

TRAGO MILLS, MERTHYR TYDFIL PETROL FILLING STATION

Noise Impact Assessment

Prepared for: Trago Mills (Falmouth) Ltd

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1.0 Introduction

Trago Mills (Falmouth) Ltd has appointed SLR Consulting Limited to undertake a noise impact assessment for a proposed petrol filling station at Trago Mills, Merthyr Tydfil. This report considers the potential noise impact of the following sources:

- Automatic car wash
- Jet wash
- Car vacuum
- Use of air and water services
- Car door slams associated with pump use

The proposed opening hours are as follows:

- 07:30-22:00 weekdays and Saturday
- 09:00-21:00 on Sunday

This report has been prepared to inform noise impacts from the proposed development following the assessment principles of British Standard BS 4142:2014 + A1:2019 *Methods for rating and assessing industrial and commercial sound*. As such, a baseline noise survey has been undertaken to inform the assessment presented within this report.

Whilst reasonable effort has been made to ensure that this report is easy to understand, it is technical in nature. To assist the reader, a glossary of terminology has been included in **Appendix 01**.

2.0 Site Description

The proposed development will be located on an unbuilt plot of land which lies approximately 55m south of Swansea Road, Merthyr Tydfil.

The site is bounded:

- To the north by Swansea Road with residential properties around 30m from the Site boundary.
- To the east by Trago Mills commercial premises which includes the access road for the Site.

2.1 Proposed Development

The planned proposal includes the following:

- The installation of eight petrol pumps and one commercial pump and associated infrastructure including a canopy;
- The installation of two jet washing bays and associated screens;
- The installation of an automatic car wash and associated screens;
- The installation of car vacuum and air and water facilities; and
- The erection of a forecourt shop and associated car parking.

Proposed site layout plans are presented in Figure 2-1 and within **Appendix 02**.

2.2 Noise Sensitive Receptors

The Site has been noted within a mixed residential and commercial area. Noise sensitive receptors (NSRs) in the immediate vicinity to the proposals have residential uses to the north off Swansea Road.

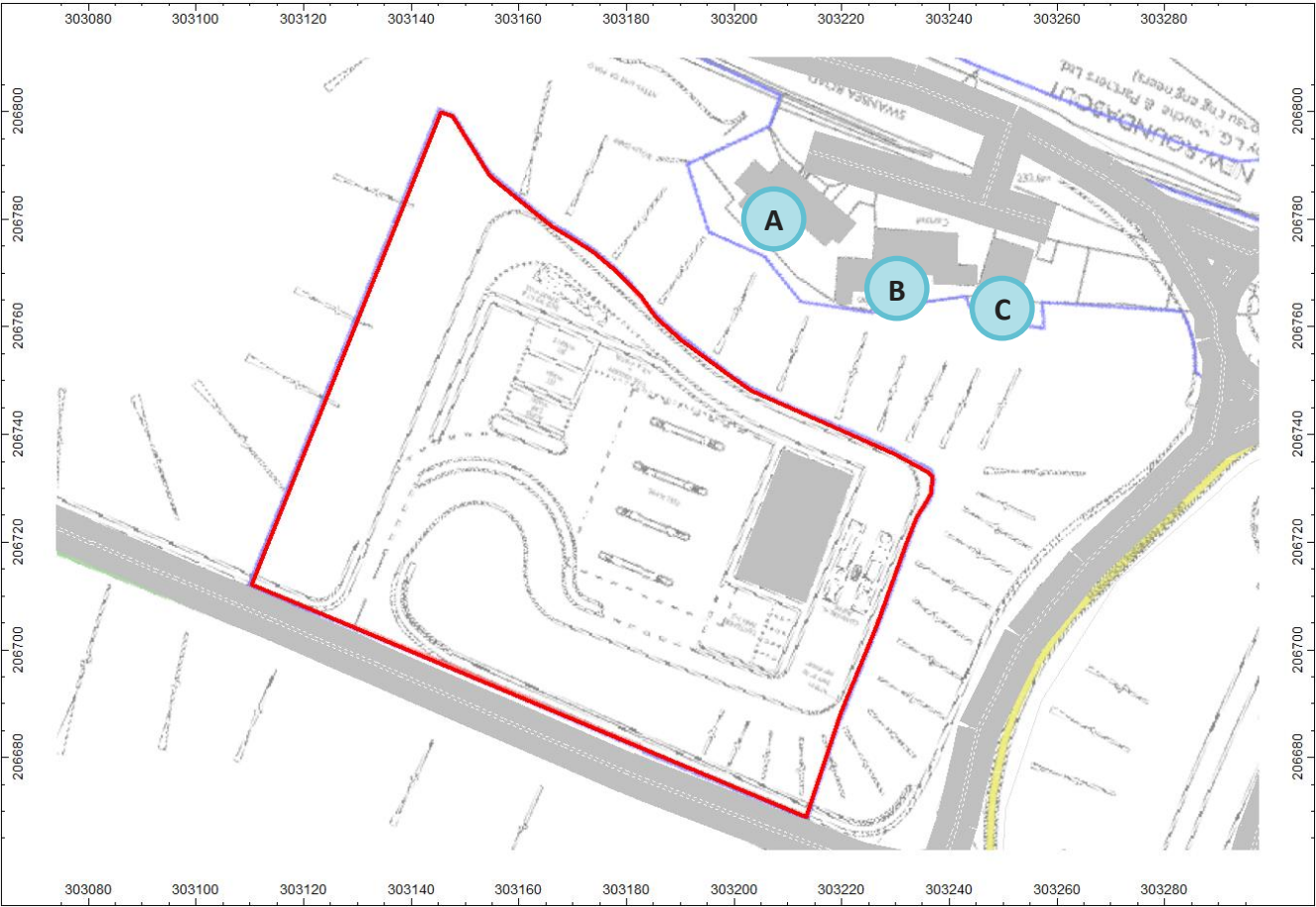
Those NSRs of note within this assessment have been referenced as:

- A. 34-34A Swansea Road. Two storey residential properties directly to the north of the Site approximately 30m from the Site boundary.
- B. 33 Swansea Road. One storey residential property directly to the north of the Site approximately 30m from the Site boundary.
- C. 32 Swansea Road. Two storey residential property directly to the north of the Site approximately 40m from the Site boundary.

These receptors are topographically offset to the proposed Site, and lie approximately 8m lower than the development site, as shown on the section drawings presented within **Appendix 02**.

All above-listed receptors have been identified within the site plan of Figure 2-1 below.

Figure 2-1
Location Plan and Identification of NSRs



3.0 Scope and Planning Noise Guidance

3.1 Consultation with Merthyr Tydfil Council

Merthyr Tydfil Council were consulted via email to confirm their views and policies on noise-related issues for the application. The following assessment scope was presented:

- A baseline survey would be completed as set out in Section 4.0 of this Report.
- An assessment to determine the impact of commercial noise from the proposed development upon existing residential receptors. This assessment would be completed with reference to BS4142:2014+A1:2019 *Methods for rating and assessing industrial and commercial sound*.

Communication was undertaken with Garin Eldred, the Environmental Health Officer at Merthyr Tydfil County Borough Council. The scope identified above for the noise assessment was accepted.

3.2 Planning Policy Wales (Edition 11, February 2021)

Planning Policy Wales (PPW) sets out the Welsh Government's planning policies for land use. The PPW is supplemented by Technical Advice Notes (TANs), Circulars and policy clarification letters which in combination with the PPW provides the national policy framework for Wales.

PPW identifies problematic forms of sound are generally experienced as noise pollution and these can affect amenity or be prejudicial to health or a nuisance. It states that lower levels of noise can still be annoying or disruptive and impact on amenity and as such should be protected through the planning process.

The PPW states that, regarding the location of commercial, industrial and other potentially polluting development, *"such development should be located in areas where there is low potential for public exposure, or where its impact can be minimised"*.

PPW goes on to advise that, *"Relevant considerations in making planning decisions for potentially polluting development are likely to include: ... the risk and impact of potential pollution from the development, insofar as this might lead to the creation of, or worsen the situation in, an air quality management area, a noise action planning priority area or an area where there are sensitive receptors..."*.

