

PROPOSED STUDENT ACCOMMODATION
SITE AT 88-90 CARMOOR ROAD,
MANCHESTER, M13 0FB

Noise Impact Assessment
Addendum Report



Document History

Document Reference: 1700414-RP-NIA-0003 - Noise Impact Assessment - Addendum

Rev	Date	Comment	Author	Checked
1	February 2023	Design Team comments	GH	AJH
0	February 2023	Issued to client	GH	-

Contents

1.	Introduction.....	1
2.	Consultee Responses	2
2.1	West Indian Community Centre.....	2
2.2	Environmental Health	4
3.	Additional Baseline Noise Survey	5
3.1	Overview	5
3.2	Noise measurement Equipment	5
3.3	Weather Conditions.....	6
3.4	Noise Measurement Location	8
3.5	Measurement Results	10
3.5.1	Weekend 1 (Friday 27 th to 29 th January 2023)	10
3.5.2	Weekend 2 (Friday 3 rd to Sunday 5 th February 2023)	11
3.5.3	Weekend 3 (Friday 10 th to Sunday 12 th February 2023).....	12
3.6	Summary	13
4.	Assessment.....	14
4.1	Design Criterion	14
4.2	Assessment Location.....	14
4.3	Worst Case Data	15
4.4	Glazing.....	16
5.	Provision of Ventilation	19
5.1	Background Ventilation	19
5.2	Internal Noise Levels During the Overheating Condition	19
5.3	Purge Ventilation	19
6.	Conclusions.....	20
	Appendices	21
	Appendix A – Letter of Objection from the ACFCA	22
	Appendix B – Consultation Response from Environmental Health	23

Appendix C – Noise Survey Data	24
Appendix E – Report Limitations	32

1. INTRODUCTION

This addendum report has been produced to specifically respond to matters raised following submission of the original Noise Impact Assessment undertaken by MZA Acoustics for the proposed development of 88-90 Carmoor Road, Manchester, comprising the demolition of existing buildings and construction of purpose-built student accommodation with 172 beds in a mix of studio and cluster units alongside ancillary facilities and shared amenity space, site access and other associated works in a development of three to six storeys.

The documents that this Addendum Report specifically responds to are;

1. Letter of objection from the Afro Caribbean & Friends Community Association (ACFCA) in relation to the Community Centre located adjacent to the development site on Carmoor Road.
2. Environmental Health Consultee response dated 22nd December 2022

Full details of the development proposals, previous noise survey and assessment findings can be found in the original report referenced 1700414-RP-NIA-0002 'Proposed Student Accommodation at Carmoor Road, Manchester – Noise Impact Assessment Report' Rev 1, dated November 2022.

2. **CONSULTEE RESPONSES**

2.1 **West Indian Community Centre**

A letter of objection has been submitted by the Afro Caribbean & Friends Community Association (ACFCA) in relation to the West Indian Community Centre (WICC) located immediately north-west of the development site.

The letter of objection discusses various points, but only those in relation to noise are considered by this response. For ease of reference the section of the letter of objection headed 'noise' is repeated below.

Noise

ACFCA's Community Centre building has a Premises Licence that allows events to be held throughout the week from 9am into the early hours of the morning on each day of the week (Monday through to Sunday).

The Community Centre is used to host a range of events including, amongst others, weddings, funerals and other family and social functions, education sessions for adults and children, community markets, awareness campaigns and religious services.

The submitted Noise Impact Assessment Report has misreported the terms of the Premises Licence by under reporting the permitted hours for events at the Community Centre. In addition, the noise report was informed by a survey undertaken for just over 24 hours between 9.53am on Monday 10th October 2021 through to 11.04am on Tuesday 11th October 2021. This limited weekday survey was clearly not representative given the potential noise that might reasonably be expected to arise from a venue with such extensive hours of operation available both to host events and to permit the sale of alcohol.

It is inadequate for the applicant's consultant to suggest without explanation that events have been limited at the Community Centre in recent years. This is extremely insensitive since it ignores the impact of Covid lockdowns on the community and the fact that Black and Minority groups were amongst those most adversely affected by the pandemic.

Proper consideration of the potential for noise generation from the Community Centre is clearly germane to the Council's consideration of the planning application since its findings should inform the applicant's design proposals and requisite acoustic treatment of the proposed development to ensure acceptable levels of amenity for future student residents.

Despite this context, the noise consultant's report acknowledged that its limited assessment of noise from the Community Centre building had, 'not been informed by measurement of noise levels at an event.' This is a serious oversight, and we respectfully request that the applicant be required by the Council to carry out appropriate noise surveys of a representative night-time event and a Sunday morning religious service at the Community Centre building.

The key points are summarised below;

1. The WICC holds a Premises Licence (issued by Manchester City Council) enabling the use of the premises for events.
2. The licence enables use of the premises for events between 09:00 and 03:30 Monday to Saturday and 09:00 to 02:30 on Sundays, and that events must accord with the requirements of the licence.
3. The letter of objection states that the permitted hours for events have been misreported in the original noise assessment.
4. The baseline noise survey in the original report was not considered sufficiently representative of potential noise from events

Key points are responded to in more detail later in the report but for ease the following can be immediately discounted;

1. It is accepted the venue holds a Premises licence and this is acknowledged within the original report
2. Again, the licence and conditioned hours of use are accepted and not in dispute.
3. This has been checked and the times stated in the original report are indeed correct, noting that the hours stated in Section 5.1.1 are for the sales of alcohol and the following paragraph states that the premises can remain open for a period of 30 minutes after the sale of alcohol ceases, thus mirroring the times stated above.

It is acknowledged that the original noise survey sought to cover a typical midweek period as no events at the WICC were identified through the various website and social media pages checked at that time.

In light of the comments an additional survey has been conducted at the site covering 3 consecutive weekend periods. This is discussed in more detail in Section 3 of this Report.

The full letter of objection from the ACFCA is provided in Appendix A.

2.2 Environmental Health

The consultee response from Manchester City Councils Environmental Health Team recommended conditions as set out below;

1. Provision of a Demolition / Construction Management Plan.
2. Demolition / Construction Hours of working.
3. NSE1 Ground Floor Gym – provision of sound insulation scheme and numerical targets in relation to the proposed gym. Noise targets are also stated.
4. NSE4(b) Residential Sound Insulation AND Overheating – requirement for a scheme of sound insulation to be submitted to and approved by the local planning authority. Noise targets are also stated.
5. NSE6 External Plant / equipment / servicing – requirement for a scheme of noise control applied to externally mounted plant / equipment to be submitted to and approved by the local planning authority. Noise targets are also stated.
6. Refuse – requirement for scheme for storage and disposal of refuse to be agreed.

Items 1 and 2 are relating to demolition / construction noise and are considered appropriate.

Item 3 appears to be targeted more towards a commercial gym facility. The gym at the proposed development is for occupant use only and not a commercial operation. It is therefore considered that the condition is unwarranted, and the planning consultants (Maddox) will be submitted more detailed information about the proposed use of the gym in due course.

Item 4 seems to ignore the fact that an assessment was provided within the original noise impact assessment and therefore seems to require the resubmission of information that has already been provided to Manchester City Council.

It is therefore requested that MCC review the proposals in the original noise impact assessment report and advise whether these are considered acceptable, and therefore avoid an unnecessary condition. It is accepted that a condition requiring the adoption of those measures may be appropriate, and where an alternative approach is proposed, this would require approval from the LPA to deviate from the previously agreed strategy.

Item 5 is a standard condition applied by MCC, and given the plant / equipment information is not available at this time it is considered appropriate to condition this item.

Item 6 is not considered to be a noise issue and therefore not covered by this response.

The full consultation response from the Environmental Health Department is provided in Appendix B.

3. ADDITIONAL BASELINE NOISE SURVEY

3.1 Overview

An additional baseline noise survey has been undertaken by MZA, specifically aimed at measuring noise during events at the WICC.

The equipment was installed on Friday 27th January 2023 and covers the three consecutive weekends noted below;

1. Friday 27th to Sunday 29th January;
2. Friday 3rd to Sunday 5th February and
3. Friday 10th to Sunday 12th February.

3.2 Noise measurement Equipment

Noise measurements were undertaken using the Class 1 specification noise measurement equipment detailed in **Table 1**.

Item	Make & Model	Serial Number	Calibration Due Date
Sound Level Meter	01dB CUBE	14240	29/05/2024
Pre-amplifier	01dB PRE22	2138129	
Microphone	GRAS 40CD 1/2" Pre-polarised free-field	367230	
Calibrator	Cirrus CR:515	93522	26/10/2023

Table 1 - Details of Sound Measurement Equipment

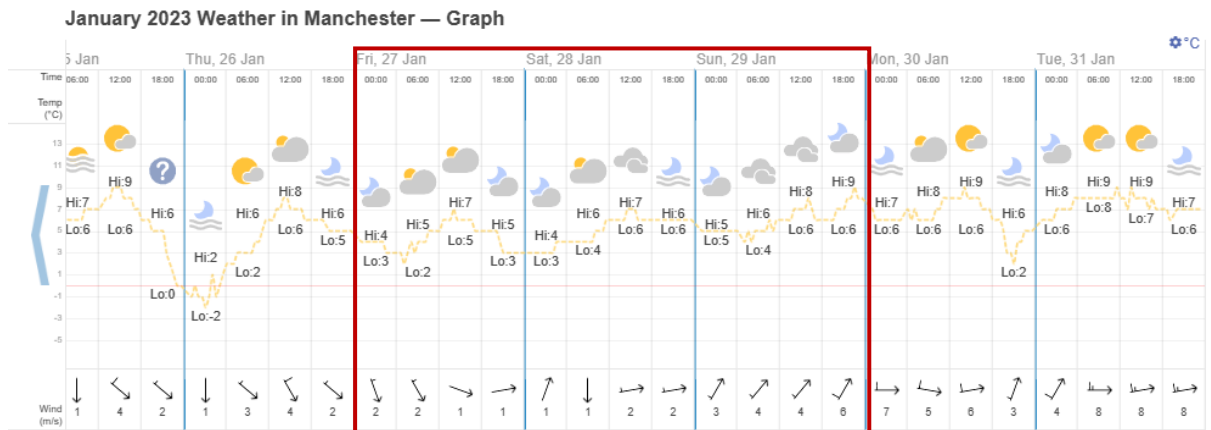
The sound level meter, pre-amplifier and microphone were calibrated to traceable standards within the 24 months prior to the measurements. The portable calibrator used was calibrated within the 12 months preceding the date of the survey.

All equipment was field calibrated before and after the measurement survey and no significant drift (<0.5 dB) was noted.

