

# Report Ref. CLI0539/R1/Rev.A

# **Noise Impact Assessment Report** for Licensing

Wicks's Bar, 1 Midland House, High Street, Harwich, Essex, CO12 3PS

01 November 2023

Report prepared for:

Enterprise Harwich Bar Ltd

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# **Document Information**

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# **Summary**

Harwich Bar Enterprise Ltd has appointed Climate Acoustics to complete a noise survey, noise impact assessment and technical acoustic report to support the licensing application for the existing single-storey bar/ club premises at Wicks's Bar, 1 Midland House, High Street, Harwich, Essex, CO12 3PS.

As part of reviewing the premises license or club premises certificate under the Licensing Act 2003, Tendring District Council's objective is *'the prevention of public nuisance'* relating to excessive noise from Wick's Bar.

Tendring Council's Environmental Protection team has also witnessed breaches of the noise abatement notice on 8<sup>th</sup> September 2023, 9<sup>th</sup> September 2023 and 30<sup>th</sup> September 2023 (noise abatement notice served to the client on 20<sup>th</sup> July 2023).

Climate Acoustics will assess the increase in noise level due to the operation of the bar/ club premises and, if required, suggest further appropriate mitigation measures to reduce noise emissions.

Appendix A1 of this report shows a noise survey from Wednesday 25<sup>th</sup> October 2023 to Thursday 26<sup>th</sup> October 2023. The bar/ club premises will operate from 6 pm to Midnight on Monday to Thursday, 4 pm to 1:30 am on Friday to Saturday, and 4 pm to Midnight on Sunday. *Note: noise would be more noticeable during the late evening/ night when the existing background noise is lower & less road traffic affects the background noise level.* 

#### Noise Impact Assessment from Bar/ Club Premises Noise on the Nearest Noise Sensitive Residents:

Noise impact from the existing bar and club premises to the nearest noise-sensitive receptors is not expected to cause a significant impact if the **Noise Management Plan** recommendations in <u>Section 5</u> of this report and the **Noise Management Policy Statement** shown in Section 6 of this report is implemented.

The summary of the Noise Management Plan (<u>Section 5</u>) is outlined below, including the following noise reduction measures:

- Noise Control Sound System: The sound system has a noise limiter applied, as detailed in <u>Section 5.1</u> of this report is implemented.
- **Noise Control Remedial Works/ Soundproofing:** The noise management plan recommendations listed in <u>Section 5.2</u> of this report are implemented.
- Noise Control Patron Noise in Front Decking Seating Area: The outdoor front decking seating area should have a restricted number of people using it from 11 pm onwards to minimise noise impact, and the noise management plan recommendations in <u>Section 5.3</u> of this report should be implemented to minimise noise.
- **Noise Control Operational Noise:** A comprehensive **Noise Management Policy Statement** will operate at the site, as **Section 6** of this report shows. This policy document will be regularly reviewed and updated.

<u>Important</u>: It is recommended that before the client selects/ purchases any building materials, products and design proposals considered, the main contractor should contact their acoustic consultant (Climate Acoustics) to clarify if the selected acoustic performance is sufficient.



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# **Table of Contents**

Do	ocument l	nformation	2
Sı	ımmary		3
1	Introd	luction	5
	1.1.	Site Description	
2	Noise	Criteria	F
_	2.1.	Licencing Act 2003:	
	2.2.	Noise Abatement Notice (Issued 20th July 2023):	
	2.3.	Music Impact Assessment Criteria:	
	2.4.	Front Decking Seating Area Impact Assessment Criteria:	
3	Noise	Survey	
	3.1.	Noise Survey Details	
	3.2.	Noise Climate	
	3.3.	Noise Measurement Results	<del>.</del>
	3.3.1.		
	3.3.2.		
4	Music	c/ Entertainment Noise Impact from Bar/ Club to Residential	
	4.1.	Noise Impact Assessment Parameters	
	4.2.	Music/ Entertainment Noise Breakout from Bar/ Club to Residential	10
	4.3.	Noise from Front Decking Seating Area to Residential	11
5	Noise	Management Plan	12
	5.1.	Noise Control - Sound System	12
	5.2.	Noise Control - Remedial Works/ Soundproofing	12
	5.3.	Noise Control - Patron Noise in Front Decking Seating Area	14
	5.4.	Noise Control - Operational Noise	15
6	Noise	Management Policy Statement	16
	6.1.	Reverberation	
	6.2.	Controlling Noise to Prevent Noise Nuisance	16
	6.3.	Remedial Works/ Soundproofing to Reduce Breakout Noise	19
	6.4.	Anti-Social Behaviour	19
	6.5.	Security and Lighting	19
	6.6.	Future Ventilation	19
Ap	pendix A	- Noise Survey Details and Result Tables	20
·		A1 – Noise Survey Details	
	Appendix	A2 – Noise Survey Locations	21
Ar	ppendix B	- Site Location & Photos	22



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## 1 Introduction

Harwich Bar Enterprise Ltd has appointed Climate Acoustics to complete a noise survey, noise impact assessment and technical acoustic report to support the licensing application for the existing single-storey bar/ club premises at Wicks's Bar, 1 Midland House, High Street, Harwich, Essex, CO12 3PS.

Tendring District Council does not have specific noise criteria, but to avoid future noise nuisance to the nearest residents, we have reviewed the relevant criteria (Section 2 of this report) and measured noise levels at the site by completing a noise survey (Section 3).