Regarding mitigation, PPW advises at Paragraph 6.7.17 that, *"The location of potentially polluting development adjacent to sensitive receptors will be unacceptable where health and amenity impacts cannot be minimised through appropriate design and mitigation measures. It is the overall expectation that levels of pollution should be reduced as far as possible and for this reason the location of potentially polluting development should be taken into account as part of overall strategies in development plans to ensure it can be appropriately located and maximum environmental benefits can be gained through measures such as green infrastructure."*

PPW ultimately acknowledges that relevant considerations in making planning decisions for potentially polluting development are likely to include factors such as noise.

3.3 Merthyr Tydfil Replacement Local Development Plan 2016 – 2031 (Adopted January 2020)

Policy EnW4: Environmental Protection, highlights that *"development proposals will be required to demonstrate they will not result in an unacceptable impact on people, residential amenity, property and / or the natural environment from either:*

- *Pollution of land, surface water, ground water and the air;*

- Land contamination;
- Hazardous substances;
- Land stability;
- Noise, vibration, dust, odour nuisance and light pollution; or
- Any other identified risk to public health and safety.

Where impacts are identified the Council will require applicants to demonstrate that appropriate measures have been incorporated to reduce, or minimise the impact identified to the lowest possible acceptable level. Planning conditions may be imposed or legal obligation entered into, to secure any necessary mitigation and monitoring processes.”

The general development principles of new development under Policy PS 2: Placemaking and Place Management of this Local Development Plan (LDP) explains that development will be permitted where “no significant adverse impacts would be caused to people’s amenity.”

3.4 Technical Advice Note 11 Noise (October 1997)

This Technical Advice Note (TAN) has been considered in conjunction with PPW and local policy, as a document to be considered by the Local Planning Authority when determining the proposed application.

“This note provides advice on the planning system can be used to minimise the adverse impact of noise without placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business. It outlines some of the main considerations which local planning authorities should take into account ...when determining planning applications for development which will either generate noise or be exposed to existing noise sources.”

In the case of noise generating development, TNA11 acknowledges in Paragraph 8 that Local Planning Authorities must ensure there is not “an unacceptable degree of disturbance”. It acknowledges that noise characteristics and levels can vary depending on the source and activity involved, such that the character of noise should be considered alongside its level.

TAN11 provides in Paragraph 11 that suitable measures to mitigation the impact of noise should be proportionate and reasonable and ideally through engineering improvements at source, layout and adequate distances between noise sources and sensitive receivers as well as administrative procedures such as with the use of operating time restrictions.

Annex B of TAN11 highlights that the suitable assessment method of BS 4142 is appropriate for external areas and general guidance within buildings can be found within BS 8233. Where TAN11 Paragraph B17 has provided superseded versions of these British Standards, the latest versions have been considered within this report and primarily from BS 4142:2014 +A1:2019.

3.5 BS 4142:2014 +A1:2019

The British Standard BS 4142:2014 +A1:2019 *Methods for Rating and Assessing Industrial and Commercial Sound* (BS 4142) notably describes methods for rating and assessing sound of an industrial or commercial nature. It has been referenced where required in policy and guidance documents to assess the potential impact of sound of an industrial and/or commercial nature, at existing and proposed noise-sensitive receptor locations within the context of the existing sound environment.

In this assessment, industrial/commercial sources have been present on the Site with respect to proposed development emission, where the onus lies with the developer to mitigate any associated impacts arising from existing and proposed sources of commercial noise.

Certain acoustic features can increase the significance of impact from a comparison of the specific sound level to the background sound level where these features are likely to affect perception and response. Where such features are present at the assessment location, a character correction (or penalty) to the specific sound level is made to obtain the rating level. This can be approached from subjective, objective and reference methods.

- Tonality: A correction of 0 dB to + 6 dB for sound ranging from not tonal to prominently tonal.
- Impulsivity: A correction of up to + 9 dB can be applied for sound that is impulsive.
- Intermittency: A penalty of + 3 dB can be applied if on/off conditions are readily distinctive within the reference time interval over the period of the greatest amount of on-time.
- Other characteristics: A penalty of + 3 dB can be applied in the absence of all other defined characteristics, where the specific sound contains a distinctive feature in the residual acoustic environment.
- The rating sound level is equal to the specific sound level if there are no acoustic features present or expected to be present.