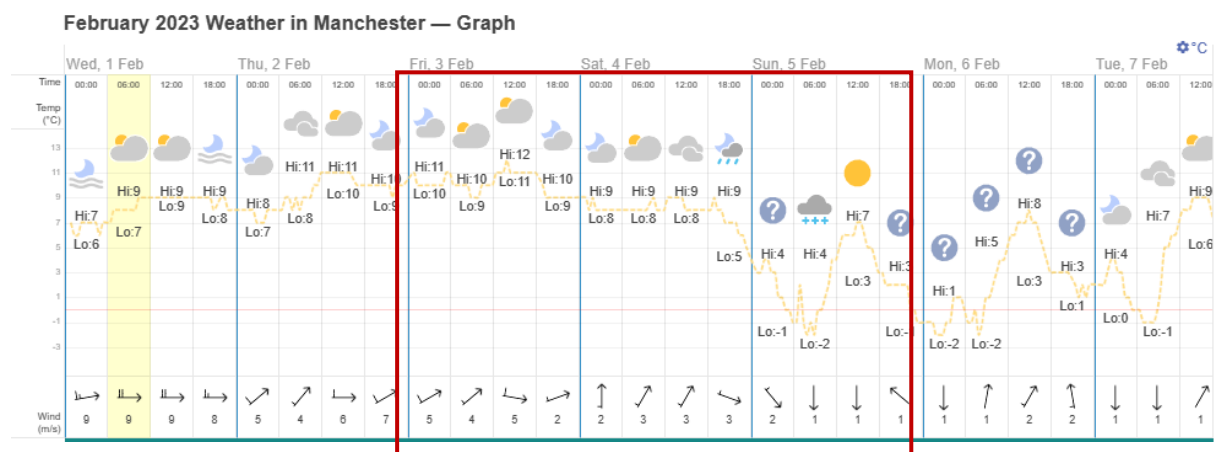
3.3 Weather Conditions

The weather conditions have been noted as follows;

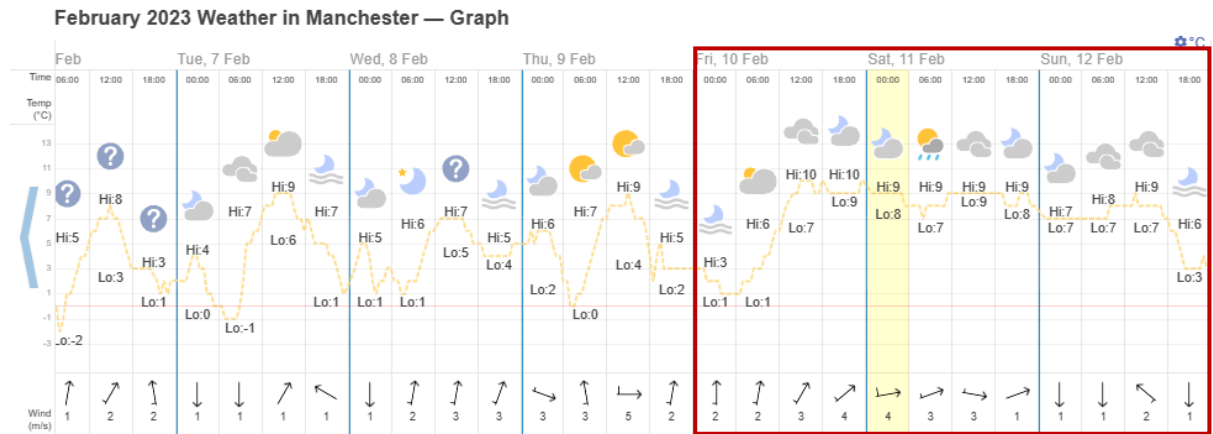
1. Friday 27th to Sunday 29th January;



2. Friday 3rd to Sunday 5th February;



3. Friday 10th to Sunday 12th February.



Windspeeds should ideally be below 5m/s for environmental noise surveys. The data presented above is from the Manchester Airport weather station and therefore more exposed than the site in question. It is considered therefore that windspeeds would have been within acceptable limits through the survey.

Whilst rain is noted on the above for Saturday the 11th February, local weather stations on the Wundermap website (IMANCH115 and IMANCHES66) report no rainfall on the day in question.

3.4 Noise Measurement Location

A single, unattended measurement position was used during the extend of the survey.

The microphone was installed out of a first-floor dormer window of the existing nursery dwelling on Carmoor Road on the north-west façade. The microphone was installed at circa 4.5 m above ground level and at 1 m from the building façade. The location of the measurement position is indicated by the red dot on the floor plan in **Figure 1** below. Photographs of the measurement position and environs are presented in **Figures 2** and **3**.

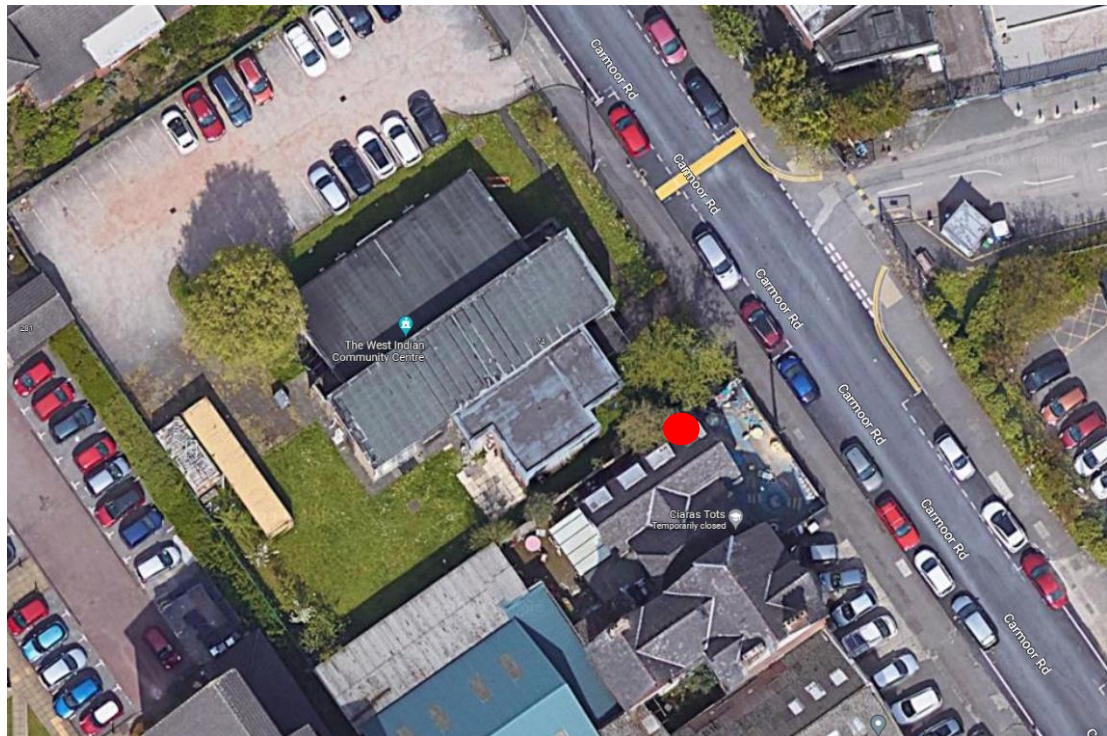


Figure 1 - Noise Measurement Position (shown in red)



Figure 2 - Noise Measurement Position (shown in red)



Figure 3 - Noise Measurement Position Photographs (Internal)

3.5 Measurement Results

A summary of measured sound pressure levels at the measurement position are presented below.

The full time-history of measured sound levels are presented in **Appendix B**.

3.5.1 Weekend 1 (Friday 27th to 29th January 2023)

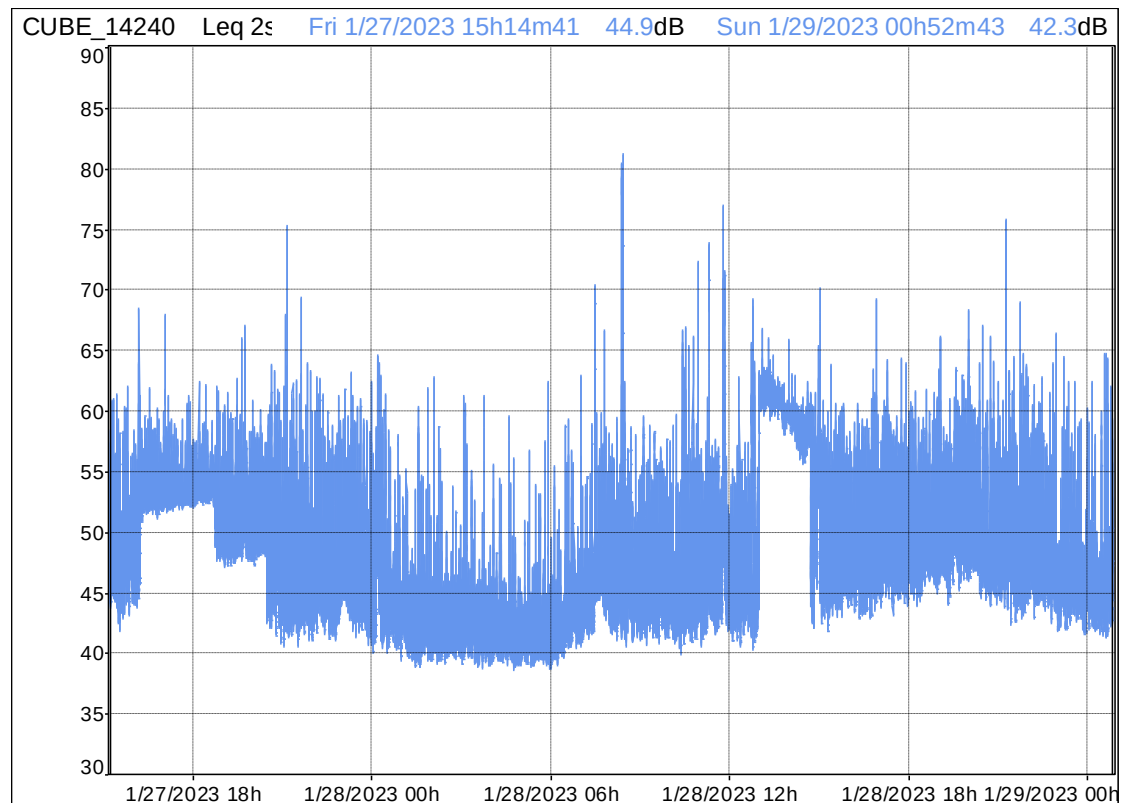


Figure 4 – Measured Noise Levels Weekend 1

The survey identified prolonged elevated noise levels between the following periods;

- Friday
 - 16:15 to 18:45 approximately $L_{Aeq,30mins}$ 54dB.
 - 18:45 to 20:30 approximately $L_{Aeq,30mins}$ 52dB
- Saturday
 - 13:00 to 14:50 starts about $L_{Aeq,39mins}$ 62dB and gradually reduces.

Note – measurements ceased on the early hours of Sunday morning due to a battery failure.

