



Noise Mitigation Grant Scheme 2024

Application Guidelines

Bristol Airport Environmental
Improvement Fund

Noise Mitigation Grant Scheme – Application Guidelines

1.1 Introduction

The Noise Insulation Scheme is run as part of the Bristol Airport Environmental Improvement Fund. The main purpose of the fund is to mitigate the impacts of the Airport's operations and give something back to the surrounding communities who are affected by being situated in close proximity to Bristol Airport. It reflects our aim for responsible growth by being respectful of the local community and the environment.

These guidelines detail how the Noise Mitigation Scheme is administered and how the noise grants are provided. The fund is administered by Bristol Airport and overseen by a Management Committee consisting of local parish councillors, North Somerset Council representatives and airport managers.

1.2 What can the noise mitigation grant cover?

The fund can cover some, or all, of the costs of noise insulating works and is available to properties most impacted by noise from Bristol Airport flights. Depending on where you live you could be eligible for a grant between £5000 and £8000. Unlike the previous Noise Insulation Scheme, the Airport does not require any contributions from residents in the lower noise contour areas. Previous schemes required a 50% contribution for some noise bands. This is no longer the case.

1.3 Does the recent planning application appeal affect this scheme?

In February 2022 the Government's Planning Inspectorate granted planning permission for the airport to grow. As part of a series of measures included in this planning decision was an enhanced Noise Mitigation Scheme. 2024 is the first year of the new scheme, set out within these guidelines.

1.4 How do I know if I am eligible for funding?

A resident's ability to apply for noise mitigation funding is based on the property's location. This doesn't mean the direct proximity to the Airport, but where the property lies within the noise contours which are produced annually.

Noise contours are shown like topographical maps. Noise contour lines draw together points of the same sound level representing different areas of noise exposure. A number of factors affect the shape of the noise contours including terrain, aircraft fleet in operation and runway direction. Contours are produced for daytime and night time periods. These are based on the daily average movements that take place between 0700-2300 local time (day) and 2300-0700 (night) during the 92-day period 16 June to 15 September inclusive.

Noise contours are compiled every January by external acoustic consultants who use the flight schedule for the summer period to predict noise levels in decibels.

If you live within the daytime LAeq, 16h (07:00 – 23:00) 63 dB, 60 dB or 57 dB noise contours or the nighttime LAeq, 8h (23:00 – 07:00) 55 dB contour you can apply for a grant.

Contour	Sum
60 dB LAeq, 16hr (0700h – 2300h) or above	£8,000
55 dB LAeq, 8hr (23:00 to 07:00)	£5,550
57 dB LAeq, 16hr (0700h – 2300h)	£5,000

A summary view of the noise contours can be found on our website at:

<http://www.bristolairport.co.uk/about-us/community/local-community/noise-insulation-grants>

1.5 How will my application be assessed?

Being within the noise contour does not mean you will automatically get a grant as there is only a finite amount of funding available each year. If the number of applications in any year exceeds the total value of funding which has been allocated to the scheme, then two factors will be considered when prioritising applications:

1. Providing noise insulation to those located in a higher contour
2. Providing noise insulation to those who have not previously received a grant

Applications are considered by the Management Committee, consisting of representatives from Bristol Airport and North Somerset Councillors, based on the following priority list:

<u>Priority</u>	<u>Requirements</u>
1	Within the 63dB day noise contour area – never had a grant before
2	Within the 63dB day noise contour area – had a grant before
3	Within the 55dB night noise contour area – never had a grant before
4	Within the 55dB night noise contour area – had a grant before
5	Within the 60dB day noise contour area – never had a grant before
6	Within the 60dB day noise contour area – had a grant before
7	Within the 57dB night noise contour area – never had a grant before
8	Within the 57db night noise contour area – had a grant before

Should the fund be oversubscribed in any one category then priority will be given to those living closest to the extended centreline of our runway. It needs to be noted that the decision of the Committee is final, and the process is established on a case-by-case basis.

2. How do I apply?

Please complete a noise grant application form and include a quote from a local company that you wish to use to carry out the noise mitigation works. The online form via the application portal must be completed for an application to be considered at the Committee meeting.

<https://www.bristolairport.co.uk/about-us/community/local-community/noise-insulation-grants>

If you require a paper copy of the application form, please contact us using the contact details at the end of this document.