Climate Acoustics will assess the increase in noise level due to the operation of the bar/ club premises and if required, suggest further appropriate mitigation measures to reduce noise emissions.

#### 1.1. Site Description

<u>Figure 1</u> shows where the existing ground floor level bar/ club building is located on the High Street in Harwich, highlighted in <u>red</u>. <u>Appendix B</u> shows the site location and photos of the existing bar club premises building.

<u>Section 3.2</u> of this report discusses the site's noise climate. The current noise climate was dominated by road traffic noise from High Street. For the noise survey, the existing bar/ club simulated the sound system without patrons between 21:48 and 23:20 on Wednesday 25<sup>th</sup> October 2023.

<u>Section 4</u> of this report considers external noise breakout from the bar/ club (and associated outdoor area) affecting nearby noise-sensitive residential receptors.

Figure 1 – Google Earth™ image showing the site description.





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## 2 Noise Criteria

A noise impact assessment and acoustic report are required to avoid noise nuisance to the nearest residents from the bar/ club, as detailed in <u>Section 2</u> of this report, which outlines music/ entertainment noise guidance.

#### 2.1. Licensing Act 2003:

Tendring District Council has a duty under the Licensing Act 2003 to determine its policy, exercise its licensing functions, and publish a statement of that policy.

As part of reviewing the premises license or club premises certificate under the Licencing Act 2003, Tendring District Council's objective is *'the prevention of public nuisance'* relating to excessive noise from Wick's Bar.

#### 2.2. Noise Abatement Notice (Issued 20th July 2023):

Tendring District Council has served the client a noise abatement notice on 20<sup>th</sup> July 2023. Since then, Tendring Council's Environmental Protection team has witnessed breaches of the noise abatement notice on 8<sup>th</sup> September 2023, 9<sup>th</sup> September 2023 and 30<sup>th</sup> September 2023.

#### 2.3. Music Impact Assessment Criteria:

Discussions were made with the EHO at Tendring District Council (TDC) that there were no specific music noise criteria. Therefore, the assessment of the bass component from music noise would be based on using Noise Rating (NR) criteria. NR levels use a noise's octave band frequency spectrum and are the usual approach adopted for music-based noise sources.

Typical criteria for the bass component of music noise of this nature should not exceed NR 25 during the daytime hours (07:00 to 23:00) and not exceed NR 15 during the night-time (23:00 to 07:00), as measured inside the nearest noise-sensitive receptors properties (NSR). However, these criteria would need to be agreed upon with TDC.

Noise Source	Noise Level Limits						
	Daytime	Night-time					
Music Noise	Internal NR 25*	Internal NR 15*					

<sup>\*</sup> A 10 dB reduction for an open window for ventilation from outside (free-field) to inside NSR.

#### Noise Rating Curve for NR 25 (Daytime) and NR 15 (Night-time)

Frequency, Hz	NR	L <sub>ZFeq</sub>	L <sub>Zfeq</sub> 125	L <sub>Zfeq</sub> 250	L <sub>Zfeq</sub> 500	L <sub>Zfeq</sub> 1000	L <sub>Zfeq</sub> 2000	L <sub>Zfeq</sub> 4000	L <sub>Zfeq</sub> 8000
Leq, dB	NR 25	55.2	43.8	35.3	28.7	25.0	21.9	19.5	17.8
	NR 15	47.3	35.1	26.0	18.9	15.0	11.7	9.3	7.5

## 2.4. Front Decking Seating Area Impact Assessment Criteria:

Noise from the front decking seating area to the front of the bar/ club should not exceed World Health Organisation (WHO) guidelines. WHO guidance for daytime level is for maximum exposure levels of 35 dB  $L_{Aeq,16hr}$  for indoor living areas (no  $L_{Amax}$  limit specified). Therefore, with a 10 dB reduction for an open window, a maximum exposure level of 45 dB  $L_{Aeq,16hr}$  at 1 metre from the façade of the nearest dwelling.



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# 3 Noise Survey

### 3.1. Noise Survey Details

<u>Appendix A1</u> shows the noise survey details, including personnel, instrumentation, calibration information, calibration procedure, uncertainty, equipment operation time & dates, and weather conditions.

Appendix A2 shows the noise survey positions where the noise levels were measured.

#### 3.2. Noise Climate

When attending the site, the current noise climate was dominated by road traffic noise from the High Street. The existing bar/ club premises (Wicks's Bar, 1 Midland House) have no existing plant associated with this site, but the sound system was simulated without patrons between 21:48 and 23:20 on Wednesday 25<sup>th</sup> October 2023.

#### 3.3. Noise Measurement Results

#### 3.3.1. Bar/ Club Operating Noise Survey Results

The detailed attended measured noise levels are summarised below for the bar/ club operating noise levels from music playing from the speaker system. *Note: The detailed octave band noise level measures are provided in the noise impact assessment in Section 4.2 of this report.* 

#### Music Breakout Noise Level Results (Locations Inside and A1 to A3):

Date	Position	Time	Duration (Minutes)	$L_{Aeq,T}$	L <sub>AF,max</sub>	L <sub>A90,T</sub>	Comments
25/10/2023	Inside	21:48	1 m 58 s	90	96	83	Inside 'Typical Mode': Amplified music from the speaker system with speakers and subwoofers on.
		22:23	2 m 33 s	73	77	68	Inside 'Quietest Mode': Amplified music
		22:26	1 m 29 s	68	71	65	from the speaker system with speakers on and subwoofers on.
		22:49	1 m 12 s	82	86	78	Inside 'Acceptable Quiet Mode': Amplified music from the speaker system with speakers and subwoofers on.