3.5.2 Weekend 2 (Friday 3rd to Sunday 5th February 2023)

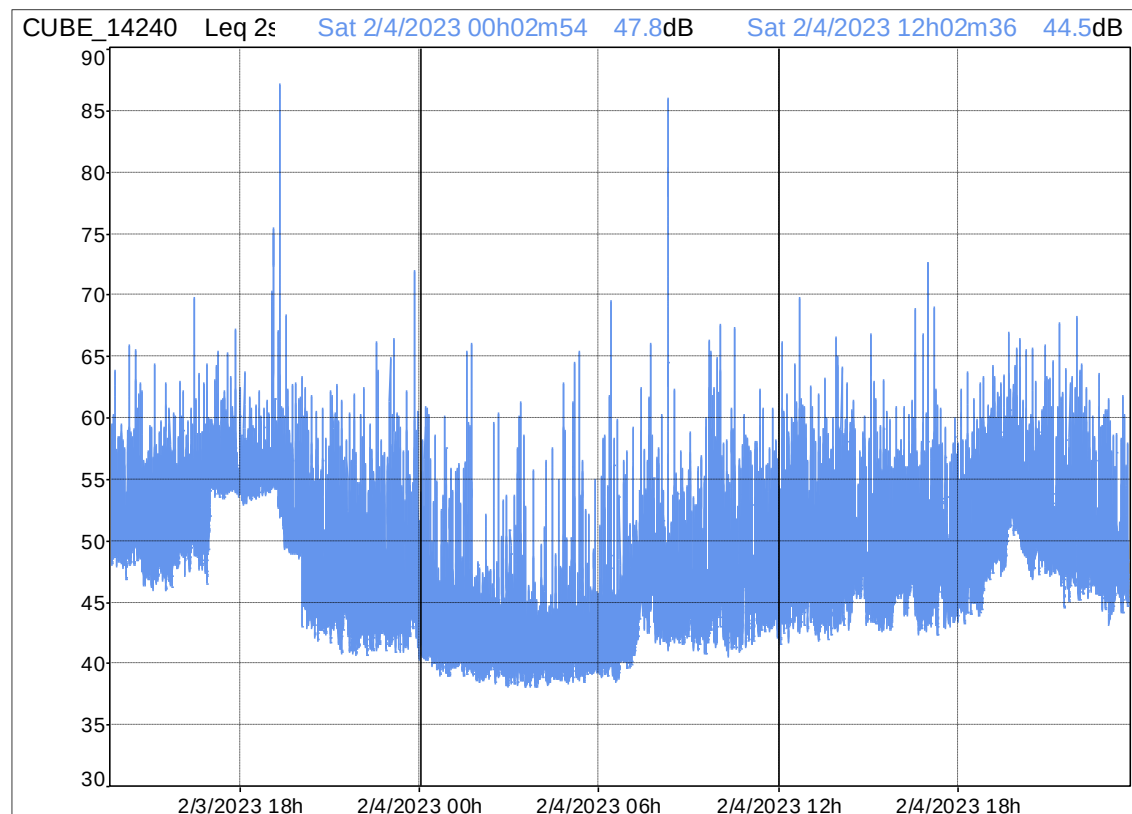


Figure 5 – Measured Noise Levels Weekend 2

The survey identified prolonged elevated noise levels between the following periods;

- Friday
 - 17:00 to 19:30 approximately $L_{Aeq,30mins}$ 55dB.
 - 19:30 to 20:10 approximately $L_{Aeq,30mins}$ 52dB
- Saturday
 - No clear events identified.

Note – measurements ceased on the early hours of Sunday morning again due to a battery failure (traced to the modem not disconnecting). Equipment removed midweek and reinstalled when rectified.

3.5.3 Weekend 3 (Friday 10th to Sunday 12th February 2023)

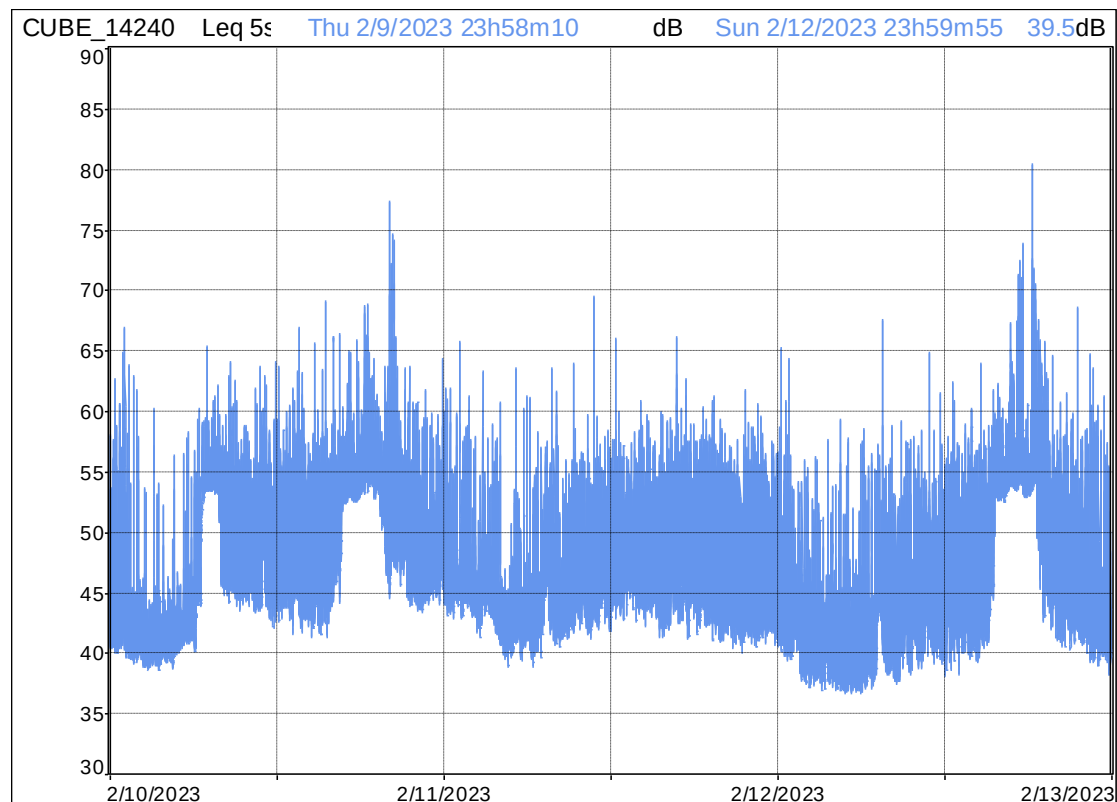


Figure 6 – Measured Noise Levels Weekend 3

The survey identified prolonged elevated noise levels between the following periods;

- Friday
 - 06:30 to 07:30 approximately $L_{Aeq,30mins}$ 55dB[#].
 - 16:45 to 20:00 approximately $L_{Aeq,30mins}$ 55dB.
- Saturday
 - No clear events identified.
- Sunday
 - 15:30 to 19:00 up to $L_{Aeq,30mins}$ 60dB

[#] - The spectrum shape for the event early on the Friday morning is very similar to the other events and therefore considered most likely to be emanating from the WICC. However, it is noted that this period is outside the hours covered by the Premises Licence and therefore would need to be verified.

3.6 Summary

A summary of the findings of the baseline noise survey are presented below;

1. On each of the three weekends there appeared to be a regular event on a Friday afternoon / evening broadly between 5pm and 8pm and typically at approximately $L_{Aeq,30mins}$ 55dB for the bulk of the event and often with a slightly reduced noise level just before the finish. It is not clear if this is due to a reduction in noise levels during the event or whether it is due to windows / doors being open at the start of the event and closed towards the end.
2. Over the three weekends there was only 1 period of elevated noise considered to be potentially from an event at the WICC. This was in the early afternoon of 28th January and started off slightly noisier than the Friday evening events but finished at a similar level.
3. Unfortunately, a full Sunday period was only covered in the third weekend of monitoring. This identified an event between 15:30 and 19:00. This was at a similar level to the event recorded on Saturday 28th January.
4. The elevated noise levels identified on the Friday morning (10th February) appear to be a similar level and spectrum shape to the other events but would be outside the permitted hours of use for the premises and therefore require confirmation from WICC.

4. ASSESSMENT

4.1 Design Criterion

It is expected that noise from the WICC would be considered as 'Entertainment noise' under the various types of noise that are listed in the Manchester City Council 'Planning and Noise – Technical Guidance' dated October 2022.

In relation to this type of noise, the guidance identifies;

Therefore, a criterion that would achieve a condition of 'inaudible' / 'virtually inaudible' which is applicable for new residential developments that are structurally connected to entertainment venues (or vice versa) would be:

'Music noise levels in the 63Hz and 125Hz octave centre frequency bands (Leq) should be controlled so as not to exceed (in habitable rooms) 47dB and 41dB (Leq,5min), respectively'.

This criterion may also be applicable for new residential developments that are structurally separate from an existing entertainment venue.

The proposed development is structurally separate to the WICC but the third paragraph indicates that this is also likely to be applicable for this scenario.

Therefore this criterion will be applied to the assessment of noise from the WICC premises, based upon the measured noise levels, irrespective of time of day.

4.2 Assessment Location

For the purposes of this assessment it has been assumed the build line of the new development will be broadly identical to the existing measurement position and as such no correction to the measured noise levels has been applied.

The highest measured $L_{eq,5min}$ octave band noise levels would also be used in a noise break in calculation for a typical studio bedroom, to determine the resultant internal noise levels within windows closed.

4.3 Worst Case Data

The highest measured $L_{Aeq,30mins}$ noise levels that were identified to occur on 3rd February 2023 at 19:00, resulting in a level of just under 64dB.

However, detailed analysis of the data included a spike at 19:21 which was mostly in the 2kHz to 4kHz range with minimal energy at other frequencies. Therefore, this is concluded to be an emergency siren. Judging by the gradual increase, short spike, then decrease it is assumed this emergency vehicle passed the site without stopping, and therefore should be discounted from the assessment.

The next highest measured $L_{Aeq,30mins}$ noise levels (without a siren present) that are considered to be attributable to activity at the WICC only were identified to occur on 28th January 2023 at 13:00, resulting in a level of just under 62dB.

This period is shown below;

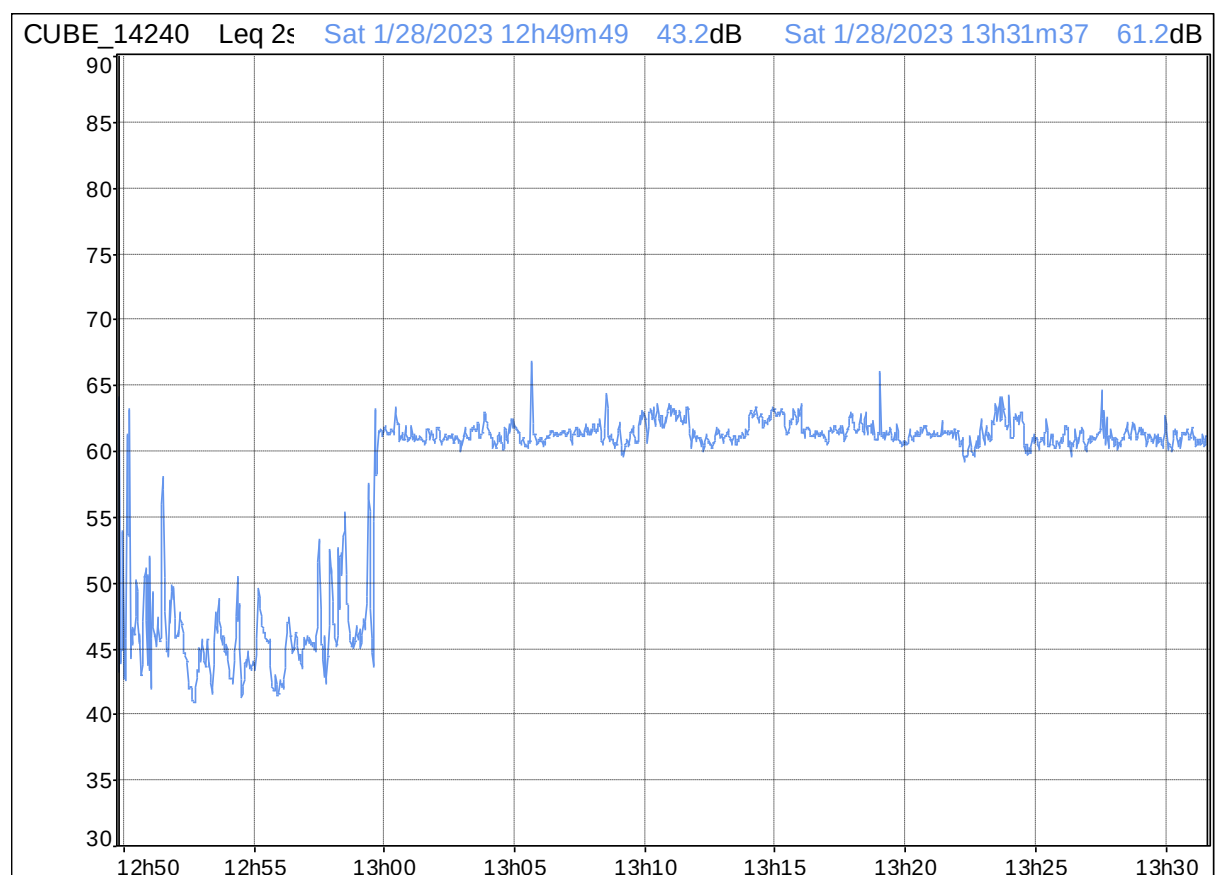


Figure 7 – Highest Measured Noise Levels Over All Weekends

The consistent levels recorded during this period would indicate that the source is music, rather than people standing outside. This is confirmed by looking at the frequency content, with sufficient energy in the low frequencies, which are outside the range of human speech.