In obtaining your quote you will need to ensure it is for:

- High specification acoustic double/triple glazing or Secondary glazing.
- Inclusion of measures to provide suitable alternative means of acoustic ventilation where appropriate and necessary
- Fits the budget of allocated grant (and you have budgeted to account for any remaining costs)
- Is for habitable rooms (this includes bedrooms, living rooms, dining rooms and kitchens but NOT bathrooms, hallways and landings).
- Acoustic grade doors affixed to masonry walls (excludes conservatories and internal doors)

The scheme also offers funding towards loft insulation. Monies towards loft insulation will only be approved if the material chosen is effective at reducing sound transmission. The loft in the property must have adequate ventilation to avoid damp. Loft insulation must meet the following specification:

- The type of insulant should be chosen based on the material properties to reduce sound transmission, your insulators should be able to assist with this. We strongly advise using glass or rock mineral wool where possible. Expanded/extruded polystyrene (EPS/EXPS) and foam products (PUR/PIR) do not provide adequate sound absorption.

A full specification is provided in Appendix A. This should be provided to the contractor to ensure the works are carried out to meet these specifications.

2.1 When can I apply?

The scheme will be open across two periods each year to provide two opportunities within the year for residents to apply for funds. The first set of applications will be open from the beginning of April to the 1st of June and the beginning of July to the 1st September for consideration by the

Management Committee. We do not accept applications outside of this period. Sound Insulation work will need to be complete by the end of the year to be covered by the scheme.

2.2 What happens once I have applied?

All applications are considered at the Committee Meeting, after which you will be contacted to let you know if you have been successful. You will hear about the outcome of your application the week following the Management Committee meeting held in either June or September, depending on when the application is submitted. The dates of the meetings can be found on our website at '[Local community | Bristol Airport Environmental Improvement Fund](#)'.

If you are unsuccessful, you are welcome to reapply in future years (assuming continued eligibility). As the higher priority properties are provided with grants, it is more likely that those further down the priority list can be funded in future years.

If you are successful, we will contact you confirming the grant amount that will be provided. You will then be able to instruct your contractor to undertake the work. Unless otherwise requested, this decision will be communicated by email.

After the works are finished, we will require a copy of the final invoice and some photographs of the completed works. These can be sent via email to the email addresses included in this document. If you are unable to share these details electronically, we can arrange a site visit, or these can be posted to us.

It is important to note that the Airport will then bank transfer funds to your contractor directly after works have been completed and proof has been received.

2.3 If your property is not eligible

If you believe the aircraft noise levels you experience should make you eligible for funding, but your property is outside of the contours, or your property is in the wrong contour, we have a process in place to accommodate these appeals.

We can facilitate mobile noise monitoring carried out by external acoustic consultants. This involves installing noise monitoring equipment at your property for a period of approximately two weeks. To ensure accuracy, this will be carried out during the busiest period of the summer, between June and September. This is subject to the location being secure and having an external power supply, for example, a resident's back garden. Reports are generated and based on these results in line with the priority listed above, there is the possibility of a grant being provided.

This resource is not limitless and as such we will prioritise the distribution of this monitoring based on a location's proximity to the nearest eligible contour.

If you wish to be considered for this service please contact us via the email or phone number provided.

2.4 Contact Us

If you have any questions then please contact the Airport's Sustainability Officer – Whitney Love or the Head of Sustainability and Social Value – Hannah Pollard, who can offer advice:

Email: Sustainability@bristolairport.com (preferred) / Whitney.love@bristolairport.com / Hannah.pollard@bristolairport.com

Phone:

Whitney Love - 07342 035973

Hannah Pollard – 07776 658966

Post:

Sustainability, Lulsgate House, Bristol Airport, Bristol, BS48 3DW

3. Frequently asked questions

How do I find out what noise contour level I am in?

All eligible properties can apply throughout the open application periods. An interactive map of the contours is available on the Bristol Airport website. An overview is also available at the end of this document.

If you have any further questions, please contact the Sustainability team.

Why does it only cover certain noise contour levels?

The intention is to provide noise insulation grants to those who have not received funding before and are most affected first. The criteria provide a balance whereby we can invite applications whilst ensuring that the Committee's funds cover the demand. Funding is provided for those most affected by noise.

How can I find out if my property has ever had a grant for noise insulation before?

There have been previous schemes that provided grants for windows. If you have moved into your property more recently you may not know if you have received a grant for noise insulation before. The Airport team can check the records and advise.

Why do I need to get my own quote?

By sourcing your own quote for the work you can ensure that the work will cover the windows and ventilation you wish to have. Feedback from other similar schemes has been that residents prefer control over who supplies the windows and the eventual cost, particularly when part funded. This method also allows for local suppliers to be used, keeping funds from the Noise Insulation Scheme within the local area. If, through exceptional circumstances, you are unable to organise for a company to provide you with a quote, then please contact the Airport's Sustainability Department for assistance.