Date	Position	Time	Duration (Minutes)	$L_{Aeq,T}$	$L_{AF,max}$	L <sub>A90,T</sub>	Comments	
25/10/2023	A1	22:53	2 m 34 s	55	61	52	Measurement Outside the Front Entrance Facade of Bar Area 'Acceptable Quiet Mode': The Façade quieter to the bar area, as speakers are located in the upper seating area to the west portion of the bar/ club.	
	A2	21:50	1 m 30 s	65	75	60	Measurement Outside the Front Facade	
		21:58	56 s	62	65	55	of Upper Seating Area 'Typical Mode': Façade louder to the upper seating area	
		21:59	1 m 2 s	62	68	55	front facade.	
		22:00	34 s	59	65	48		



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Date	Position	Time	Duration (Minutes)	$L_{Aeq,T}$	L <sub>AF,max</sub>	L <sub>A90,T</sub>	Comments
25/10/2023	A2	22:30	1 m 16 s	47	56	42	Measurement Outside the Front Facade of Upper Seating Area 'Quietest Mode': Façade louder to the upper seating area front facade.
		23:11	3 m 23 s	60	75	49	Measurement Outside the Front Facade of Upper Seating Area 'Acceptable Quiet Mode': Façade louder to the upper seating area front facade.
	А3	21:53	1 m 19 s	64	73	59	Measurement Outside the Side Facade
		21:54	1 m 56 s	67	72	60	of Upper Seating Area 'Typical Mode': Façade louder to the upper seating area
		21:57	1 m 3 s	61	66	57	side facade.
		22:32	1 m 58 s	49	54	47	Measurement Outside the Side Facade of Upper Seating Area 'Quietest Mode': Façade louder to the upper seating area side facade.
		23:17	1 m 8 s	53	59	49	Measurement Outside the Side Facade of Upper Seating Area 'Acceptable Quiet Mode': Façade louder to the upper seating area side facade.

#### 3.3.2. Background Noise Survey Results

The attended measured background noise levels are summarised in the table below for the evening/ night after the simulated music was switched off, following measurements taken in <u>Section 3.3.1</u> of this report above.

#### Night Attended Background Noise Monitoring Results (Location A2 to A3):

Date	Position	Time	Duration (Minutes)	L <sub>Aeq,T</sub>	L <sub>A90,T</sub>
26/10/2023	A2	00:01	5 m 14 s	58	39
		00:12	5 m 17 s	54	39
		00:36	5 m 2 s	49	32
		00:48	5 m 18 s	43	29
		01:01	4 m 43 s	48	28
		01:33	36 s	35	29
	АЗ	00:07	5 m 5 s	55	36
		00:18	5 m 17 s	57	36
		00:42	5 m 17 s	51	33
		00:55	4 m 17 s	34	30
		01:31	2 m 4 s	34	31



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# 4 Music/ Entertainment Noise Impact from Bar/ Club to Residential

#### 4.1. Noise Impact Assessment Parameters

<u>Section 4</u> of this report shows the noise impact from the existing bar/ club (Wicks's Bar) on the neighbouring residents.

When attending the site, the current noise climate is dominated by road traffic noise from the High Street to the north of the site. When the speaker system was simulated, the amplified music noise was audible outside the building, particularly at the bass frequencies (63 Hz and 125 Hz).

• <u>Wicks's Bar Operating Hours</u>: The operating hours of bar/ club premises at Wicks's Bar were noted to be open during the daytime/ evening/ night when the noise survey was conducted:

#### Opening hours:

- 18:00 to 00:00 Monday to Thursday.
- 16:00 to 01:30 Friday to Saturday.
- 16:00 to 00:00 Sunday.

#### Location of bar and club:

<u>Figure 2</u> shows the location of the existing bar (Wicks's Bar) on the Ground Level of the premises, highlighted in **red**, whilst the nearest sensitive residential premises facing High Street and Cliff Road are highlighted in **purple**.

Figure 2 – Google Earth™ image showing the 3D view of Wicks's Bar and Residential.





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#### 4.2. Music/ Entertainment Noise Breakout from Bar/ Club to Residential

The bar and club on the ground level are approximately 3 metres from the nearest receptors (residents) above High Street and Cliff Road.

Music noise is clearly audible outside the bar/ club building and at Wicks's Bar, 1 Midland House, High Street, Harwich, Essex, CO12 3PS. The noise survey measurements were taken in October 2023 from all bar/ club operations.

<u>Section 3.2</u> of this report details the measured noise climate, and the following expected activities from the bar/ club operations include noise from the 'Background Music Noise Breakout', 'Chatter' and 'Noise from Patrons using the Front Decking Seating Area'.

#### **Bar/ Club Existing Internal Noise Levels:**

Following our site visit, it is understood that the Upper Seating Area is where the loudspeaker system and subwoofers are set up for music playing, and the Main Bar Area is not used for this type of activity. To ensure acceptable noise levels are maintained, both areas utilised for music, including the Main Bar and the Upper Seating Area are based on the music recorded in Wicks's Bar.

This assessment first looked at the Front Façade of Wicks's Bar and then the Side Façade of Wicks's Bar.

The music noise breakout has been assessed with the current doors and window configuration of the bar/ club to the nearest noise-sensitive receptors located at the 1st-floor level on High Street and Cliff Road. The table below shows the octave band reverberant noise spectrum used for this assessment, based on measuring music noise level at a typical level and general chatter added to the noise spectrum.