The highest measured $L_{eq,5mins}$ octave band noise levels during this period have been determined to be as shown below;

Table 2 – Octave Band $L_{eq,5mins}$ Levels for Assessment

Measured Incident Sound Level (Free field)	63	125	250	500	1000	2000	4000	8000	dB(A)
L_{Aeq} Night Time	76.6	64.6	55.7	53.6	55.1	55.8	54.5	43.4	61.9

These octave band noise levels have been used in a noise break in calculation for a typical studio bedroom, to determine the resultant internal noise levels within windows closed.

4.4 Glazing

Typically, the glazing and the ventilation elements will be the weakest acoustical elements in the façade of a building.

The solid element of the façade has been assumed to be a brick outer leaf with SFS internal leaf lined internally with min 2 x 12.5mm plasterboard linings. As such the glazing on its own would need to achieve the following;

- Minimum SRI at 63Hz $\geq$ 30dB
- Minimum SRI at 125Hz $\geq$ 25dB

A calculation, in accordance with BS 12354-3, has been undertaken to establish the performance requirements for the glazed elements of the façade. The break-in calculations are based on the external levels as measured on site, and the internal noise level targets summarised in **Section 4.1**.

Based on the above the minimum composite performance for the façade of bedrooms overlooking the WICC would need to be;

- Minimum SRI at 63Hz $\geq$ 33dB
- Minimum SRI at 125Hz $\geq$ 26dB

Table 3 - Glazing performance requirements

Location	Glazing Performance & Indicative System Type
All elevations (except those adjacent to the WIOCC)	Noise levels are sufficiently low that basic thermal double glazing will suffice to meet the acoustic requirement. It is considered likely that other factors (thermal, solar performance) will drive the specification of the glazing, ensuring the acoustic performance is met by default. An example acoustic performance for standard thermal double glazing may be: 33 dB R_w 6 mm glass / 12 mm air / 4 mm glass
Enhanced Specification for Elevations Adjacent to the WIOCC	Minimum SRI at 63Hz ≥ 33dB; and Minimum SRI at 125Hz ≥ 26dB

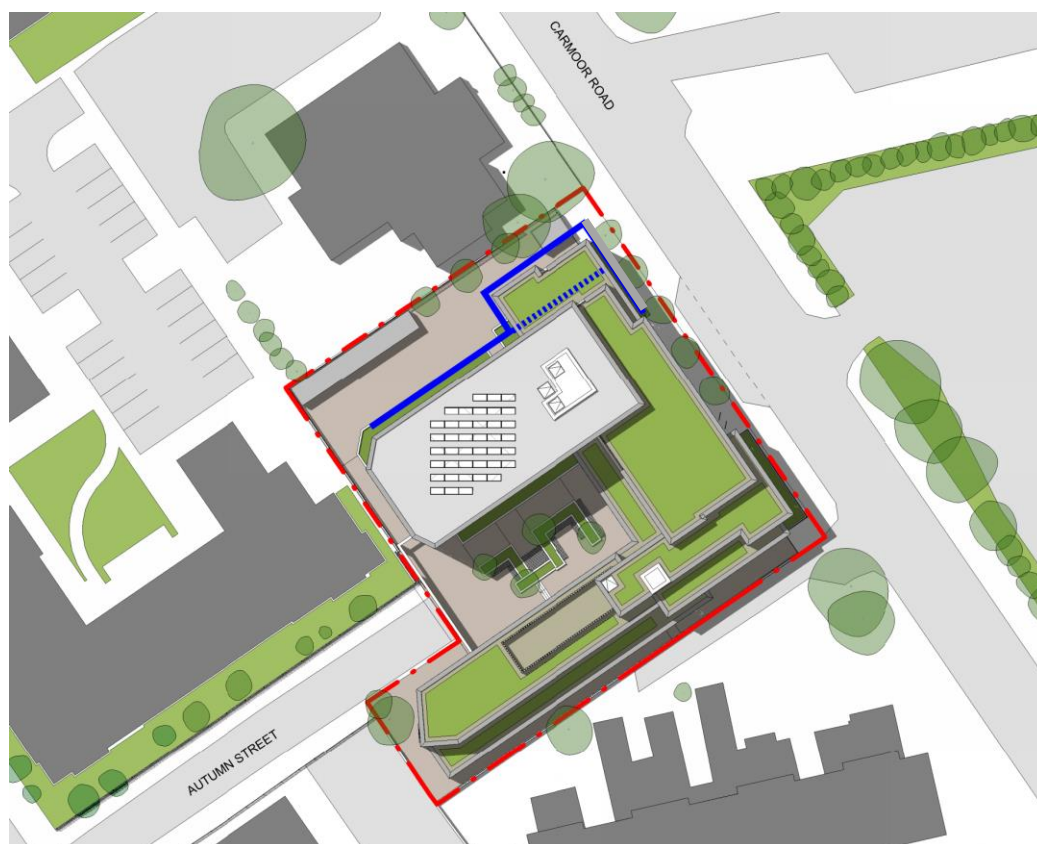


Figure 8 – Extent of Enhanced Specification of Glazing (shown in blue)

The difficulty with this specification is that the 63Hz octave band falls outside the range covered by the relevant testing standards, and therefore most test bodies will not test at 63Hz or if they do they will heavily caveat the results stated as being for information purposes only.

Based on the MZA Acoustics library of test data for glazing the required level of performance (at both 63 and 125Hz) can be achieved by the following glazing configurations;

1. Saint Gobain double glazed unit - 10.8mm Stadip Silence, 16mm airgap, 8mm Planiclear
2. Saint Gobain double glazed unit – 9.5mm Stadip Silence, 20mm airgap, 6mm Planiclear
3. Saint Gobain triple glazed unit - 8.8mm Stadip, 12mm airgap, 6mm Planiclear, 12mm airgap 6.4mm Stadip

The above data is based on the glass on its own. It must be ensured that the frame in combination with the glass achieves this level of performance.

The above will need to be checked against other requirements (e.g. thermal / security etc).

It should also be noted that the acoustic performance specification could be met by glazing with alternate configurations to those presented in the above table provided the acoustic performance requirements are met.

Additionally, the minimum requirements in **Table 3** also rely on noise break-in through fresh air paths to be controlled.

While it is understood that the development will be mechanically ventilated (via mechanical ventilation with heat recovery (MVHR) units, and therefore trickle ventilators will not be required. It has been determined that attenuators are not required to the MVHR ductwork where standard glazing units are specified. It is recommended that minimum 500mm long MVHR attenuator (220mm x 90mm) be included on elevations overlooking the WICC (such as Domus 9SL-500) in order to account for potential noise during licenced events.

Glazing specifications may need to be higher to account for solar / thermal requirements and it is recommended that these are checked with the relevant consultants.

5. PROVISION OF VENTILATION

The following ventilation proposals remain as per the original design, but have been considered in line with the extended noise survey results.

5.1 Background Ventilation

Background ventilation will be provided by a mechanical system (MVHR). This avoids the need for passive trickle ventilators. The proposed system will provide background ventilation together with a boost mode to increase ventilation rates as and when required.

In order to maintain the internal noise levels, the supply and extract ductwork must be provided with a minimum of 1m long acoustic flexi ductwork (the performance to match or exceed that of Lindab Akucom flexible duct silencer - 100mm dia ducting).

5.2 Internal Noise Levels During the Overheating Condition

Given the above assessment assumes windows closed during an event at the WICC is required to achieve internal noise criteria, consideration needs to be given to the overheating condition, when windows may need to be opened.

The mechanical consultants for the scheme (FutureServ) have undertaken an overheating assessment for the scheme and identified as below;

- Windows can remain closed in all bedrooms for the entire night-time period (23:00 to 07:00), and overheating does not occur based on the appropriate weather files etc
- During the hottest periods windows to bedrooms can be closed for between 3 to 4 hours per day (and remain closed all night) and still not overheat.

On the basis of the above, and based on the typical duration and timing of events at the WICC, it is considered that occupants in rooms most likely to be affected by noise during an event have the ability to close windows, and avoid overheating.

5.3 Purge Ventilation

Section 4.15 of Approved Document F of the Building Regulations suggests that, in addition to a normal ventilation rate, a higher 'purge' ventilation is also required to "...aid removal of high concentrations of pollutants and water vapour released from occasional activities such as painting and decorating or accidental releases such as smoke from burnt food or spillage of water."

Based on the above and considering the short periods and infrequent nature that this higher ventilation rates would be required, it is usually considered acceptable for windows to be opened. There is a general precedent that external sound levels should not determine the acceptability of opening windows to provide intermittent, occasional and ad-hoc, ventilation in cases such as those described above.

6. CONCLUSIONS

An extended baseline noise survey has been undertaken to better quantify the impact of noise from the WICC.

The noise survey was conducted over three consecutive weekends and identified elevated noise levels over the daytime and evening for periods of up to 3 hours.

However it is noted the licence conditions permit events to be held in the night-time period, through to the early hours of the morning.

MZA Acoustics have used the design criteria set out by MCC, based on the loudest 5 min L_{eq} octave band noise levels identified during an event. This data has been used to provide an updated glazing / window specification for bedrooms on the northern elevation facing the WICC.

In addition acoustic attenuation is required to the inlet and exhaust paths of the MVHR ventilation systems in order to ensure internal noise levels are maintained whilst providing adequate ventilation whilst windows are closed.

Finally this strategy has been tested during an overheating scenario, where it has been confirmed that windows can remain closed all night (23:00 to 07:00) and for a period of up to 3 to 4 hours during the daytime, and ensure that dwellings do not overheat.

Therefore occupants will be able to close windows all night, and if events occur during the daytime (as identified in the survey) close windows for the typical identified duration of those events, and still avoid excessive heat build-up.