If I am renting a property can I still apply?

In order to receive a grant you must have the authorisation of the property owner, so you will need written permission from your landlord. Attach evidence of this to your application.

If I am unsuccessful what happens to my application?

The scheme will consider all the applications received each year, so if you wish to reapply in the following year, please resubmit your application within the timeframes identified.

I would like to have additional windows fitted, that take the price over the maximum grant amount, or are for windows in a bathroom/hallway/landing. Is this possible?

Any additional work beyond that specified in this scheme is funded by the householder. Ask your contractor to separate the work out so it is clear which elements are covered by you and which will be covered by the grant.

I've already had windows fitted. Can I retrospectively apply for funding?

Grants are only available for the future installation of windows unless specifically agreed by the Committee. We do not offer grants for retrospective works.

3.1 Data privacy

To find out more about how we process your data, please visit our website <https://www.bristolairport.co.uk/privacy-policy>. You can contact our Privacy Team by emailing privacy@bristolairport.com.

If, however you are not satisfied with our response, you can contact our Data Protection Officer at dpo@bristolairport.com. If you remain dissatisfied, you can contact the Information Commissioner's Office, whose details are available from their website www.ico.org.uk. Or at:

Information Commissioners Office

Wycliffe House
Water Lane
Wilmslow
Cheshire SK9 5AF

4.0 ACOUSTIC SPECIFICATION (APPENDIX A)

Noise Insulation Fund specification for contractors.

Provision of high acoustic performance replacement double/triple glazing:

Where chosen, replacement double/triple glazing works and specification to meet acoustic requirements are as follows:

- Windows of habitable rooms within the dwelling, bedrooms / living rooms / dining rooms / studies / can be upgraded with new high-performance units and will be covered by the offer given in the grant scheme.

- Additional windows to habitable or non-habitable areas (i.e. halls / en-suite or bathrooms etc.) can also be upgraded but are not covered by the grant scheme.
- High performance units shall be formed from a sealed glazing configuration which has at least one laminated pane, and should normally achieve a weighted sound reduction index of R_w 38 dB, tested and rated in accordance with BS EN ISO 10140-4:2021 Acoustics — Laboratory measurement of sound insulation of building elements — Part 4: Measurement procedures and requirements and BS EN ISO 717-1:2020. The sound insulation requirements of the glazing are applicable to the window system as a whole, including frames, mullions and panels.
- Windows should be adequately openable for means of escape, where required.
- Openable windows including seals should be as per the tested system.
- Building Regulations apply to all replacement windows. These regulations apply to thermal performance and other areas such as safety, air supply, means of escape and ventilation. The installed windows must comply with all current Building Regulations.
- Windows should not normally be fitted with trickle vents. Trickle ventilators are designed to comply with Building Regulations Approved Document F ventilation requirements. Standard trickle ventilators will allow fresh air and also aircraft noise into habitable rooms. To maintain the intent of the high acoustic performance windows these can not be used. Further details on ventilation are provided below.
- Where Habitable Rooms have external doors, they will be fitted with weatherstrip seals to the thresholds, jambs and heads in order to achieve an acoustic standard which is as far as practicable, compatible with high performance replacement glazing or secondary glazing fitted under this scheme.
- Fully glazed or patio doors or French windows will be treated as windows for the purposes of the scope of works.
- We recommend using a higher specification of acoustic glass, such as L3, for the most effective sound insulation.

Provision of secondary glazing:

Secondary glazing can provide a very cost effective method of improving the sound insulation performance of windows. It may also be the only option where there are constraints on changes to the external appearance of a dwelling, i.e. listed buildings and/or those in conservation areas.

Where chosen, secondary glazing works and specification to meet acoustic requirements are as follows:

- Windows of habitable rooms within the dwelling, bedrooms / living rooms / dining rooms / studies / can be upgraded with new high-performance double-glazed units and will be covered by the offer given in the grant scheme.

- Additional windows to habitable or non-habitable areas (i.e. halls / en-suite or bathrooms etc.) can also be upgraded but are not covered by the grant scheme.
- Outer windows made good and effectively sealed by compressible strips or otherwise.
- Secondary glazing should fit within, or cover the full area of the existing window reveal.
- Secondary glazing shall be formed by minimum 6mm thick laminated glass panes.
- Separation between outer and inner glazing should be a minimum of 100mm where reasonably practicable.
- Inner & outer windows should be adequately openable for means of escape.
- Inner windows should be well sealed at junctions and edges by any effective means.
- The reveals between panes may be lined with acoustically absorptive treatments to increase attenuation; however, this is not required to be undertaken as part of the scheme.
- Supply and fitting of secondary glazing must be in accordance with any applicable current Building Regulations.