#### Reverberant noise levels in bar/ club (typical music level and general chatter):

Frequency, Hz	L <sub>ZFeq</sub>	L <sub>Zfeq</sub> 125	L <sub>Zfeq</sub> 250	L <sub>Zfeq</sub> 500	L <sub>Zfeq</sub>	L <sub>Zfeq</sub> 2000	L <sub>Zfeq</sub> 4000	L <sub>Zfeq</sub> 8000	dBA
Leq, dB	104	100	87	83	86	80	80	81	91

Noise breakout calculations show that noise breaking out of the bar/ club with windows and doors closed will be approximately 60 dB L<sub>Aeq</sub> at the nearest noise-sensitive receptors. This gives an internal NR 43 value above the NR 15 criteria represent inside the High Street NSR, and an internal NR 47 value is above the criteria value representative of inside the Cliff Road NSR.

Based on the results from the initial noise breakout assessment of the front and side façade of Wicks's Bar, it is expected that complaints are likely. Therefore, mitigation measures to reduce music noise breakout have been considered in the noise management plan in <u>Section 5</u> of this report to reduce the likelihood of complaints from music noise breakout.



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### 4.3. Noise from Front Decking Seating Area to Residential

Noise from the activities in the open front area to the nearest noise-sensitive residential receptors above.

The table below shows the assumed noise levels, where the maximum noise level (LAF,max) is based on a person shouting, and the LAeq noise level is based on a general hubbub of around 30 people in the front decking seating area. This represents the potential use and size of the existing front standing area.

#### **Expected noise level from existing front decking seating area:**

Front Area Noise Sources	Distance from Source	Noise level, dB
30 people in the front decking seating area	1 metre	79
Shouting	1 metre	95

The expected noise from the general hubbub on the front decking seating area will be approximately 69 dB L<sub>Aeq</sub> at the nearest noise-sensitive receptor(s). This is 24 dB above the measured evening/ night noise level at survey location A2 (45 dB L<sub>Aeq</sub> not exceed at 1 metre from NSR).

These calculations indicate that noise from somebody shouting in the front decking seating area would be 85 dB L<sub>AF,max</sub> at the nearest NSR. This is 31 dB higher than the measured L<sub>Aeq</sub> noise levels at survey location A2 (54 dB L<sub>Aeq</sub>, representative of the High Street NSR).

Based on the above, it is expected that complaints are likely. Therefore, mitigation measures have been considered for the front decking seating area in the noise management plan in <u>Section 5</u> of this report to reduce the likelihood of complaints from the activities in the open front decking seating area.



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# 5 Noise Management Plan

## 5.1. Noise Control - Sound System

To control the internal music noise level and ensure that the speaker system does not exceed the local authority criteria, it is suggested that, should licensing be granted, through changes in licencing, the bar/ club has a noise monitor installed to check compliance with the internal noise levels set in the table below within the Main Bar and the Upper Seating Area to avoid internal noise levels exceeding the design limits.

#### Recommended music noise limits inside Wicks's Bar from Music System:

Frequency, Hz	L <sub>ZFeq</sub>	L <sub>Zfeq</sub> 125	L <sub>Zfeq</sub> 250	L <sub>Zfeq</sub> 500	L <sub>Zfeq</sub> 1000	L <sub>Zfeq</sub> 2000	L <sub>Zfeq</sub> 4000	L <sub>Zfeq</sub> 8000	dBA
Leq, dB	94	90	84	83	85	80	80	78	89

Provided the internal music noise levels don't exceed the above octave band noise limits, the recommendations in this report will remain relevant and compliant with the criteria set in <u>Section 2</u> of this report. This music noise limit should not be onerous, as an acceptable noise limit was agreed upon during our site visit.

The sound system should be periodically checked to ensure that the maximum operating level will not likely cause a nuisance at the nearest noise-sensitive property. Assessment should be carried out at the nearest noise-sensitive property itself at a time when the ambient noise is at its lowest (but within regular operating hours of the premises).

## 5.2. Noise Control - Remedial Works/ Soundproofing

The building envelope currently provides an ineffective continuous barrier to contain sound inside the premises. Therefore, additional remedial works/ soundproofing are listed below:

#### <u>Fire Exit Door – Front Façade</u>:

Our investigation found that the current fire exit door provides minimal sound reduction. This was due to poor door seals, single-glazed pane, letterbox, and thin timber door frame.

So changing the fire exit door system to an acoustically rated door system is critical to start tackling the noise problem. It has been calculated that an individual door design would not be sufficient acoustically.

The following entrance fire exit door detail (highlighted in **bold** below) may be employed to achieve the required SRI of 52 decibels. However, similar acoustic door set systems with a minimum of 52 dB  $R_{,w}$  +  $C_{tr}$  could also be installed.

#### **Upgraded Fire Exit Door Detail:**

• A combination of two acoustic door sets in tandem with an acoustic lobby is necessary: one acoustic door to the external façade (48 dB R<sub>w</sub>), an acoustic lobby\*, and a second acoustic door (48 dB R<sub>w</sub>) to the acoustic lobby facing the Upper Seating Area.

#### **Entrance Door - Front Façade:**

Our investigation found that the current entrance double-door provides minimal sound reduction. This was due to poor door seals, single-glazed panes to each door, letterbox, and thin timber door frame.

The following entrance double-door detail (highlighted in **bold** below) may be employed to achieve the required SRI of 52 decibels. However, similar acoustic door set systems with a minimum of 52 dB  $R_{,w}$  +  $C_{tr}$  could also be installed.