The significance of sound depends upon both the margin by which the rating level exceeds the background sound level and the context in which the sound occurs. An initial estimate of the impact of the specific sound is made by subtracting the measured background sound level from the rating level.

- Typically, the greater the difference, the greater the magnitude of the impact;
- A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on the context;
- A difference of around +5dB is likely to be an indication of an adverse impact, depending on the context; and
- The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. It is an indication that the specific sound source has a low impact, depending on the context.

BS 4142 has stipulated that context is important when assessing the impact of sound of a commercial and/or industrial nature. Amongst a range of advocated considerations, this can include mitigation, residual sound levels, location and absolute sound levels in the consideration of context.

The scope of BS 4142 recognises that human response to sound can be subjective as affected by many factors, both acoustic and non-acoustic. The significance of its impact can depend on various factors such as the exceedance to the background level, its absolute level, time of day and change in environment, as well as local attitudes to the source of sound and character of the neighbourhood.

4.0 Environmental Sound Survey

To establish the prevailing sound climate at The Site, a baseline survey was undertaken over weekday and weekend periods between Friday 27th to Tuesday 31st January 2023.

The period of surveying coincided with reasonable measurement conditions for environmental surveying. F

Following a review of the deployed weather station data, periods where adverse weather conditions were measured (i.e during periods of rain) which have been removed from the data presented for the purposes of the BS 4142 assessment. These excluded data sections are outlined in **Appendix 03**.

4.1 Equipment and Measurements

Sound pressure level measurements were carried out using the following equipment listed in Table 4-1, confirming to Class 1 acoustic accuracy for sound level meters and matched calibrators.

The sound level meters were calibrated before the measurements using the handheld acoustic calibrator and the calibration was checked upon completion of the survey. No significant drift was observed with calibration offsets of ≤ 0.5 dB. The calibration chain of equipment has been maintained to traceably to national standards, no greater than one year for sound calibrators and two years for sound level meters.

Table 4-1
Sound Monitoring Equipment

Location	Description	Serial No.
Location 1	Cirrus CR:171B Type 1 Sound Level Meter	G300561
	Cirrus CR:515 Acoustic Calibrator	87922

Sound level measurements at Location 1 were viewed to be representative of baseline noise levels currently experienced at the existing sensitive receptors on Swansea Road. The microphone was located 2.5 m above the ground attached above the palisade fence line within free field conditions i.e at least 3.5m from the nearest vertical, reflecting surface. The noise survey location can be seen in Figure 4-1.