Ventilation:

Adequate ventilation is a Building Regulations requirement. Standard replacement window ventilation via trickle/slot ventilators will significantly compromise the performance of the windows and should not be used.

- Should replacement double glazing or secondary glazing be chosen, passive or mechanical acoustic ventilator units should be installed in rooms where replacement/secondary glazing's fitted.
- The size and/or flow rate of any ventilator(s) must be in line with current Building Regulations.
- The presence of any combustion appliances may require additional ventilation to comply with Approved Document J. These ventilators must be permanently open.
- Acoustic ventilation is likely to comprise at least two permanent sound attenuating vents or one mechanical sound attenuating vent and one permanent sound attenuating vent.
- The permanent sound attenuating ventilators should normally comply with the requirements of the Noise Insulation Regulations.
- The mechanical sound attenuating vent shall comprise a Siegenia-Aubi Aeropac SN Acoustic Ventilator or Titon Sonair.
- The mechanical sound attenuating ventilators will provide residents the option to achieve high levels of ventilation with windows closed. This will help improve indoor environmental quality and will help to mitigate overheating risk during the summer.

- Subject to checking for compliance with Approved Document J, any existing air bricks or ventilators in habitable rooms should be upgraded to meet the acoustic requirements above.

Loft Insulation:

Where chosen, loft insulation works and specification to meet acoustic requirements are as follows:

- Loft insulation should be targeted to soundproofing the property.
- For acoustic performance a minimum thickness of 100mm is required. Thicker layers will have incidental benefits of providing extra thermal insulation. A thickness of at least 300mm in depth of insulation is recommended.
- The material should be glass or rock mineral wool materials for insulation where possible.

APPENDIX 2: GLOSSARY OF ACOUSTIC TERMINOLOGY

The Decibel, dB

The unit used to describe the magnitude of sound is the decibel (dB) and the quantity measured is the sound pressure level. The decibel scale is logarithmic and it ascribes equal values to proportional changes in sound pressure, which is a characteristic of the ear. Use of a logarithmic scale has the added advantage that it compresses the very wide range of sound pressures to which the ear may typically be exposed to a more manageable range of numbers. The threshold of hearing occurs at approximately 0 dB (which corresponds to a reference sound pressure of 2×10^{-5} Pascals) and the threshold of pain is around 120 dB.

The sound energy radiated by a source can also be expressed in decibels. The sound power is a measure of the total sound energy radiated by a source per second, in watts. The sound power level, L_w is expressed in decibels, referenced to 10^{-12} watts.

Frequency, Hz

Frequency is analogous to musical pitch. It depends upon the rate of vibration of the air molecules that transmit the sound and is measured as the number of cycles per second or Hertz (Hz). The human ear is sensitive to sound in the range 20 Hz to 20,000 Hz (20 kHz). For acoustic engineering purposes, the frequency range is normally divided up into discrete bands. The most commonly used bands are octave bands, in which the upper limiting frequency for any band is twice the lower limiting frequency, and one-third octave bands, in which each octave band is divided into three. The bands are described by their centre frequency value and the ranges which are typically used for building acoustics purposes are 63 Hz to 4 kHz (octave bands) and 100 Hz to 3150 Hz (one-third octave bands).

A-weighting

The sensitivity of the ear is frequency dependent. Sound level meters are fitted with a weighting network which approximates to this response and allows sound levels to be expressed as an overall single figure value, in dB(A).

Environmental Noise Descriptors

Where noise levels vary with time, it is necessary to express the results of a measurement over a period of time in statistical terms. Some commonly used descriptors follow.

Statistical Term	Description
$L_{Aeq,T}$	The most widely applicable unit is the equivalent continuous A-weighted sound pressure level ($L_{Aeq,T}$). It is an energy average and is defined as the level of a notional sound which (over a defined period of time, T) would deliver the same A-weighted sound energy as the actual fluctuating sound.
L_{A90}	The level exceeded for 90% of the time is normally used to describe background noise.
$L_{Amax,T}$	The maximum A-weighted sound pressure level, normally associated with a time weighting, F (fast), or S (slow)

Sound Transmission in Rooms

Sound energy is reflected from the room surfaces and this gives rise to reverberation. At short distances from a sound source, the sound level will fall off at a rate of 6 dB per doubling of distance, as it would in the open air – this is known as the direct field. Beyond a certain distance, the effect of reverberation takes over and the level ceases to fall off significantly with distance from the source. This is known as the reverberant field. For receiver positions in this part of the room, sound levels can be reduced by applying sound absorbing finishes to the surfaces of the room. A 3 dB reduction can normally be obtained by doubling the absorption present, which corresponds to halving the reverberation time (see below).