In light of the above it is considered that acceptable internal conditions can be maintained, without affecting the operations of the WICC in accordance with their license conditions.

The limitations to this report, in addition to those limits and assumptions identified within the main text are presented in **Appendix D**.

Appendices

Appendix A – Letter of Objection from the ACFCA

The Afro Caribbean & Friends Community Association (ACFCA) has instructed me to prepare and submit this letter of objection to the above proposals and to represent them in this matter.

Given the identified shortcomings in the Tiger Development Limited's planning application submission ACFCA reserves the right to make further representations in response to any future additional information submitted on behalf of the applicant.

Background

The application proposals would introduce a significant number of new neighbours adjacent to the ACFCA Community Centre building on Carmoor Road and this must be properly evaluated before the planning application can be determined.

ACFCA operates to promote and develop the social, cultural, and economic wellbeing of the Afro Caribbean people of all ages across Greater Manchester but with an emphasis on working with the under privileged young.

ACFCA is a self-funded charitable organisation run by volunteers that relies on income derived from the long-established Community Centre building on Carmoor Road.

The building is used throughout the week both during the daytime and on evenings to host events held by community organisations, members and friends, this use includes the hire of the hall and ancillary facilities for social gatherings and celebrations.

A Premises Licence allows the sale of alcohol at the Community Centre building between 9am and 3am Monday to Saturday and from 9am and 2am on Sundays. It also permits events with live and recorded music and dance between to be held at the Community Centre between 9am and 3.30am Monday to Saturday and between 9am and 2.30am on Sundays. Thus, in accord with the terms and requirements of the license, events can take place beyond midnight and well into the early hours of the morning throughout the week.

The Covid pandemic has impacted significantly on the third sector and the ACFCA's operations have also suffered. Nonetheless, ACFCA has taken stock and has developed a business plan which is intended both to ensure optimal use of the building and to deliver a diverse range of community activities. These planned initiatives include, amongst others, an upgraded Community Garden utilising the land around the building for organic gardening to benefit members, friends, visitors – including those referred as part of the NHS prescribing process.

The revamped garden will be an organic, bio-diverse, carbon capturing environment designed to be drought tolerant, self-fertilising and therefore highly sustainable. The Community Garden will be a focal point for ACFCA members, friends, and visitors. It will allow them to hold social events and to host organic horticultural classes to demonstrate, encourage and support members of the community to grow their own food, as well as learning the importance of biodiversity, climate control, and food recycling for use as garden nutrients. This will serve as an exemplar project to inform best practice in gardens and community areas across Manchester. The benefits of

gardening for mental health and general well-being of living in nature are well documented. The garden will be an important local hub for all the above purposes.

Understandably ACFCA need to ensure that the Community Garden will not be adversely affected because of any reduction in natural daylight that might reasonably be expected to arise from development of the application proposals. Plants have been purchased, and those that have been chosen, have been selected specifically for their suitability and tolerance to current light levels and environment throughout the year. Without sufficient daylight plants may fail and become less healthy and nutritious and will be more prone to disease – all of which would deter people from attending the garden and organic growing classes.

ACFCA is concerned that Tiger Development Limited's planning application proposals have not been informed by informed and objective assessment of its present and proposed operation of the Community Centre building. Consequently, there is a significant risk that in the absence of such assessment development of the scheme proposals and introduction of a significant student accommodation adjacent to the Community Centre building could impact adversely upon its vital and continued function as a valued community facility in the city.

The Application Proposals – Identified Shortcomings

Having reviewed Tiger Development Limited's planning application proposals, ACFCFA is concerned that the scheme proposals do not appear to have taken proper account of the present and future operation of the Community Centre building to ensure that the proposed development can be accommodated without detriment to ACFCFA's vital and continued community function.

Manchester's Core Strategy policies DM1 and SP1 both require application proposals to be properly evaluated and justified to ensure that proposed developments can be accommodated without unacceptable environmental impacts.

Unfortunately, the planning application submission has neither been informed by prior visit to ACFCFA's Community Centre building nor by detailed assessment of potential environmental impacts that the proposed development might have on its immediate neighbour.

Noise

ACFCFA's Community Centre building has a Premises Licence that allows events to be held throughout the week from 9am into the early hours of the morning on each day of the week (Monday through to Sunday).

T

he Community Centre is used to host a range of events including, amongst others, weddings, funerals and other family and social functions, education sessions for adults and children, community markets, awareness campaigns and religious services.

The submitted Noise Impact Assessment Report has misreported the terms of the Premises Licence by under reporting the permitted hours for events at the

Community Centre. In addition, the noise report was informed by a survey undertaken for just over 24 hours between 9.53am on Monday 10th October 2021 through to 11.04am on Tuesday 11th October 2021. This limited weekday survey was clearly not representative given the potential noise that might reasonably be expected to arise from a venue with such extensive hours of operation available both to host events and to permit the sale of alcohol.

It is inadequate for the applicant's consultant to suggest without explanation that events have been limited at the Community Centre in recent years. This is extremely insensitive since it ignores the impact of Covid lockdowns on the community and the fact that Black and Minority groups were amongst those most adversely affected by the pandemic.

Proper consideration of the potential for noise generation from the Community Centre is clearly germane to the Council's consideration of the planning application since its findings should inform the applicant's design proposals and requisite acoustic treatment of the proposed development to ensure acceptable levels of amenity for future student residents.

Despite this context, the noise consultant's report acknowledged that its limited assessment of noise from the Community Centre building had, '*not been informed by measurement of noise levels at an event.*' This is a serious oversight, and we respectfully request that the applicant be required by the Council to carry out appropriate noise surveys of a representative night-time event and a Sunday morning religious service at the Community Centre building.

Daylight and Sunlight

The proposed development is far greater in scale, mass, and height than the ACFCA Community Centre building and, consequently, fair consideration of resultant daylight and sunlight impacts on neighbouring development is appropriate. However, the applicant's Daylight and Sunlight Report is confined solely to assessment of impacts on neighbouring residential properties and hence avoids any evaluation of the physical impact that the proposed development will have on the ACFCA Community Centre building and its immediate curtilage. Again, this is a serious oversight and once more, the Council should require the applicant to extend their daylight and sunlight survey to include proper assessment of the impact that the proposed development of multi-storey flatted development in this location would have upon the Community Centre and its environs. An obvious and fair concern will be to ensure that the proposed development would not impact unacceptably on ACFCA's premises and activities, including its Community Garden.

Conclusion

Until these shortcomings have been addressed neither ACFCA nor indeed the local planning authority, can be assured that the application proposals will not impact adversely upon ACFCA's continued and planned operation of the Community Centre building.

In the absence of robust technical assessment, the application proposals as presently submitted are contrary to the requirements of local planning policies and are also in conflict with national planning policy contained in the National Planning Policy Framework.

Appendix B – Consultation Response from Environmental Health



To	Head of Planning	FAO: Steven McCoombe
From	Head of Compliance, Enforcement and Community Safety	
Contact Officer:	Lisa Jones	Our Ref: 760506
Date:	22 December 2022	Telephone: 31372

Consultation on Planning Application

Application No: 135576/FO/2022

Description: Erection of part three storey, part 6 storey purpose-built student accommodation (sui generis) with 172 beds in a mix of studio and cluster units, together with ancillary facilities, shared amenity space, site access and other associated works following demolition of existing buildings

Location: 88 Carmoor Road, Manchester, M13 0DY

I write in response to your memorandum of the 6th December 2022 regarding the above application and to inform you that I have considered the application and recommend that the following conditions are attached to any approval.

DEMOLITION/CONSTRUCTION PHASE*

DEMOLITION/CONSTRUCTION MANAGEMENT PLAN

Prior to the commencement of development, a demolition / construction (delete as appropriate) management plan outlining working practices shall be submitted to and approved in writing by the City Council as Local Planning authority, which for the avoidance of doubt shall include as a minimum:

Measures to control noise and vibration;

Dust suppression measures;

Compound locations where relevant;

Details of an emergency contact telephone number;

A community consultation plan and;

Sheeting of construction vehicles.

The development shall only be carried out in accordance with the approved management plan.

Reason - To safeguard the amenities of nearby residents pursuant to policies SP1, EN19 and DM1 of the Manchester Core Strategy.

*The applicant should refer to our noise from building sites webpage for further information/guidance and also IAQM/EPUK Construction Guidance

DEMOLITION/CONSTRUCTION HOURS

Construction/demolition works shall be confined to the following hours unless otherwise agreed in writing by the City Council as local planning authority:

Monday - Friday: 7.30am - 6pm

Saturday: 8.30am - 2pm

Sunday / Bank holidays: No work

Reason - To safeguard the amenities of nearby residents pursuant to policies SP1, EN19 and DM1 of the Manchester Core Strategy.

NSE1 (ground floor gym)

a) The premises shall be acoustically insulated and treated to limit the break out of noise in accordance with a noise study of the premises and a scheme of acoustic treatment that has been submitted to and approved in writing by the City Council as local planning authority. The scheme shall be implemented in full before the use commences or as otherwise agreed in writing by the City Council as local planning authority.

Where entertainment noise is proposed the LAeq (entertainment noise) shall be controlled to 5dB below the LA90 (without entertainment noise) in each octave band at the facade of the nearest noise sensitive location, and internal noise levels at structurally adjoined residential properties in the 63Hz and 125Hz octave frequency bands shall be controlled so as not to exceed (in habitable rooms) 47dB and 41dB (Leq,5min), respectively.

b) Prior to occupation of the development a verification report will be required to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic consultant's report. The report shall also undertake post completion testing to confirm that acceptable criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.

Reason - To safeguard the amenities of the occupiers of the building and occupiers of nearby properties.

Information for Developers guidance documents can be downloaded using the following link:

NSE4(b)

Residential sound insulation AND overheating

a) Before the development commences a scheme for acoustically insulating the proposed residential accommodation against noise from [Main Street] and [Busy Road] shall be submitted to and approved in writing by the City Council as local planning authority. There may be other actual or potential sources of noise which require consideration on or near the site, including any local commercial/industrial premises.

The potential for overheating shall also be assessed and the noise insulation scheme shall take this into account. The approved noise insulation and ventilation scheme shall be completed before any of the dwelling units are occupied.

Noise survey data shall include measurements taken during a rush-hour period and night time to determine the appropriate sound insulation measures necessary. The following noise criteria shall be required to be achieved:

Bedrooms (night time - 23.00 - 07.00)	30 dB LAeq (individual noise events shall not exceed 45 dB LAmax,F by more than 15 times)
---------------------------------------	---

Living Rooms (daytime - 07.00 - 23.00)	35 dB LAeq
--	------------

Gardens and terraces (daytime)	55 dB LAeq
--------------------------------	------------

Additionally, where entertainment noise is a factor in the noise climate the sound insulation scheme shall be designed to achieve internal noise levels in the 63Hz and 125Hz octave centre frequency bands so as not to exceed (in habitable rooms) 47dB and 41dB (Leq,5min), respectively.

b) Prior to first occupation of the residential units, a verification report shall be required to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic consultant's report. The report shall also undertake post completion testing to confirm that the internal noise criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the internal noise criteria.

Reason: To secure a reduction in noise from traffic or other sources in order to protect future residents from noise disturbance and to reduce the potential for overheating.

The applicant must ensure that the criteria set out in the acoustic report submitted is not exceeded and the mitigation measures set out in the report must be implemented in full at the development.