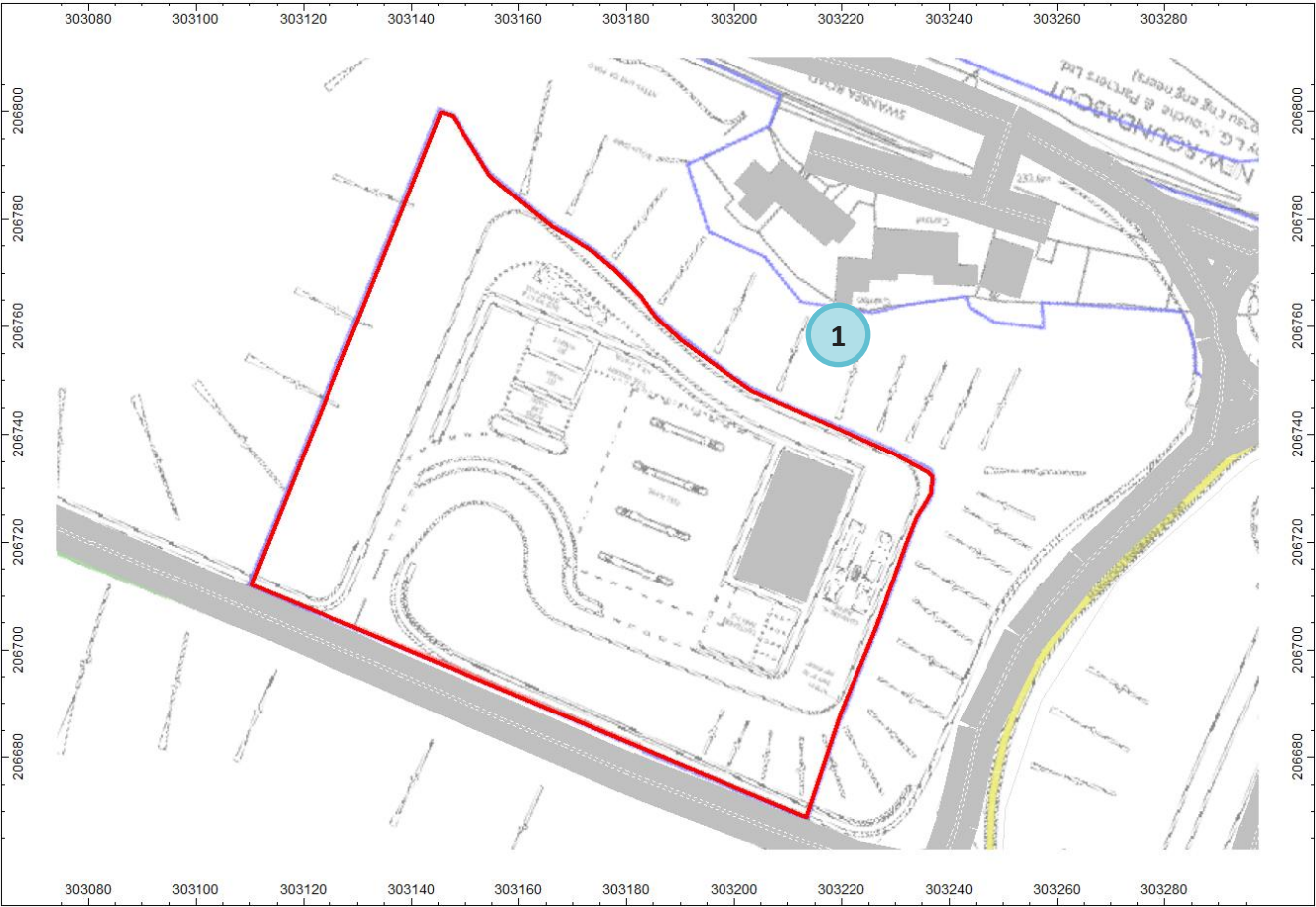
The monitoring protocol consisted of substantially unattended readings over the survey period with attendance at the start and end of the monitoring periods, covering a nominal week.

The following noise level indices have been reported at 15-minute intervals:

- $L_{Aeq,T}$ – The A-weighted equivalent continuous noise level over the measurement period.
- $L_{A90,T}$ – The A-weighted noise level exceeded for 90% of the measurement period.
- $L_{A10,T}$ – The A-weighted noise level exceeded for 10% of the measurement period.
- $L_{Amax(F)}$ – The maximum A-weighted noise level during the measurement period.

Full survey results describing unattended monitoring periods have been provided for the above-listed metrics within **Appendix 03**.

Figure 4-1
Monitoring Location



4.2 Sound Climate

The sound climate at the measurement location consisted mainly of constant road traffic movements along the local network, including local traffic on A470 and along Swansea Road. The unattended time history of data recorded has generally reflected an expected, diurnal pattern of these transportation sources. Additionally, noise from planes overhead, reversing beepers in the distance and birdsong was also audible.

4.3 Residual and Background Sound Levels

The 'typical' background sound levels have been reported in this section in accordance with BS 4142 as established from histograms of the recorded dB $L_{A90,15min}$ data at Location 1, shown in **Appendix 03**. The measurement location has been used to describe the underlying sound climate at NSRs during proposed operating periods.

In line with Section 8.1.4 of BS 4142, the monitoring duration should reflect the range of background sound levels for the period assessed. In practice, there is no single level for background sound as this is a fluctuating parameter, although a representative value of the period should be used.

Note this has not been either the lowest or mean average value of dB $L_{A90,T}$ according to the assessment standard.