Sound Insulation - Airborne

Voices, hi-fi systems, television and radio sound and musical instruments are all sources of airborne sound. They excite the air around them and the vibration in the air is transmitted to surrounding surfaces, such as walls, ceilings and floors. This sets these constructions into vibration and this vibration is radiated in neighbouring rooms as sound. Energy is lost in the transmission path and this is referred to as transmission loss or, more generally, sound insulation. The most simple measure of sound insulation is the sound level difference, D , which is the arithmetic difference between the sound level, in dB, in the source room and the sound level in the receiving room.

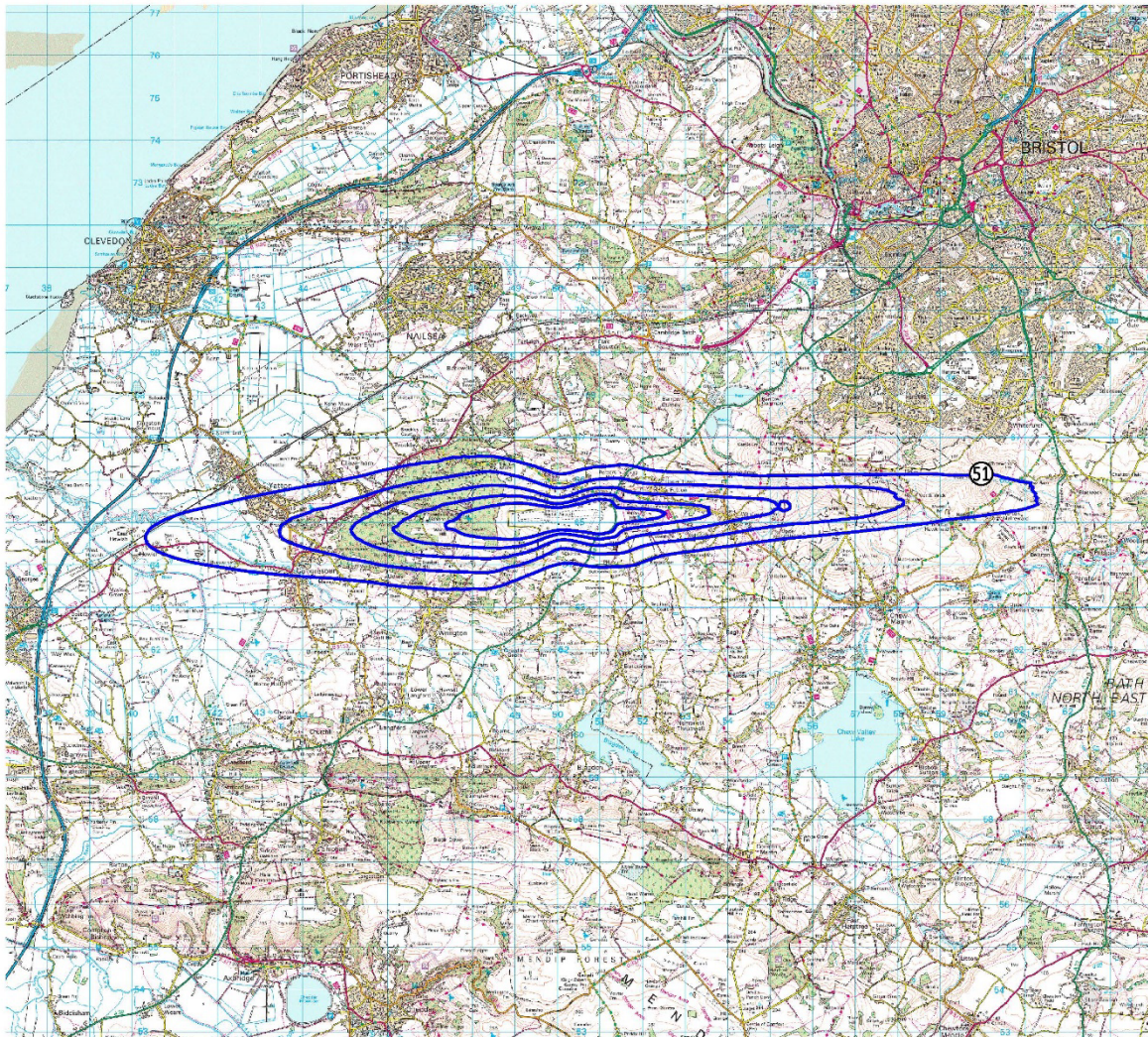
Other measures of sound insulation include the sound reduction index, R , which is a measure of the acoustical performance of a partition, obtained in a laboratory, and the standardised level difference, D_{nT} , which is used mainly in the sound insulation of domestic separating walls and separating floors. The relevant test procedures are laid down in BS EN ISO 140. A single figure “weighted” result can be obtained from one-third octave band test results by using a curve-fitting procedure laid down in BS EN ISO 717. The subscript “w” is added to the relevant descriptor (eg $D_{nT,w}$).

