order to suitably control atmospheric plant noise emissions to the nearest residential façade windows, in-duct attenuators should be installed on the atmospheric side of each of the units inlet and exhaust.

The attenuators should achieve the following minimum insertion losses:

Plant Item	Noise Source	Minimum Insertion Loss (dB) at Octave Band Centre Frequency (Hz)							
		63	125	250	500	1k	2k	4k	8k
AHU	Supply Inlet	6	13	25	37	44	43	30	20
	Extract Outlet	6	13	25	37	44	43	30	20
Kitchen Supply	Inlet	9	17	29	46	50	50	49	37
Kitchen Extract	Outlet	9	17	29	46	50	50	49	37

The above insertion losses could typically be achieved with silencers of 1800mm in length and free areas of 40% and 30% respectively. The pressure drop across the unit must not exceed 50 Pa. and the face velocity should not exceed 3.5 m/s.



Ideally the attenuator should be installed at the grille with no intermediate ductwork between the attenuator and the grille. If this is not possible the attenuator and all intermediate ductwork to the grille should be lagged with a material consisting of 50mm mineral wool slab (minimum density 100kg/m³) and a complex laminate with an internal mass barrier (minimum 10kg/m²). A full specification and suitable suppliers list can be provided upon request.

It should be ensured that the attenuator supplier can guarantee the above insertion losses, particularly in the presence of any Melinex lining which is known to reduce the performance of attenuators.

9.4.2 Enclosures

We have calculated that the proposed office air conditioning condensers and AHU condensers will also need to be attenuated which we would expect to be in the form of an enclosure. For the Office AC condensers we would recommend enclosures for each unit which offer no less than 15dB of attenuation. As for the AHU condensers we would suggest enclosures for each unit that offer no less than 10dB of attenuation.

9.5 Discussion

With the aforementioned attenuation we believe the proposed plant selection will achieve the noise criteria determined in Section 9.1.

10.0 Operational Noise Impact Assessment

10.1 Overview

When operational, the proposed ground floor restaurant will generate noise due to both operating noise (kitchens, removal of bins etc) and we would assume that amplified music will also be present within the restaurant.

The two manned measurements at position 4No. were taken at the beginning of the event when guests were socialising and again later in the evening once the amplified music had begun. Each of the measurements demonstrated an L_{Aeq} of 76dB and L_{Amax} between 83 – 86dB. Immediately after each of these measurements a walk around the external perimeter of the building was undertaken and at no point was the internal operational noise of the building audible externally. Our calculations in the preceding section 10.2 assume higher noise levels than what were recorded in the events venue so that we can assure worst case noise levels can be suitably mitigated.



10.2 Internal Operational Noise Levels

We understand the development's restaurant space intends to be in operation between approximately 11:00 - 01:00hrs daily.

The operation of the restaurant will therefore have the potential to cause a noise impact to the nearby residential properties.

10.2.1 Anticipated Source Noise Levels

Hann Tucker Associates has previously undertaken noise level measurements within a restaurant with live music (excluding live percussion). The following table presents the typical reverberant noise levels measured.

Index	Reverberant Noise Level (dB) at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
L _{eq}	80	85	85	80	80	80	75	75	86
L ₁₀	85	90	90	85	85	85	80	80	91

10.2.2 Assessment

We have assessed noise breakout from the restaurant assuming, when live music is on, doors to the terrace and main entrance will be closed. We also assume the façade will comprise conventional thermal double glazing, the room itself will have a reasonable degree of soft furnishings and a sound absorbent ceiling, the roof will be solid concrete and the walls will be brick/block.

The nearest, most exposed noise sensitive receptors will be windows to living rooms and at the other side of Oldham Road approximately 60 metres away.

In accordance with the IOA guidelines, broadband L_{eq} noise levels should not exceed the prevailing background L₉₀ noise level and typical peak L₁₀ noise levels in the 63Hz and 125Hz octave bands should not exceed the corresponding background L₉₀ noise levels.

The following table presents our calculated resultant restaurant noise levels at these windows and compares the results against the lowest measured background noise levels from our survey. Calculation sheets are available upon request.



Index	Noise Level (dB) at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
Calculated L_{eq}	29	32	31	23	13	9	4	4	26
Background L_{90}	-	-	-	-	-	-	-	-	31
Exceedance	-	-	-	-	-	-	-	-	-
Calculated L_{10}	34	37	36	28	18	14	9	9	31
Background L_{90}	45	38	-	-	-	-	-	-	-
Exceedance	0	0	-	-	-	-	-	-	-

The results indicate noise breakout should comply with IOA guidelines in terms of broadband ambient noise levels, as well as the low frequency noise targets by 6dB in the 125Hz octave band.

Please note these calculations have been completed using the glazing specifications discussed in section 10.3.4

10.2.3 Mitigation Measures

In order to control low frequency noise output from the restaurant to within IOA guidelines, we would propose the following mitigation measures:-

10.2.4 Glazing to Restaurant

We would recommend an acoustically enhanced glazing system is used on the restaurant elevation facing the car park and residential properties on the other side of Oldham Road.

This glazing should achieve the following minimum sound reduction indices.