<sup>\*</sup> Note: to reduce flanking noise transmission passing through them, the proposed acoustic lobby wall and ceiling specification for the fire exit door will need further consideration at the design stage.



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#### **Upgraded Entrance Double-Door Detail:**

A combination of two acoustic door sets in tandem with an acoustic lobby is necessary: one
acoustic door to the external façade (48 dB R<sub>w</sub>), an acoustic lobby\*, and a second acoustic door
(48 dB R<sub>w</sub>) to the acoustic lobby facing the Upper Seating Area.

\* Note: the proposed acoustic lobby wall and ceiling specifications for the entrance door will need further consideration at the design stage to reduce flanking noise transmission passing through them.

#### Windows - Front and Side Façades:

Our investigation has found that the current single-glazed windows (assumed 6mm toughened glass) provide minimal sound reduction. This was due to poor door seals, sealent between individual panes to the side window, and the thin timber window frame.

The following construction below may be employed to achieve the required SRI of 50 decibels. Although other similar wall constructions with a minimum of 50 dB DnT,w + Ctr could also be installed. Note, this wall treatment should be installed to the whole open window areas (north façade & west facade) at Wicks's Bar, highlighted in **bold** below:

#### **Upgraded Window Opening Construction Detail:**

- Remove existing single-glazed windows and frames.
- 100mm brickwork (min. net dry density 2000kg/m³).
- 50mm gap with 50mm Rockwool RWA45 or equivalent (min. density 45kg/m³).
- 100mm Lignacite, Lignacrete High Strength Block (minimum net dry density 2000kg/m³) with a plaster finish or equivalent.

The predicted external wall performance provided above is expected to meet a minimum acoustic performance of 50 dB D<sub>nT,W+</sub>C<sub>tr</sub>. Note: The above construction details must span the whole window area without holes or gaps. Also, when sealing perimeters or gaps/ holes exist, do not use expanding foam but use acoustic mastic instead. Finally, we recommend speaking directly with the manufacturer to ensure the optimum acoustic performance of the wall is achieved and the structural engineer to ensure the existing foundations and ceiling are suitably supported by the installed blockwork.

#### External Walls - Front and Side Façades:

Our investigation has found that the current external walls provide the most sound reduction. However, the external walls must be upgraded internally to prevent low and high-frequency noise breakout.

The following construction listed below may be employed to achieve the required SRI of 66 decibels. However, similar wall constructions with a minimum of 66 dB DnT,w + Ctr could also be installed. Note, this wall treatment should be installed to the whole external wall (north façade & west facade) at Wicks's Bar, highlighted in **bold** below:

#### **Upgraded External Wall Construction Detail:**

- Existing 100 mm brickwork (TBC\*)
- Existing 50 mm gap (TBC\*)
- Existing 100 mm blockwork (TBC\*)
- 100mm gap with 100mm Rockwool RWA45 or equivalent (min. density 45kg/m³)
- 100mm Lignacite, Lignacrete High Strength Block (minimum net dry density 2000kg/m³) with a plaster finish or equivalent.

\* A brief visual inspection of the existing external façade was made during the survey, but the current construction is assumed based on the age of the building, and the density of the masonry materials is unknown.

The predicted external wall performance provided above is expected to meet a minimum acoustic performance of  $66 \text{ dB D}_{nT,W+}C_{tr}$ . Note: This upgraded external wall construction listed above must span from the ground floor and

Page 13 of 23



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terminate at the roof space with no holes or gaps. Also, when ceiling perimeters or gaps/holes exist, do not use expanding foam but use acoustic mastic instead. Finally, we recommend speaking directly with the manufacturer to ensure the optimum acoustic performance of the wall is achieved and the structural engineer to ensure the existing foundations and ceiling are suitably supported by the installed blockwork.

#### 5.3. Noise Control - Patron Noise in Front Decking Seating Area

You will need to bear in mind when the premises are open during evenings, at night, or weekends, as this could lead to complaints of noise nuisance from the front decking seating area.

The business operator and their staff at the premises are responsible for ensuring noise from all external areas is kept to a minimum. It would be best to display posters asking customers to keep noise to a minimum. To avoid problems with neighbours, the following advice should be considered:

- the front decking seating area of the premises should be sited away from domestic premises and, if possible, with some form of insulation between customers and residents to help mitigate the noise.
- Speak to your neighbours, advise them what you plan to do, and get their suggestions.
- Display posters advising your customers to keep noise to a minimum in external areas.

The noise control measures listed below should not exceed the trigger levels at 1 metre from the façade of the NSR per WHO guidelines, as stated in <u>Section 2.4</u> of this report.

- Localised acoustic seating booths inside the front decking seating area: Patron noise control should start
  with your layout and orientation of your seating to segregate individual areas and reduce noise locally inside the
  front decking seating area. Acoustic panels can also segregate each seated area, but consideration should be
  given for airflow.
- Restrict noise egress levels from the front decking seating area: We recommend that the number of patrons using the outside front decking seating area from 11 pm onwards is restricted to up to 10 people at any one time and that noise levels in the seating area do not exceed the cumulative predicted noise levels (L<sub>Aeq</sub>) detailed below:

Restricted noise levels from the existing front decking seating area:

Front Area Noise Sources	Distance from Source	Noise level, dB
Ten people in the front decking seating area	1 metre	69

- Restricting Patron Noise Levels: Methods of patron noise control include:
  - To ensure that the noise levels detailed in the table in <u>Section 5.3</u> of this report are maintained and restricted to desired noise levels, <u>we strongly recommend a noise survey be carried out to ensure that the number of patrons will not be a noise nuisance.</u>
  - Playing calmer types of music internally towards closing time (11 pm to 1:30 am) can encourage patrons to leave in a less rowdy manner, spread over a more extended period so that the peak number leaving and peak noise are reduced.
  - Display posters/ signage advising your customers to keep noise to a minimum in external areas. Providing notices at exits requesting patrons' cooperation can also help reduce noise. However, in most cases, it will be good practice for door supervisors to manage the coming and going of patrons.
  - In some cases, specially trained staff may also be used to patrol the surrounding area to help control noise from patrons.
  - Door staff should also remind patrons using the front seating area of the residential nature of surrounding premises, and behaviour outside the premises should be monitored.