Table 4-2
Summary of Measured Sound Levels

Measurement Details				Residual sound level dB $L_{Aeq,15min}$		Background sound level dB $L_{A90,15min}$	
Date Range	Location	Period	Time HH:MM	Range	Typical*	Range	Typical*
Fri 27/01/2023 – Tue 31/01/2023	1	Day	07:30 – 19:00	44-57	51	37-54	45
		Evening	19:00 – 22:00	43-52	50	35-49	40
* Typical values of background sound level have been established from counts of data from Appendix 03. Typical residual sound levels have been equated at times of typical background sound.							

5.0 Noise Impact Assessment

The impact of noise from the proposed development on the surrounding environment will depend on several factors, including (but not limited to) the time of day, frequency of occurrence and nature of sound source.

Development activities will naturally pose greater noise risk where permissible during noise sensitive periods of the evening and night where the likelihood of annoyance or sleep disturbance increases. Human response to noise depends on sociological factors, attitudes and perceptions which can be difficult to define and account for any individual case.

The recognised methodology for assessment has been taken from BS 4142:2014 + A1:2019 *Methods for rating and assessing industrial and commercial sound* which includes consideration of sound from fixed plant installations. The numerical assessment has been provided below for relevant periods of proposed operation, following the definition of specific sound levels.

5.1 Noise Model Assumptions

The sound predictions in this assessment have been undertaken using a proprietary software-based noise model, CadnaA, which implements the full range of UK calculation methods. The calculation algorithms set out in ISO 9613-2:1996 *Acoustics – Attenuation of sound during propagation outdoors – Part 2 General method of calculation* have been used and the model assumes:

- A ground absorption factor of 1;
- Contour Data to include OS terrain data;
- A reflection factor of 2;
- A daytime receiver height of 1.5m; and
- A 2.0m high screen to the jet wash and automatic car wash.

5.2 Noise Sources

At the point of completing this assessment, details regarding proposed fixed plant and noise levels from operational activities are unknown. Therefore, fixed plant has not been included at this stage. The following input data within Table 5-1 has been summarised based upon sound levels taken from both library data measured by SLR at similar developments or representative manufacturer's catalogue data for proposed items.

Table 5-1
Input Data Summary for Noise Modelling

Type	Detail	Quantity	Sound power level dB L_{WA} re. 1 μ W	On time
Automatic Car Wash	SLR measurements	1	89.7	50 %
Jet Wash	Istobal 4CA2000	2	78.0	50 %
Combined Air / Water / Vacuum Unit	Istobal Combo	1	78.0	50 %
Car Door Slam	Fuel pump use – SLR measurements	9	88.5	25 %
Car Movements	SLR measurements	Predicted 2200 daily movements	80.2	25 %

The on-time assumptions have been provided on SLR's experience of similar and successful applications for development elsewhere and as not to underpredict the resulting impacts. The on-time assumptions have been made to reflect a realistic in-situ use, but with tendency towards the worst-case.

6.0 BS4142:2014+A1:2019 Assessment

6.1 Specific Sound Level

The predicted sound levels are shown in Table 6-1 below.