The sound reduction index, R , is used in the specification of components, such as partitions, doors and windows. It is important to bear in mind that the performance of components in the field is usually lower than can be obtained in a laboratory. The transmission of sound via other components common to both rooms ("flanking transmission") can reduce the apparent sound reduction index (R') significantly.

Sound Insulation - Impact

In the case of impact sound, the building construction is caused to vibrate as a result of a physical impact. Footsteps on floors are the most obvious example. The vibration is radiated as sound in neighbouring rooms. Impact insulation is measured using a standard tapping machine, which drops weights cyclically onto a floor. The sound pressure level is measured in the receiving room below and the result is known as the impact level, L_i for laboratory tests and L'_i for field tests.

APPENDIX 3 – NOISE CONTOURS



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LEGEND:

Noise Contours,
— 51 to 63 dB $L_{Aeq,16h}$ in 3 dB steps

Rev	Date	Description	Initials

REVISIONS

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**Bristol Airport
Noise Contours**

2024 Forecast Summer Day

DRAWN: AM CHECKED: DC

DATE: March 2024 SCALE: 1:125,000@A4

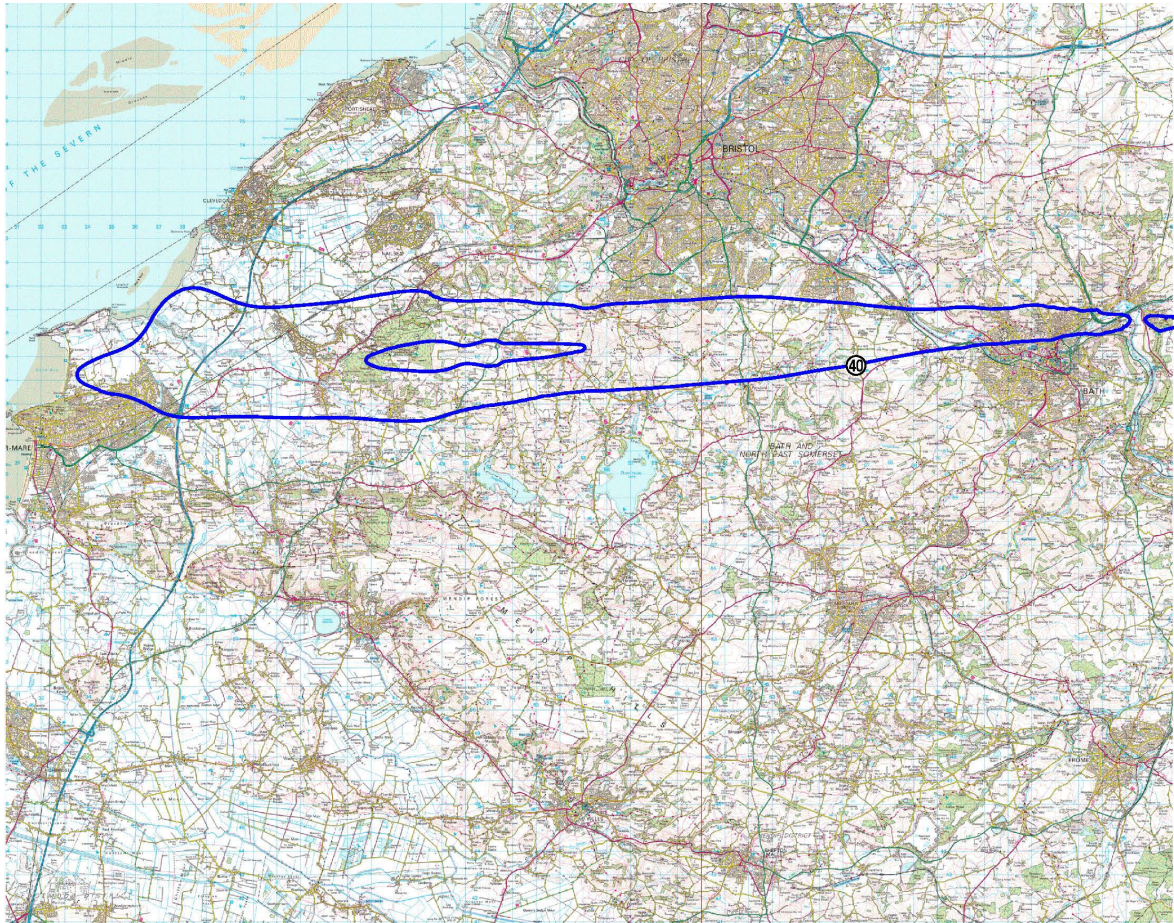
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LEGEND:

Noise Contours,
— 40 and 55 dB L_{Aeq,8h}



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**Bristol Airport
Noise Contours**

2024 Forecast Summer Night

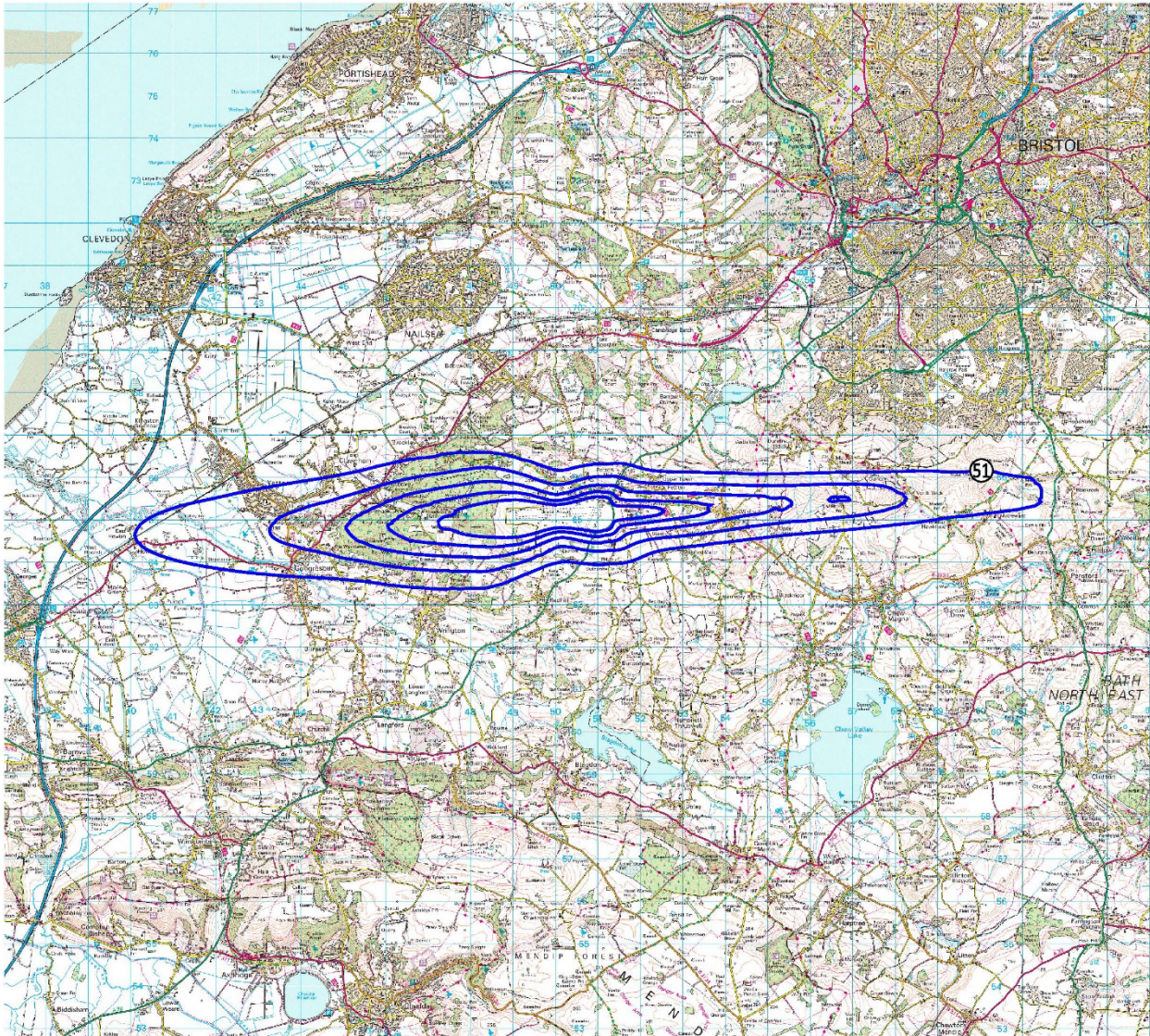
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March 2024