Page 14 of 23



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The sounding of taxi horns when waiting to collect customers can be discouraged by licensees forming an
agreement with local cab firms. Hence, the drivers come to the door or into the licensed premises to collect
their passengers. Additional controls can be gained by staff calling cabs for customers, or a dedicated
freephone line being installed for customers to call cabs and then being directed to wait inside the premises
for their taxi. These measures can help reduce the nuisance of taxi touts.

<u>Note</u>: Door staff should enforce quieter noise levels from patrons using the seating area or take action by reducing the number of people using the space.

#### 5.4. Noise Control - Operational Noise

A comprehensive Noise Management Policy Statement will operate at the site, as shown in <u>Section 6</u> of this report. This policy document will be regularly reviewed and updated.



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# 6 Noise Management Policy Statement

#### 6.1. Reverberation

The reverberation time inside the upper seating area inside Wicks's Bar will be necessary to meet the requirements. Curtains installed to line windows and acoustic foam bass trappers in all corners of the top seating area have been installed to reduce the reverberation time inside the upper seating area.

Some other measures that can be taken to reduce reverberant sound field include:

- Acoustic Ceiling Panels
- Acoustic Hanging Baffles
- Acoustic Wall Panels
- Soft Furnishings

<u>Important</u>: During the design phase, it is recommended that before selecting/ purchasing acoustic materials and furnishings, the main contractor should contact their acoustic consultant (Climate Acoustics) to clarify if the selected acoustic absorption is sufficient.

#### 6.2. Controlling Noise to Prevent Noise Nuisance

- Minimise fire exit/egress: By providing lobby doors predominantly used as a fire exit/egress except for access, maintenance and safety reasons, emergency exit and service doors will not be secured open when the premises are operating.
- Minimise entrance/egress: The provision of lobby doors predominantly used as an entrance/egress will
  minimise customers entering or leaving, particularly late in the evening. These doors should be fitted with selfclosing devices to help minimise the amount of noise that escapes when people enter or leave the premises.
   This also has the added effect of limiting smoke returning to your premises.
- Control noise from the music system: To minimise noise from the two speakers and two subwoofers, a noise limiter will be installed through which all music must be played to meet the noise egress level provided in the table below.

The noise limiter/ controller shall be installed, then set and sealed in conjunction with Tendring District Council's EHO / Noise Team. *Note: particular attention should be paid to assessing and controlling low-frequency noise (bass beat) from entertainment, as this is a frequent source of complaint.* 

#### Recommended music noise limits inside Wicks's Bar from Music System:

Frequency, Hz	L <sub>ZFeq</sub> 63	L <sub>Zfeq</sub> 125	L <sub>Zfeq</sub> 250	L <sub>Zfeq</sub> 500	L <sub>Zfeq</sub> 1000	L <sub>Zfeq</sub> 2000	L <sub>Zfeq</sub> 4000	L <sub>Zfeq</sub> 8000	dBA
Leq, dB	94	90	84	83	85	80	80	78	89

- The sound system has been removed from the bar to remove any further sound complaints by residents.
- Implementing hourly checks of sound by staff inside and around the building.
- Control Noise from Amplifier and TV system: A document of correct sound levels around the amp and TV is currently being produced. All staff members must read through this document and, once read, must sign and date it. If sound levels aren't adhered to, a written notice will be given to that staff member.
- **Control Music Events:** At this moment in time, no music events are being planned. This will be reviewed again once the sound acoustic engineers have created a plan and the soundproofing is in place.

Page 16 of 23



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- Restricting Patron Noise Levels: Methods of patron noise control include:
  - To ensure that the noise levels detailed in the table in <u>Section 5.3</u> of this report are maintained and restricted to desired noise levels, <u>we strongly recommend a noise survey be carried out to ensure that the number of patrons will not be a noise nuisance.</u>
  - Playing calmer types of music internally towards closing time (11 pm to 1:30 am) can encourage patrons to leave in a less rowdy manner, spread over a more extended period so that the peak number leaving and peak noise are reduced.
- **Signage and Policies:** Display posters/ signage advising your customers to keep noise to a minimum in external areas. Providing notices at exits requesting patrons' cooperation can also help reduce noise. However, in most cases, it will be good practice for door supervisors to manage the coming and going of patrons
  - Clearly display noise level policies within the bar premises.
  - Encourage customers to be respectful of noise levels through signage and announcements.
  - Establish a policy for customers' behaviour, including noise expectations, and enforce it consistently.
  - Regular Monitoring:
- Staff Training: In some cases, specially trained staff may also be used to patrol the surrounding area to help control noise from patrons.
  - The entrance doors are supervised at all times.
  - Door staff should also remind patrons using the outdoor decking seating area of the residential nature of surrounding premises, and behaviour outside the premises should be monitored.
  - The sounding of taxi horns when waiting to collect customers can be discouraged by licensees forming an
    agreement with local cab firms. Hence, the drivers come to the door or into the licensed premises to collect
    their passengers. Additional controls can be gained by staff calling cabs for customers, or a dedicated
    freephone line being installed for customers to call cabs and then being directed to wait inside the premises
    for their taxi. These measures can help reduce the nuisance of taxi touts.
  - Train staff on noise management practices and maintaining acceptable noise levels.
    - Instruct staff on handling customer noise complaints, ensuring they are professional, respectful, and proactive in addressing concerns.
  - IHASCO training to be completed by all bar staff, including; 'Working in licensed premise', 'Slips, trips, and falls', 'Drug and alcohol awareness', 'Fire safety', 'First aid', and 'Sexual harassment'.