NSE6

External plant/equipment/servicing

a) 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 (LAeq) below the typical background (LA90) level at the nearest noise sensitive location. Prior to commencement of the use hereby approved the scheme shall be submitted to and approved in writing by the City Council as local planning authority in order to secure a reduction in the level of noise emanating from the site. The scheme shall be implemented in full before the use commences or as otherwise agreed in writing by the City Council as local planning authority.

b) Prior to the operation of the scheme a verification report shall be submitted to and approved in writing by the City Council as local planning authority to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic report. The report shall also undertake post completion testing to confirm that the noise criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.

Reason - To minimise the impact of the development and to prevent a general increase in pre-existing background noise levels around the site.

The applicant must implement the mitigation measures set out within the submitted acoustic report. The applicant must also submit a scheme for the testing of the emergency generator.

REF*

a) Before the development commences a scheme for the storage and disposal of refuse shall be submitted to and approved in writing by the City Council as local planning authority.

New developments shall have refuse storage space for segregated waste collection and recycling. Internal and external storage areas are required.

b) The details of the approved scheme shall be implemented as part of the development and shall remain in situ whilst the use or development is in operation.

Reason - In the interests of amenity and public health.

*The proforma/ Waste Management Strategy must include the following information:

Estimated volumes and types of waste produced by the development;

Details of internal and external stores for both waste and recycling, including any plans and designs;

Location of the proposed collection point and details of the route the collection vehicle will take;

Details of how waste will be transferred between stores and to the collection location; and

Details of number and capacity of bins proposed and collection frequency.

Other details as per 'Waste Proforma v1.0' - refer to guidance at:

http://www.manchester.gov.uk/downloads/download/6048/waste_management_strategy

10 units or below = low rise

11 or above = high rise

The Waste Management Strategy submitted with the application is acceptable.

Should you wish to discuss this matter further please contact Lisa Jones on extension 31372.

Fiona Sharkey

Head of Compliance, Enforcement and Community Safety

Appendix C – Noise Survey Data

Weekend 1

Data type	Time	Oct 63Hz	Oct 125Hz	Oct 250Hz	Oct 500Hz	Oct 1kHz	Oct 2kHz	Oct 4kHz	Oct 8kHz
1/27/2023	15:30	59.9	53.2	46.2	44.3	46.3	42.7	39.0	29.1
1/27/2023	16:00	66.5	59.7	50.1	48.1	47.9	44.1	38.9	33.9
1/27/2023	16:30	69.8	62.5	52.1	48.8	48.7	44.2	36.6	27.9
1/27/2023	17:00	70.1	62.7	52.4	49.0	48.9	45.4	36.3	26.9
1/27/2023	17:30	69.7	62.5	52.1	48.8	47.9	43.6	36.6	27.3
1/27/2023	18:00	69.8	62.7	52.3	49.5	48.6	43.7	36.9	27.3
1/27/2023	18:30	67.4	60.9	51.0	48.5	47.8	42.9	36.8	27.4
1/27/2023	19:00	61.9	56.5	49.7	47.2	47.1	42.7	36.4	26.9
1/27/2023	19:30	61.9	56.1	49.6	48.4	49.0	44.2	37.9	28.0
1/27/2023	20:00	61.5	56.2	49.7	47.3	47.5	43.2	37.1	27.9
1/27/2023	20:30	59.9	54.0	47.9	46.3	46.2	42.5	34.6	26.2
1/27/2023	21:00	60.3	55.1	48.8	47.3	47.5	43.9	36.9	29.9
1/27/2023	21:30	59.5	52.9	45.6	44.0	45.7	42.0	35.0	26.5
1/27/2023	22:00	59.6	53.1	46.1	44.1	46.3	42.7	34.2	26.3
1/27/2023	22:30	59.2	52.6	45.6	44.3	45.4	41.1	31.9	23.3
1/27/2023	23:00	60.1	55.0	46.7	44.6	45.7	41.3	32.6	25.0
1/27/2023	23:30	58.9	52.0	44.0	43.6	45.7	40.8	32.2	22.9
1/28/2023	00:00	59.6	52.9	44.4	45.4	48.2	42.8	34.1	22.2
1/28/2023	00:30	58.6	51.6	42.5	40.1	41.9	36.6	27.9	19.8
1/28/2023	01:00	58.2	51.4	41.2	39.1	39.8	34.3	24.7	25.6
1/28/2023	01:30	58.0	51.6	41.7	38.8	41.2	38.5	30.6	20.2
1/28/2023	02:00	57.9	51.1	41.6	39.0	40.5	36.9	26.4	18.6
1/28/2023	02:30	58.1	50.9	41.3	38.2	39.0	33.2	22.9	16.6
1/28/2023	03:00	58.1	50.9	41.4	41.5	41.2	36.6	28.0	19.9
1/28/2023	03:30	57.8	50.8	40.5	37.8	39.5	33.7	23.6	17.0
1/28/2023	04:00	57.8	50.7	40.8	37.9	39.0	33.2	27.5	23.0
1/28/2023	04:30	57.8	50.8	40.8	37.8	38.9	34.3	25.6	17.9
1/28/2023	05:00	58.1	50.7	40.4	37.1	37.7	32.6	23.7	15.8
1/28/2023	05:30	64.1	51.5	41.4	38.0	38.3	33.5	26.6	21.7
1/28/2023	06:00	58.1	51.3	43.4	38.4	37.2	32.5	23.8	16.4
1/28/2023	06:30	59.0	52.6	45.8	41.4	40.8	36.1	27.2	24.6
1/28/2023	07:00	59.2	52.6	45.5	41.7	42.2	37.6	36.7	47.4
1/28/2023	07:30	58.8	52.3	45.6	41.9	44.0	41.4	44.1	53.2
1/28/2023	08:00	60.2	53.3	47.9	44.4	46.6	58.7	58.0	54.7
1/28/2023	08:30	59.3	53.3	47.6	44.0	42.1	38.2	42.6	31.4
1/28/2023	09:00	59.0	52.7	47.0	45.2	43.2	40.6	36.8	26.2
1/28/2023	09:30	59.3	53.1	46.9	44.1	43.0	39.0	34.2	25.3
1/28/2023	10:00	58.7	52.4	45.8	43.2	43.3	40.4	40.8	33.1
1/28/2023	10:30	58.9	52.3	46.9	44.5	46.5	43.1	40.4	32.9
1/28/2023	11:00	60.6	58.9	55.6	52.6	50.1	41.6	32.3	25.9
1/28/2023	11:30	62.6	56.1	53.2	54.3	52.0	45.8	36.1	24.2
1/28/2023	12:00	59.4	52.8	44.6	42.5	43.6	39.3	31.9	24.5
1/28/2023	12:30	60.2	53.5	45.5	45.2	49.7	46.3	41.5	35.3

1/28/2023	13:00	75.9	64.3	55.5	53.9	54.7	55.3	53.8	42.8
1/28/2023	13:30	74.5	63.6	54.7	54.0	54.4	54.4	52.1	41.2
1/28/2023	14:00	72.0	61.9	53.3	53.2	53.0	52.6	49.7	38.5
1/28/2023	14:30	68.1	59.0	50.4	49.4	50.5	49.3	45.7	37.3
1/28/2023	15:00	60.8	53.6	47.2	46.0	47.9	45.9	43.0	37.5
1/28/2023	15:30	60.2	53.4	47.0	45.2	46.1	43.2	40.0	35.6
1/28/2023	16:00	59.9	53.0	45.7	44.3	45.8	42.7	39.6	35.2
1/28/2023	16:30	60.0	53.7	46.9	44.9	47.1	44.4	40.5	36.9
1/28/2023	17:00	61.7	55.1	47.7	45.7	47.2	44.2	40.7	36.9
1/28/2023	17:30	62.3	56.2	49.1	45.9	46.2	43.2	39.6	35.1
1/28/2023	18:00	62.4	55.8	47.4	44.5	45.7	42.5	38.3	33.7
1/28/2023	18:30	62.0	56.4	49.3	45.3	46.4	43.4	39.7	35.3
1/28/2023	19:00	62.3	55.9	48.7	45.9	47.3	45.0	40.3	35.8
1/28/2023	19:30	62.1	56.5	49.4	47.5	48.1	45.5	42.1	37.8
1/28/2023	20:00	61.6	56.2	48.6	48.0	48.8	46.0	42.0	36.9
1/28/2023	20:30	60.0	54.6	47.1	45.2	47.4	44.8	40.9	36.6
1/28/2023	21:00	58.9	53.4	46.4	48.2	51.4	47.7	41.4	35.0
1/28/2023	21:30	59.5	53.9	50.0	45.4	47.3	44.6	42.0	37.8
1/28/2023	22:00	59.3	53.2	45.8	44.1	46.8	44.4	41.9	37.6
1/28/2023	22:30	59.0	53.4	46.5	44.1	46.1	42.9	39.5	35.5
1/28/2023	23:00	58.5	52.4	43.9	42.7	46.0	41.9	36.9	32.6
1/28/2023	23:30	58.4	52.3	43.5	41.9	44.2	40.4	35.3	30.4
1/29/2023	00:00	59.0	52.2	43.7	41.6	44.0	40.4	35.2	29.9
1/29/2023	00:30	58.4	51.7	44.2	42.7	45.7	43.3	39.4	34.6