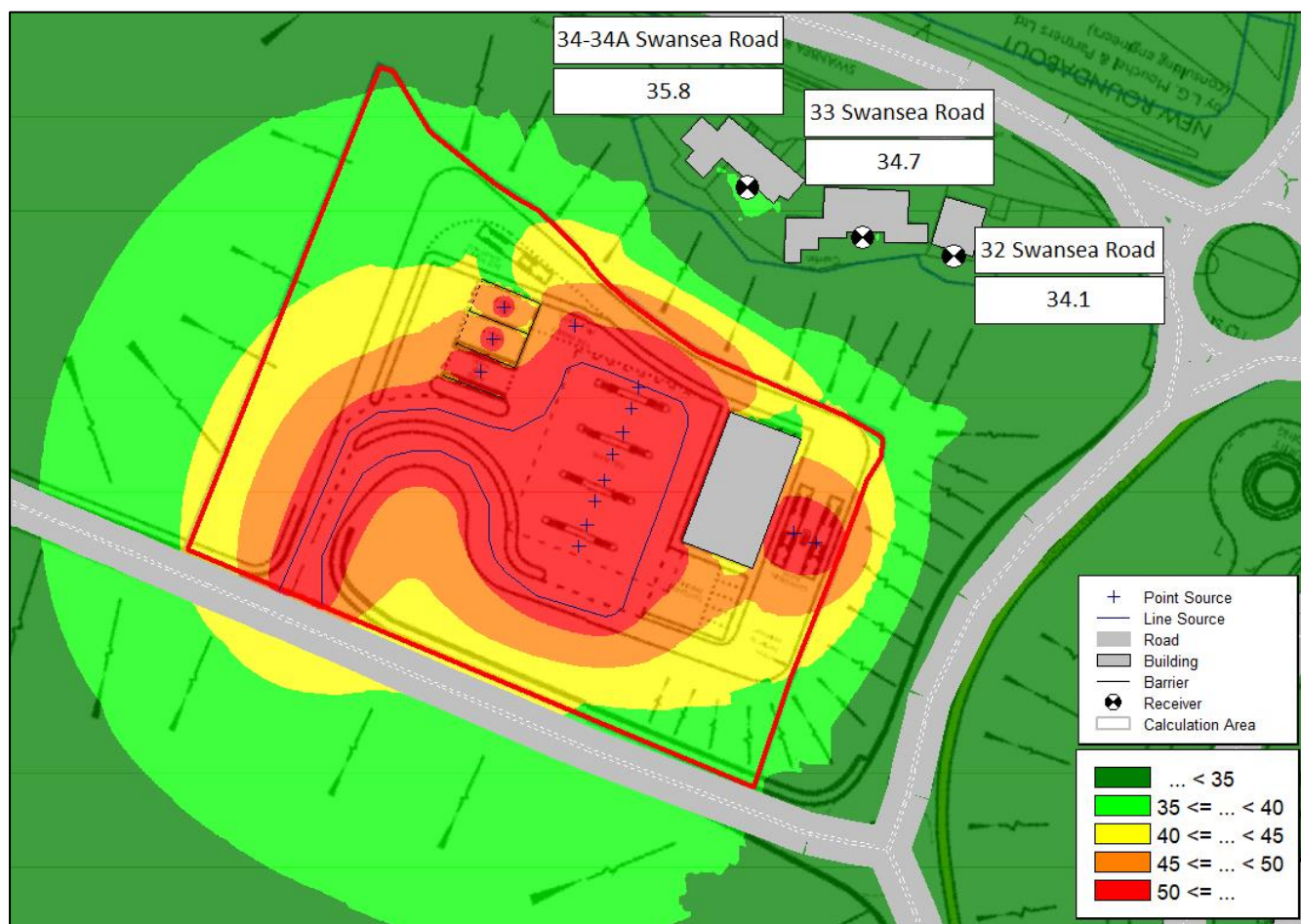
Daytime sound levels have been predicted to 1.5m above ground level, which is the approximate height of a ground floor window. As the proposed hours of operation fall during daytime and evening hours only (between 07:00-23:00), no night-time assessment has been undertaken.

Table 6-1
Predicted Specific Sound Levels

Location	Predicted Sound Level, $L_{Aeq,T}$
A: 34 – 34A Swansea Road	36
B: 33 Swansea Road	35
C: 32 Swansea Road	34

A graphical image of the specific sound level during the daytime and evening period can be seen in Figure 6-1.

Figure 6-1
07:00-23:00 Specific Sound Level at a Grid Height of 1.5m – dB(A)



6.2 Rating Level Penalties

The character of each noise source, and the rating level penalties that will be applied to the calculated specific sound level from the BS4142:2014+A1:2019 assessment are as follows:

- **Tonality:** SLR has not undertaken the BS4142:2014 *objective method for assessing the audibility of tones in sound: one third octave method*. From experience at similar sites, it is not anticipated that sound from the Site would be tonal. It is expected that once installed any fixed plant would have any identifiable tone designed out.
- **Impulsivity:** It is not anticipated that any of the noise sources would be impulsive.
- **Other sound characteristics:** When operating, due to the relatively high residual sound levels in the area, the Site would not be readily distinctive against the residual acoustic environment. No penalty is therefore required.
- **Intermittentness:** As noise sources at the site would be intermittent a 3dB penalty will be included in the assessment.