<u>Note</u>: Door staff should enforce quieter noise levels from patrons using the front decking seating area or take action by reducing the number of people using the outdoor space.

- **General housekeeping:** We encourage all personnel to keep the entrance door on the High Street clean and attractive for our customers and neighbours. This means dealing with debris that has nothing to do with us, but in the interest of making this a better area, we will still clear it up.
  - Plastic cups are supplied to customers from 11 pm onwards to minimise impact.
  - No bottles are permitted to be tipped or thrown into outside storage receptacles at the premises between 23:00 and 07:00 hrs (night-time period).
  - Arrangements are in place to ensure that deliveries, collections and operational servicing are carried out between 07:00 and 23:00 hrs, except if access at other times is unavoidable and specific procedures are in place to limit disturbance.



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- Any glass or bottles in the entrance doorway will be cleared. Bottles and glasses will be cleared away as we
  try to keep the area around our building tidy and safe.
- Restrict noise egress levels from the front decking seating area: We recommend that the number of
  patrons using the outside front decking seating area from 11 pm onwards is restricted to up to 10 people at any
  one time and that noise levels in the seating area do not exceed the cumulative predicted noise levels (L<sub>Aeq</sub>)
  detailed below:

#### Restricted noise levels from the existing front decking seating area:

Front Area Noise Sources	Distance from Source	Noise level, dB	
Ten people in the front decking seating area	1 metre	69	

- **Prevent Vibration from Sound System:** Anti-vibration mounts should be fitted to the existing sound system to prevent vibration. The system suppliers can advise with an effective anti-vibration mount required so that there is no vibration impact through the structure of the floor and the external & internal wall elements.
- Engage with nearby residents and businesses: Advise them on your plan and get their suggestions. It is recommended that the premises publish a phone number to the local 'Residents Association' and any resident or business requiring it for them to call with any concerns. All complaints will be investigated by the Premises License Holder, DPS or Manager nominated by the Premises License Holder. Details of all complaints, including the outcome, will be recorded in the Incident Book.
  - Publish phone numbers to the local 'Residents Association' and any resident or business requiring it for them to call with any concerns.
  - We will attach the utmost importance to the careful investigation and prompt resolution of any complaint
    regarding the running of the premises. Particular emphasis is placed on building and maintaining close links
    with the residents, including meetings where necessary to allow our neighbours to raise any issues and for
    those issues to be quickly resolved.
  - Hosting monthly meetings for residents to attend and discuss any issues with the bar. In the future, this will
    be advertised on social media pages, and the bar will be closed to the general public while this meeting is in
    progress.
  - Notes will also be taken during every meeting and sent to residents upon request.
  - Holding these monthly meetings should help develop a good relationship between the bar and the residents.
  - In this meeting, a business number will be provided, which the residents can contact directly.
- **Record Keeping:** Keep records of the noise levels measured, acknowledging any patterns or areas that may require further attention.
  - Keep an Incident Book.
  - Conduct regular noise level checks using sound meters to ensure compliance with local regulations.
  - Take immediate action if noise levels consistently exceed acceptable limits.



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## 6.3. Remedial Works/ Soundproofing to Reduce Breakout Noise

- To prevent any noise breakout through the external construction materials, acoustic door sets should be implemented into this scheme. Follow further guidance provided in Section 5.2 of this report:
- <u>Important</u>: During the design phase, it is recommended that before selecting/ purchasing external wall materials, acoustic lobby materials, and acoustic door sets, the client should contact their acoustic consultant (Climate Acoustics) to clarify if the selected acoustic performance is sufficient.
  - <u>Upgraded Fire Exit Door Detail (Front Façade)</u>: A combination of two acoustic doors in tandem with an acoustic lobby is necessary, one acoustic door to the external façade (48 dB R<sub>w</sub>), an acoustic lobby\*, and a second acoustic door (48 dB R<sub>w</sub>) to the acoustic lobby facing the Upper Seating Area.

    \* Note: to reduce flanking noise transmission passing through them, the proposed acoustic lobby wall and ceiling specification for the fire exit door will need further consideration at the design stage.
  - <u>Upgraded Entrance Door Detail (Front Façade)</u>: A combination of two acoustic doors in tandem with an acoustic lobby is necessary, one acoustic door to the external façade (48 dB R<sub>w</sub>), an acoustic lobby\*, and a second acoustic door (48 dB R<sub>w</sub>) to the acoustic lobby facing the Upper Seating Area.