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LEGEND:

Noise Contours,
 — 51 to 63 dB $L_{Aeq,15h}$ in 3 dB steps

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**Bristol Airport
 Noise Contours**

2023 Actual Summer Day

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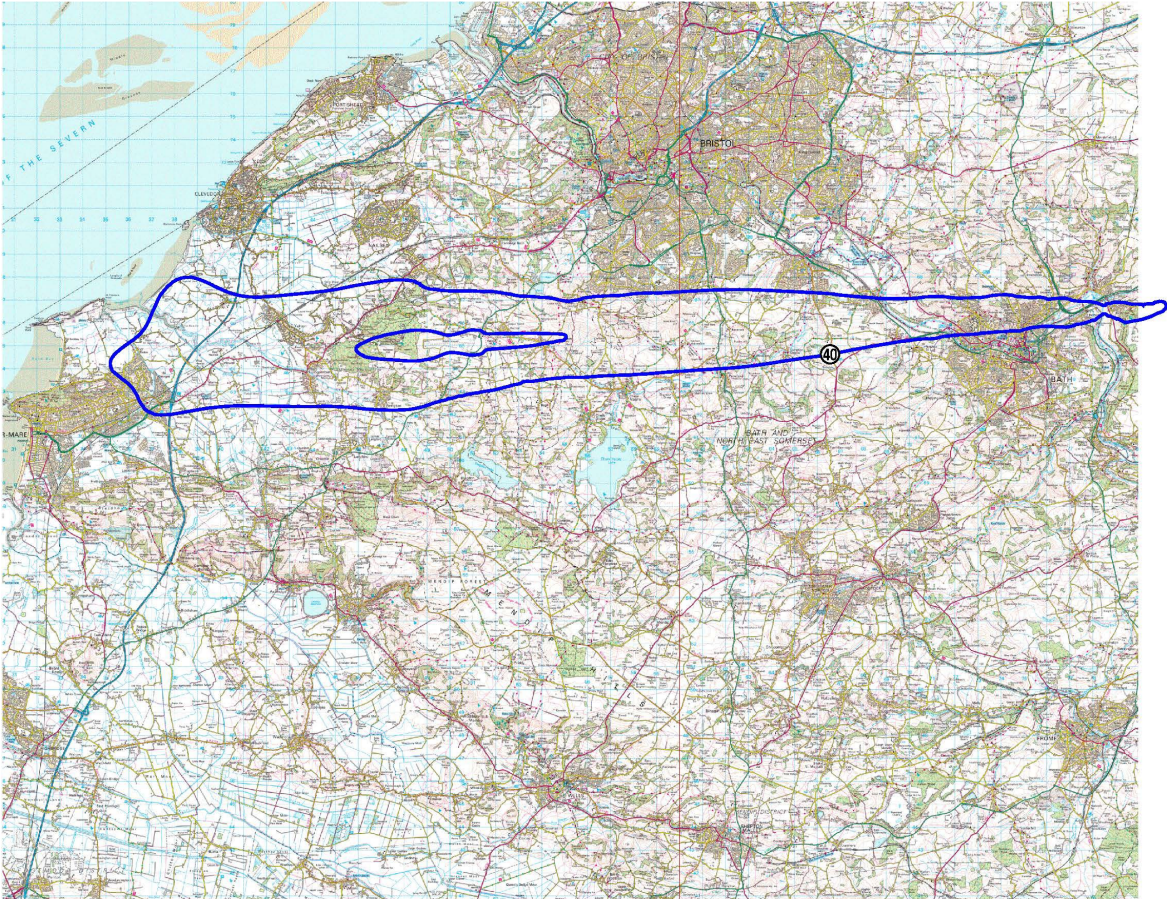
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LEGEND:

Noise Contours,
40 and 55 dB $L_{Aeq,2h}$



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**Bristol Airport
Noise Contours**

2023 Actual Summer Night

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DATE: March 2024 SCALE: 1:250,000@A4

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