Element	Min. Sound Reduction Index, R (dB) at Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Restaurant Glazing	20	22	23	25	35	35	35	35

The above values could typically be achieved with a 6/16/6 double glazed configuration, although suppliers should be asked to demonstrate compliance with actual test data.



10.2.5 Noise Limiter

We would recommend the inclusion of a noise limiter within the restaurant. This limiter should be set to the following values:-

Noise Limiter Peak Noise Level (dB) at Octave Band Centre Frequency (Hz)								dBA
63	125	250	500	1k	2k	4k	8k	
95	95	95	90	90	90	90	90	95

This should still allow live music at reasonable noise levels within the restaurant room. When these limits are reached, the limiter should be capable of preventing further power to the loudspeakers (e.g. with an electronic compressor/limiter to the main audio output).

10.2.6 Room Management

Our assessment assumes the doors to the terrace off the main restaurant space are closed during live music performance. This should be strictly managed by the operator, particularly at night-time.

10.3 Guests outside of the venue

Guests will often congregate outside of a venue so that they may smoke or make phone calls etc. During our visit the guests were grouping at the entrance of the venue (western façade) which joins the car park. Whilst measurements were been taken to measure noise from the car park, whilst it should not be considered disrupting the guests outside the venue were audible.

Upon reviewing the drawings we understand that a new entrance will be constructed at the corner of the front façade and Oldham Road façade and it would therefore be fair to assume that guests would congregate around this area. We would advise that a smoking area be established elsewhere; perhaps towards the other end of the front façade to maximise the distance between guests and the nearest residential properties.

The IoA Good Practice Guide on the Control of Noise from Pubs and Clubs offers further suggestions on how to control the noise from beer gardens & smoking areas



11.0 Car Park Noise Assessment

11.1 Project Data

It is our understanding that currently no plans to expand the car park are being proposed. Also, no additional entrances or exit have been proposed meaning the flow of traffic in & out of the car park cannot rise significantly.

During the evening of our visit we observed that the carpark was approximately 50% full, our calculations will be based on the car park being at full capacity.

11.2 Assessment

The collected noise data expressed L_{Aeq} measured between 58-65 dB if the car park were operating at 100% capacity we can calculate that there will be a doubling of car park traffic resulting in noise levels between 61-68 dB.

As we believe the increased use of this car park should result in an increase of car park noise by approximately 3dB, this is considered as barely perceptible by the criteria set out in section 5.5. When this is compared with the pre-existing noise levels from Oldham Road (71dBA at 23:00 hours) the impact of the increased use of the car park would be considered as having no impact.

We would however note that with the operation of the events venue which results in the two surges in car park traffic. For the restaurant the traffic will be much more spread out throughout the evening which will result in longer durations of the evening/night-time being affected by traffic noise.

12.0 Conclusions

A detailed critical period daytime and night-time fully manned environmental noise survey has been undertaken in order to establish the currently prevailing street level environmental noise climate around the site.

A detailed critical period daytime and night-time fully automated environmental noise survey has been undertaken in order to establish the currently prevailing street level environmental noise climate around the site.

Plant noise emission criteria have been recommended based on the results of the noise survey and with reference to the requirements of the Local Authority.



The operational noise levels associated with the interior of the restaurant have been assessed and it has been found that noise levels can be suitably mitigated so that compliance with IoA guidelines and Manchester City Council criteria can be achieved at the nearest noise sensitive residents.

The increased use of The Sheridan Suite car park and its impact on the surrounding area has been assessed. It has been calculated whilst additional noise will be generated by the car park its contribution to the overall noise environment will have no more than a minimal impact.



Appendix A

The acoustic terms used in this report are defined as follows:

dB Decibel - Used as a measurement of sound level. Decibels are not an absolute unit of measurement but an expression of ratio between two quantities expressed in logarithmic form. The relationships between Decibel levels do not work in the same way that non-logarithmic (linear) numbers work (e.g. 30dB + 30dB = 33dB, not 60dB).

dBA The human ear is more susceptible to mid-frequency noise than the high and low frequencies. The 'A'-weighting scale approximates this response and allows sound levels to be expressed as an overall single figure value in dBA. The _A subscript is applied to an acoustical parameter to indicate the stated noise level is A-weighted

It should be noted that levels in dBA do not have a linear relationship to each other; for similar noises, a change in noise level of 10dBA represents a doubling or halving of subjective loudness. A change of 3dBA is just perceptible.

L_{90,T} L₉₀ is the noise level exceeded for 90% of the period *T* (i.e. the quietest 10% of the measurement) and is often used to describe the background noise level.

L_{eq,T} L_{eq,T} is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time period, *T*.

L_{max} L_{max} is the maximum sound pressure level recorded over the period stated. L_{max} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L_{eq} noise level.

L_p Sound Pressure Level (SPL) is the sound pressure relative to a standard reference pressure of 2×10^{-5} Pa. This level varies for a given source according to a number of factors (including but not limited to: distance from the source; positioning; screening and meteorological effects).

L_w Sound Power Level (SWL) is the total amount of sound energy inherent in a particular sound source, independent of its environment. It is a logarithmic measure of the sound power in comparison to a specified reference level (usually 10^{-12} W).