    \* Note: to reduce flanking noise transmission passing through them, the proposed acoustic lobby wall and ceiling specification for the fire exit door will need further consideration at the design stage.
  - Upgraded Window Opening Construction Detail:
    - Remove existing single-glazed windows and frames.
    - 100mm brickwork (min. net dry density 2000kg/m<sup>3</sup>)
    - 50mm gap with 50mm Rockwool RWA45 or equivalent (min. density 45kg/m³)
    - 100mm Lignacite, Lignacrete High Strength Block (minimum net dry density 2000kg/m³) with a plaster finish or equivalent.
  - Upgraded External Wall Construction Detail:
    - Existing 100 mm brickwork (TBC\*)
    - Existing 50 mm gap (TBC\*)
    - Existing 100 mm blockwork (TBC\*)
    - 100mm gap with 100mm Rockwool RWA45 or equivalent (min. density 45kg/m³)
    - 100mm Lignacite, Lignacrete High Strength Block (minimum net dry density 2000kg/m³) with a plaster finish or equivalent.

#### 6.4. Anti-Social Behaviour

• Ensure your premises are monitored and covered by CCTV. This will help ensure groups of patrons do not congregate in these areas. This will also avoid complaints to the police or the local authority by your neighbours.

#### 6.5. Security and Lighting

• To avoid lighting as a statutory nuisance, consider the direction of lighting and, where possible, direct it away from any domestic premises.

#### 6.6. Future Ventilation

During summer months, an alternative means of ventilation may be required in the future, based on the background noise survey measurements shown in <u>Section 3.3.2</u> of this report. This would prevent future ventilation noise from contributing to the overall rating noise level at the resident's window. **Note: Any future ventilation or air conditioning fan(s) could be assessed cumulatively by your acoustic consultant (Climate Acoustics).** 

Page 19 of 23

<sup>\*</sup> A brief visual inspection of the existing external façade was made during the survey, but the current construction is assumed based on the age of the building, and the density of the masonry materials is unknown.



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# Appendix A – Noise Survey Details and Result Tables

## Appendix A1 - Noise Survey Details

Personnel present: Alex Hancock - Climate Acoustics

#### Instrumentation used and calibration info:

Svantek SV977 – Sound Level Meter (\*calibration certificate available upon request.).

Norsonic 1251 – Calibrator (\*calibration certificate available upon request.).

Climate Acoustics Calibrated Equipment				
Attended Noise Meter (Svantek SV977)				
Class 1 Sound Level Meter	Svantek 977 – Serial Number 34186 (Date of Calibration: 04/07/2023*)			
Microphone	MTG MK250 – Serial Number 10876 (Date of Calibration: 04/07/2023*)			
Preamplifier	Svantek SV12L – Serial Number 33684 (Date of Calibration: 04/07/2023*)			
Calibrator (Norsonic 1251)				
Calibrator	Norsonic 1251 - Serial Number 29151 (Date of Calibration: 24/02/2023*)			

<u>Calibration procedure</u>: Before and after the noise survey, the Svantek SV977 sound level meter was calibrated using the Norsonic 1251, and no significant drift was measured before and after the survey (accuracy within +0.3 dB).

**Uncertainty:** For accurate measurements, the noise monitoring equipment is calibrated by traceable lab calibration:

- a Class 1 sound level meter and microphone are calibrated once every two years.
- a Class 1 calibrator is calibrated once every year.

Note: all measurements were taken by a Class 1 sound level meter; a margin on uncertainty of +/- 1.1 decibels typically applies because of the equipment's tolerances. The uncertainty with the noise prediction calculations is limited, as using our experience and factors including distance, direct line of sight and reflections have been considered.

#### **Equipment operation times and dates:**

9:15 pm on Wednesday 25th October 2023 to 1:15 am Thursday 26th October 2023.

#### Weather conditions:

Weather conditions during the operation of noise monitoring equipment.

Date	Temperature (°C)	Weather Conditions	Wind
Wednesday 25 October 2023	6°C to 7°C	Cold. Dry. Fog/ Passing Clouds.	Calm (0-1 m/s)
Thursday 26 October 2023	7°C	Cold. Dry. Fog/ Passing Clouds.	Calm to Light Breeze (1-3m/s)

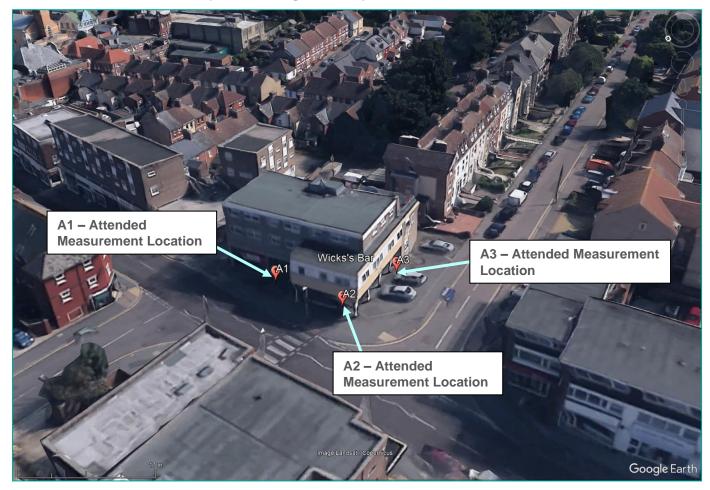


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## Appendix A2 - Noise Survey Locations

The Google Earth™ image below shows the outdoor attended sound level meter positions A1 to A3.

**Noise Measurement Locations (Source: Google Earth™)** 





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# **Appendix B – Site Location & Photos**

Site Location (Source: Google Earth™)





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#### Photos of Wicks's Bar (Outside)