Weekend 2

Date	Time	Oct 63Hz	Oct 125Hz	Oct 250Hz	Oct 500Hz	Oct 1kHz	Oct 2kHz	Oct 4kHz	Oct 8kHz
02/03/2023	13:30	62.6	54.8	51.3	47.9	48.7	45.0	40.1	37.9
02/03/2023	14:00	61.0	54.0	49.4	47.2	48.5	44.8	39.2	33.7
02/03/2023	14:30	61.3	54.1	49.4	47.1	47.9	44.5	39.1	34.8
02/03/2023	15:00	60.9	55.4	49.0	46.9	47.8	43.6	36.1	39.6
02/03/2023	15:30	60.2	54.2	49.5	47.4	47.8	43.9	38.4	31.8
02/03/2023	16:00	62.0	54.7	50.5	48.0	49.1	45.2	40.2	31.6
02/03/2023	16:30	62.8	57.6	50.6	49.1	49.5	45.2	38.2	31.6
02/03/2023	17:00	70.7	63.6	54.5	51.6	50.5	46.0	39.8	31.2
02/03/2023	17:30	71.1	63.9	55.0	51.8	50.3	46.1	39.1	31.0
02/03/2023	18:00	70.6	63.8	54.5	51.5	49.7	45.3	37.7	28.7
02/03/2023	18:30	70.6	63.6	54.3	52.2	50.1	45.3	38.3	28.5
02/03/2023	19:00	69.6	63.5	55.7	55.0	58.0	58.5	55.8	47.2
02/03/2023	19:30	65.9	57.9	52.5	49.2	47.9	43.2	37.9	30.0
02/03/2023	20:00	61.8	54.9	48.8	45.9	46.7	42.7	35.7	28.0
02/03/2023	20:30	58.1	53.1	46.3	43.6	44.7	40.1	31.7	26.7
02/03/2023	21:00	60.3	54.5	46.9	44.2	45.7	41.5	33.5	26.7
02/03/2023	21:30	59.8	53.4	46.1	43.3	44.7	40.4	31.9	26.0
02/03/2023	22:00	58.7	54.1	45.3	42.8	44.2	40.0	32.4	24.8
02/03/2023	22:30	59.1	53.3	45.7	43.2	44.9	40.3	31.4	24.5
02/03/2023	23:00	58.3	53.6	46.4	44.0	45.7	41.7	33.0	26.0
02/03/2023	23:30	58.3	53.0	45.5	43.1	45.7	42.1	34.3	25.9
02/04/2023	00:00	56.2	51.9	43.5	41.0	42.6	37.7	32.5	26.8
02/04/2023	00:30	55.6	51.7	42.5	40.2	41.1	36.4	28.3	20.5
02/04/2023	01:00	56.1	52.2	42.2	39.8	41.1	36.3	27.5	20.3
02/04/2023	01:30	55.8	51.5	42.9	40.6	42.5	38.3	29.7	21.8
02/04/2023	02:00	54.9	51.2	40.3	37.6	38.4	32.8	23.6	16.8
02/04/2023	02:30	54.5	51.1	40.4	38.8	39.7	34.3	24.2	16.3
02/04/2023	03:00	55.1	51.2	41.3	39.2	40.9	36.5	27.9	20.1
02/04/2023	03:30	54.7	51.2	40.5	37.6	38.5	33.7	26.4	19.3
02/04/2023	04:00	54.6	51.2	39.7	36.8	38.0	34.2	23.9	16.1
02/04/2023	04:30	61.8	52.5	41.1	38.2	39.2	34.9	27.5	23.0
02/04/2023	05:00	55.7	52.0	43.1	40.3	41.7	37.8	27.1	27.6
02/04/2023	05:30	55.0	51.3	40.1	37.1	37.5	32.5	26.7	25.5
02/04/2023	06:00	56.8	52.0	42.9	41.1	42.1	38.3	30.4	26.6
02/04/2023	06:30	56.8	52.3	43.9	40.1	41.2	36.7	29.3	23.5
02/04/2023	07:00	58.3	53.0	43.7	40.7	42.0	37.8	37.9	31.3
02/04/2023	07:30	58.5	52.6	45.6	42.1	42.2	40.2	42.3	37.7
02/04/2023	08:00	56.8	51.2	42.7	41.5	54.4	56.5	55.9	46.5
02/04/2023	08:30	58.3	53.3	46.3	43.4	42.9	38.4	32.6	23.6
02/04/2023	09:00	57.8	53.1	47.6	43.9	42.7	38.4	30.7	22.6
02/04/2023	09:30	58.2	52.7	45.3	43.6	45.3	43.2	38.1	30.1
02/04/2023	10:00	58.4	53.0	45.3	43.3	44.3	42.1	39.6	38.2
02/04/2023	10:30	57.8	52.1	45.0	42.9	44.8	41.1	37.5	28.7
02/04/2023	11:00	58.5	52.1	44.9	42.6	44.3	40.4	36.3	27.9
02/04/2023	11:30	58.7	52.9	46.0	43.3	44.6	40.0	35.8	25.1
02/04/2023	12:00	58.7	53.1	46.7	44.7	46.1	42.3	36.7	28.5
02/04/2023	12:30	58.8	53.7	48.1	46.7	46.9	43.3	38.1	31.3
02/04/2023	13:00	58.8	53.5	46.6	43.6	45.0	41.1	34.5	27.4

02/04/2023	13:30	58.9	53.4	46.7	44.2	46.4	42.5	36.9	33.4
02/04/2023	14:00	60.2	55.5	48.9	46.8	47.0	43.0	36.3	29.7
02/04/2023	14:30	58.9	52.4	46.6	44.9	45.8	42.7	37.4	29.4
02/04/2023	15:00	59.3	53.2	46.2	44.0	45.7	43.8	37.7	30.7
02/04/2023	15:30	60.6	53.6	46.2	43.8	45.5	42.3	34.9	25.5
02/04/2023	16:00	59.8	53.7	47.8	44.7	45.9	42.3	40.2	29.8
02/04/2023	16:30	59.0	53.3	46.7	44.7	46.9	44.1	37.9	28.3
02/04/2023	17:00	59.5	54.2	47.3	45.5	48.8	45.2	38.8	28.4
02/04/2023	17:30	58.8	53.7	47.4	44.8	44.6	41.2	34.2	28.2
02/04/2023	18:00	59.0	53.1	47.2	44.6	46.4	43.2	38.7	34.9
02/04/2023	18:30	59.1	53.5	46.5	44.6	47.1	44.8	42.3	38.8
02/04/2023	19:00	59.7	54.1	48.8	47.2	48.6	47.2	45.2	41.5
02/04/2023	19:30	60.9	54.5	49.9	48.5	50.2	48.2	46.2	42.8
02/04/2023	20:00	60.2	54.8	50.1	47.4	49.5	45.6	41.1	36.8
02/04/2023	20:30	62.2	55.6	51.0	48.7	49.4	45.2	40.0	35.5
02/04/2023	21:00	58.5	54.7	50.0	47.6	48.9	44.7	38.6	34.5
02/04/2023	21:30	59.1	54.1	49.1	46.6	48.1	44.3	38.3	34.1
02/04/2023	22:00	58.9	53.8	48.1	45.6	47.9	44.1	37.6	32.9
02/04/2023	22:30	58.4	53.8	48.2	45.2	46.9	42.4	36.1	31.5
02/04/2023	23:00	59.5	53.8	47.0	44.8	46.4	42.2	35.9	31.1

Weekend 3

Date	Time	Oct 63Hz	Oct 125Hz	Oct 250Hz	Oct 500Hz	Oct 1kHz	Oct 2kHz	Oct 4kHz	Oct 8kHz
02/10/2023	12:00:00	58.2	53.0	43.8	43.6	42.7	38.4	28.0	18.4
02/10/2023	12:30:00	59.5	54.5	48.2	47.2	45.4	39.7	28.9	20.2
02/10/2023	01:00:00	58.8	53.1	46.6	47.7	46.8	42.6	31.9	20.2
02/10/2023	01:30:00	57.9	52.0	42.4	39.2	39.7	35.3	27.5	19.0
02/10/2023	02:00:00	57.8	51.9	40.1	37.4	38.4	34.3	25.2	16.4
02/10/2023	02:30:00	57.3	51.5	39.1	36.0	36.2	31.5	22.4	14.2
02/10/2023	03:00:00	57.7	51.8	39.4	36.6	39.6	37.4	22.8	14.3
02/10/2023	03:30:00	57.7	51.8	39.1	36.5	36.3	30.9	23.8	16.3
02/10/2023	04:00:00	57.7	52.0	39.5	36.8	35.8	29.0	20.0	12.9
02/10/2023	04:30:00	60.1	52.4	39.9	37.3	37.4	32.4	24.8	18.2
02/10/2023	05:00:00	58.3	52.6	41.3	38.0	37.9	32.4	23.3	15.0
02/10/2023	05:30:00	58.6	52.6	41.9	39.7	40.3	36.0	27.1	25.0
02/10/2023	06:00:00	59.0	53.9	45.3	42.8	42.5	39.5	33.9	27.3
02/10/2023	06:30:00	69.7	62.9	52.6	50.3	46.9	42.6	36.5	24.9
02/10/2023	07:00:00	69.8	62.7	52.8	51.5	48.5	44.9	42.5	30.6
02/10/2023	07:30:00	68.7	61.3	52.3	51.3	48.7	45.8	38.4	31.4
02/10/2023	08:00:00	60.7	55.1	48.4	46.4	46.5	43.2	39.3	27.2
02/10/2023	08:30:00	61.0	54.7	48.9	47.3	47.8	44.8	37.6	30.9
02/10/2023	09:00:00	60.5	54.5	47.9	45.6	45.6	42.5	34.5	26.0
02/10/2023	09:30:00	60.5	55.0	49.7	47.6	45.7	41.7	33.6	25.2
02/10/2023	10:00:00	60.0	54.1	47.4	45.1	45.0	42.3	34.6	26.3
02/10/2023	10:30:00	59.5	54.0	47.1	45.1	45.1	41.7	35.2	26.9
02/10/2023	11:00:00	60.7	54.1	47.3	45.7	46.1	44.0	37.0	29.1
02/10/2023	11:30:00	60.7	54.8	47.7	45.8	45.8	43.0	38.4	32.6
02/10/2023	12:00:00	59.8	54.5	48.2	46.0	45.9	43.3	37.0	30.1
02/10/2023	12:30:00	59.2	53.6	46.5	44.6	45.4	42.4	35.9	27.4
02/10/2023	13:00:00	59.8	54.1	48.4	46.9	45.8	42.0	35.2	28.9
02/10/2023	13:30:00	62.6	55.4	49.9	46.8	47.1	45.1	38.5	28.8
02/10/2023	14:00:00	59.4	53.3	47.2	45.1	44.6	41.3	34.1	26.4
02/10/2023	14:30:00	59.8	54.1	47.5	45.8	46.8	44.5	37.0	28.2
02/10/2023	15:00:00	60.0	53.7	46.6	45.1	46.6	43.8	36.3	29.3
02/10/2023	15:30:00	63.7	55.3	47.5	46.6	46.7	43.7	35.8	29.3
02/10/2023	16:00:00	64.5	56.0	49.0	50.0	47.9	43.7	40.4	30.2
02/10/2023	16:30:00	67.6	60.1	51.9	51.2	48.6	45.2	41.6	32.9
02/10/2023	17:00:00	70.0	62.4	53.6	53.8	51.1	46.7	38.3	30.2
02/10/2023	17:30:00	70.1	62.0	53.0	52.3	48.9	45.7	37.1	28.4
02/10/2023	18:00:00	70.1	61.9	55.0	55.6	51.9	47.6	40.8	37.7
02/10/2023	18:30:00	71.0	62.5	55.4	56.6	53.4	48.9	41.3	33.2
02/10/2023	19:00:00	70.6	62.3	53.0	51.6	49.4	46.1	38.9	31.1
02/10/2023	19:30:00	66.0	58.3	51.1	51.5	49.7	44.6	37.9	28.9
02/10/2023	20:00:00	69.2	58.0	52.9	52.3	53.9	51.9	50.0	48.3
02/10/2023	20:30:00	70.7	58.4	49.5	49.6	48.8	44.6	37.3	29.4
02/10/2023	21:00:00	69.4	57.9	48.5	48.7	47.2	42.4	34.4	25.6
02/10/2023	21:30:00	58.6	54.1	46.6	47.1	46.3	42.2	34.2	27.4
02/10/2023	22:00:00	57.7	51.9	45.5	43.5	45.7	42.3	34.0	26.9
02/10/2023	22:30:00	57.4	52.2	45.5	43.5	45.1	41.1	35.1	32.3
02/10/2023	23:00:00	57.2	52.2	45.8	43.8	45.7	41.6	34.6	26.7
02/10/2023	23:30:00	57.8	52.2	46.6	44.8	46.6	42.7	33.5	24.3

02/11/2023	00:00:00	56.7	51.8	45.4	43.6	45.9	42.1	32.9	22.8
02/11/2023	00:30:00	56.0	51.7	44.8	42.9	44.5	39.2	30.9	23.6
02/11/2023	01:00:00	56.2	51.4	44.4	42.6	45.5	43.2	31.6	25.6
02/11/2023	01:30:00	58.2	51.8	45.1	43.2	45.3	40.7	34.5	29.7
02/11/2023	02:00:00	56.0	51.3	43.3	41.1	42.6	37.4	33.0	27.0
02/11/2023	02:30:00	56.6	51.7	44.1	42.1	43.3	39.0	32.3	28.4
02/11/2023	03:00:00	56.1	51.4	43.7	41.6	43.2	38.1	33.3	27.7
02/11/2023	03:30:00	55.7	51.4	42.8	40.6	42.3	38.9	33.1	25.3
02/11/2023	04:00:00	55.1	50.8	40.6	38.3	39.7	37.2	27.4	17.6
02/11/2023	04:30:00	55.0	50.7	39.9	37.9	38.3	32.7	25.6	22.2
02/11/2023	05:00:00	56.3	51.7	47.7	39.9	40.1	34.8	35.3	35.1
02/11/2023	05:30:00	55.4	50.9	41.0	38.5	39.7	34.3	34.5	30.8
02/11/2023	06:00:00	56.0	51.0	41.6	39.0	40.6	42.1	33.1	31.0
02/11/2023	06:30:00	55.9	51.4	42.2	39.0	40.3	36.7	34.1	32.0
02/11/2023	07:00:00	56.8	51.9	43.6	40.9	42.9	40.2	39.9	41.6
02/11/2023	07:30:00	56.6	51.6	43.0	41.0	43.0	41.3	39.0	37.9
02/11/2023	08:00:00	56.9	51.6	43.1	40.5	43.3	40.6	30.6	21.4
02/11/2023	08:30:00	56.3	51.0	42.9	40.9	42.6	38.7	30.0	20.8
02/11/2023	09:00:00	56.9	52.0	44.8	42.8	43.2	40.2	32.8	25.3
02/11/2023	09:30:00	56.9	51.8	44.8	41.9	43.7	39.8	39.0	30.6
02/11/2023	10:00:00	57.5	50.9	42.7	41.0	42.7	39.8	39.5	34.8
02/11/2023	10:30:00	56.6	52.4	47.3	46.0	44.7	41.1	33.1	25.4
02/11/2023	11:00:00	57.1	51.6	44.2	42.3	44.3	40.4	33.5	30.7
02/11/2023	11:30:00	57.0	51.9	44.2	42.5	44.6	40.9	35.8	25.3
02/11/2023	12:00:00	59.6	55.5	49.5	43.5	45.3	42.0	34.8	25.8
02/11/2023	12:30:00	57.7	52.1	46.4	44.0	45.4	41.8	34.8	26.9
02/11/2023	13:00:00	58.2	52.9	47.1	44.4	45.1	40.7	33.6	29.3
02/11/2023	13:30:00	58.6	53.4	47.6	44.1	45.4	41.8	35.2	35.4
02/11/2023	14:00:00	57.8	52.7	46.5	43.8	45.3	41.8	33.7	25.4
02/11/2023	14:30:00	57.1	52.1	45.3	43.5	45.3	42.4	34.5	29.6
02/11/2023	15:00:00	58.1	52.1	45.1	43.5	45.0	41.5	33.4	25.8
02/11/2023	15:30:00	58.0	52.3	46.7	43.7	44.4	41.0	32.3	23.8
02/11/2023	16:00:00	58.1	53.0	46.3	44.3	45.4	42.6	37.5	28.2
02/11/2023	16:30:00	58.3	52.9	46.1	48.1	46.8	43.7	41.7	32.2
02/11/2023	17:00:00	58.3	52.2	45.9	44.7	45.9	42.5	40.6	35.7
02/11/2023	17:30:00	58.6	52.9	45.8	44.6	45.3	41.6	33.9	25.5
02/11/2023	18:00:00	57.3	52.2	46.3	44.0	44.8	41.2	32.3	24.2
02/11/2023	18:30:00	58.7	52.1	46.1	44.6	45.0	41.7	36.0	27.6
02/11/2023	19:00:00	58.9	52.6	47.0	45.7	45.9	43.3	35.6	27.0
02/11/2023	19:30:00	58.2	51.8	45.3	44.1	45.2	42.1	33.9	26.7
02/11/2023	20:00:00	58.1	51.4	44.5	43.3	44.9	41.1	33.2	23.3
02/11/2023	20:30:00	58.0	52.6	45.1	43.6	44.4	41.1	33.1	26.2
02/11/2023	21:00:00	56.9	52.5	44.6	42.5	42.9	38.7	29.9	25.9
02/11/2023	21:30:00	57.1	51.9	43.8	41.9	43.7	41.1	31.1	22.2
02/11/2023	22:00:00	57.4	51.8	43.8	42.1	44.0	40.6	32.3	22.9
02/11/2023	22:30:00	56.8	52.6	44.8	43.3	44.9	41.5	32.7	24.4
02/11/2023	23:00:00	57.2	52.3	44.0	42.3	43.8	40.0	31.4	23.5
02/11/2023	23:30:00	56.6	52.1	43.0	41.5	43.6	39.1	29.6	21.4
02/12/2023	00:00:00	56.5	52.4	44.3	42.8	42.8	39.0	29.7	19.8
02/12/2023	00:30:00	55.8	52.2	44.4	43.5	42.8	39.1	30.4	21.5
02/12/2023	01:00:00	55.1	51.6	41.2	39.4	40.9	35.7	26.4	17.0

02/12/2023	01:30:00	55.3	50.6	39.8	39.2	39.4	34.5	25.3	17.1
02/12/2023	02:00:00	55.6	50.9	39.4	37.7	39.4	35.3	26.9	19.1
02/12/2023	02:30:00	55.6	50.6	39.1	37.6	39.6	34.9	25.0	16.5
02/12/2023	03:00:00	54.6	50.3	37.9	35.9	38.0	33.1	23.2	15.5
02/12/2023	03:30:00	55.3	50.3	40.3	39.1	39.5	34.4	26.6	18.6
02/12/2023	04:00:00	54.8	50.1	37.3	35.4	37.2	32.8	28.0	25.6
02/12/2023	04:30:00	55.1	50.0	38.5	37.4	39.0	35.9	28.8	21.2
02/12/2023	05:00:00	54.6	50.2	36.6	34.8	37.4	34.1	33.9	32.9
02/12/2023	05:30:00	54.3	50.3	35.9	33.9	35.6	31.1	32.4	32.5
02/12/2023	06:00:00	55.8	50.7	40.4	37.6	38.6	35.3	34.4	42.5
02/12/2023	06:30:00	55.0	50.6	38.4	36.2	38.3	34.6	34.6	36.1
02/12/2023	07:00:00	55.6	51.4	41.1	39.0	41.2	38.6	39.8	29.3
02/12/2023	07:30:00	56.1	51.0	41.6	41.0	42.8	40.3	36.4	28.9
02/12/2023	08:00:00	55.8	50.9	42.0	39.0	41.0	37.6	30.7	24.4
02/12/2023	08:30:00	55.2	50.3	40.4	39.1	41.0	38.6	31.6	24.0
02/12/2023	09:00:00	55.9	51.3	43.2	39.9	40.6	37.5	41.7	30.4
02/12/2023	09:30:00	56.0	51.5	43.5	39.9	41.7	38.6	37.6	26.1
02/12/2023	10:00:00	57.0	52.4	43.8	41.6	42.3	38.8	32.5	24.1
02/12/2023	10:30:00	60.1	56.3	43.8	42.8	42.2	38.6	34.3	26.7
02/12/2023	11:00:00	55.4	50.7	41.9	39.8	41.5	37.4	35.1	24.1
02/12/2023	11:30:00	56.3	51.0	41.4	39.9	42.6	39.0	30.5	21.8
02/12/2023	12:00:00	56.5	54.0	42.4	40.6	42.5	38.5	30.4	21.1
02/12/2023	12:30:00	59.0	55.4	46.2	45.0	45.4	41.4	33.8	25.8
02/12/2023	13:00:00	57.0	52.9	44.4	42.0	43.5	39.8	31.8	24.5
02/12/2023	13:30:00	58.0	53.2	47.0	44.4	44.9	41.0	32.5	24.6
02/12/2023	14:00:00	57.5	53.3	47.0	43.8	44.4	40.1	31.7	23.0
02/12/2023	14:30:00	57.7	52.2	45.9	45.6	45.8	41.5	33.7	26.4
02/12/2023	15:00:00	58.9	52.4	44.8	45.2	45.8	42.5	37.0	31.1
02/12/2023	15:30:00	59.3	56.4	52.1	47.5	48.4	48.0	46.9	42.8
02/12/2023	16:00:00	61.0	57.1	52.7	46.9	48.0	48.4	46.9	42.9
02/12/2023	16:30:00	60.3	56.7	53.0	48.6	52.4	51.1	48.7	43.5
02/12/2023	17:00:00	60.8	56.7	53.0	49.8	54.5	52.7	48.9	43.4
02/12/2023	17:30:00	61.8	57.0	53.3	50.1	55.3	53.2	48.9	43.3
02/12/2023	18:00:00	64.1	57.9	53.3	49.1	56.6	54.8	49.5	43.5
02/12/2023	18:30:00	63.8	56.6	52.1	50.1	54.8	52.4	46.1	39.5
02/12/2023	19:00:00	63.2	55.2	49.7	51.6	50.3	46.5	39.7	30.7
02/12/2023	19:30:00	62.0	53.7	45.4	45.1	45.4	43.3	36.2	31.1
02/12/2023	20:00:00	57.8	52.1	44.2	43.4	45.1	41.2	33.1	28.0
02/12/2023	20:30:00	57.2	52.4	44.5	43.7	45.2	41.9	40.3	34.2
02/12/2023	21:00:00	57.2	52.2	45.2	42.9	44.2	40.6	31.8	23.5
02/12/2023	21:30:00	55.7	51.3	45.3	46.2	44.6	40.1	30.7	20.7
02/12/2023	22:00:00	56.0	51.1	43.1	41.6	44.0	40.6	31.6	24.4
02/12/2023	22:30:00	56.3	50.7	44.4	42.6	44.2	40.9	31.6	23.5
02/12/2023	23:00:00	55.9	50.9	42.1	40.5	43.2	39.5	29.9	20.6
02/12/2023	23:30:00	55.2	50.5	41.1	39.2	42.1	38.5	28.5	19.1

Appendix E – Report Limitations

Report Limitations

This report has been prepared for the titled project or named part thereof and should not be used in whole or part and relied upon for any other project without the written authorisation of MZA Acoustics Limited. MZA Acoustics Limited accepts no responsibility or liability for the consequences of this document if it is used for a purpose other than that for which it was commissioned. Persons wishing to use or rely upon this report for other purposes must seek written authority to do so from the owner of this report and/ or MZA Acoustics Limited and agree to indemnify MZA Acoustics Limited for any and all loss or damage resulting therefrom. MZA Acoustics Limited accepts no responsibility or liability for this document to any other party other than the person by whom it was commissioned.

The findings and opinions expressed are relevant to the dates of the site works and should not be relied upon to represent conditions at substantially later dates. Opinions included therein are based on information gathered during the study and from our experience. If additional information becomes available which may affect our comments, conclusions or recommendations MZA Acoustics Limited reserve the right to review the information, reassess any new potential concerns and modify our opinions accordingly.



Graham Hornby
Director
Unit A, Second Floor, Bridge Mills
Huddersfield Road, Holmfirth, HD9 3TW

M: +44 (0)7887 059711
ghornby@mzaconsult.co.uk
www.mza-acoustics.co.uk