Based on the above, a 3dB penalty is applicable to the predicted specific sound level at the closest receptors to derive the corresponding rating levels.

6.3 Assessment

The penalties described in Section 6-2 have been added to the predicted sound levels shown in Table 6-1 to derive the rating levels at each of the nearest noise-sensitive receptors.

The results of the BS4142:2014 +A1:2019 assessment are shown in Table 6-2. In accordance with the standard, the rating levels and the representative background sound levels have been rounded to the nearest decibel.

Based on the accuracy of the prediction methodology, i.e. ISO9613-2, the uncertainty of the CadnaA model accuracy, i.e. barrier corrections for buildings, etc., it is considered that the results of the assessment are as accurate as reasonably practicable and considered to be within +/-3dB.

Table 6-2
BS4142:2014+A1:2019 Assessment

Receptor	Assessment	Predicted Specific Sound Level, $L_{Aeq,T}$	Predicted Rating Level, $L_{Ar,T}$	Derived Background Sound Level L_{A90}	Difference between Background Sound Level and Rating Level
A: 34 – 34A Swansea Road	Daytime	36	39	45	-6
	Evening	36	39	40	-1
B: 33 Swansea Road	Daytime	35	38	45	-7
	Evening	35	38	40	-2
C: 32 Swansea Road	Daytime	34	37	45	-8
	Evening	34	37	40	-3

It can be seen from Table 6-2 that:

- During the daytime period (07:30-19:00) the rating level of the development would be up to 8dB below the background sound level at the Noise Sensitive Receptors assessed. In accordance with BS4142:2014+A1:2019, the proposed development would therefore typically have a low noise impact at the receptor locations during this period.
- During the evening period (19:00-22:00) the rating level of the development would be up to 3dB below the background sound level at the Noise Sensitive Receptors assessed. In accordance with BS4142:2014+A1:2019, the proposed development would therefore typically have a low noise impact at the receptor locations during this period.

BS4142:2014+ A1:2019 states as below:

- “The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.”*
- It is evident that the rating level due to the development during the daytime and evening does not represent an adverse impact (being 6-8 dB below existing daytime and 1-3 dB below evening background noise levels).

6.4 Context

BS4142:2014 highlights the importance of considering the context in which a sound occurs.

Factors including the absolute sound level, the character of the sound, the sensitivity of the receptor and the existing acoustic character of the area should be considered when assessing the noise impact.

It is therefore considered in context as follows:

- The existing character of the noise climate in the immediate surround is dominated by vehicle movements and is not considered to be low in existing magnitude during the assessment period, as such receptor sensitivity is limited;
- In addition, the proposal will not be dissimilar in character and lower in magnitude than existing noise impacts from Swansea Road in immediate adjacency to the identified receptors, which are already identified as having a noise climate dominated by vehicle movements and road traffic;
- In real terms the existing ambient noise climate in the vicinity of the receptors ranges from 43-52dB $L_{Aeq,1 \text{ hour}}$ over any individual measurement period, averaging 50dB $L_{Aeq, 16 \text{ hours}}$ over the 16-hour day and evening period; and
- As such the magnitude of impact identified with a predicted rating level of 37-39 dB $L_{Ar 1 \text{ hour}}$ is unlikely to be significantly distinguishable against the existing acoustic environment.

Therefore, the numerical outcome of the assessment above is in line with the context which indicates that the presence of the proposals associated with the Site would give rise to a “low impact” at the identified receptors.

7.0 Conclusions

An assessment of noise impact has been carried out for a proposed petrol filling station at Trago Mills, Merthyr Tydfil. Environmental sound levels have been taken from a site survey at a location representative of nearest noise sensitive receptors.

A noise impact assessment has been carried out in line with BS 4142 methodology by a suitably qualified acoustician. Cumulative rating sound levels have been predicted at nearest sensitive receptors using noise modelling techniques of all new plant and equipment defined by quantitative noise emissions.

An assessment to determine the impact of the proposed development upon existing residential receptors has been undertaken. This assessment has been completed with reference to BS4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound. The assessment has found:

- During the daytime period (07:00-23:00) the rating level of the development would be up to 9dB below the background sound level at the Noise Sensitive Receptors assessed. In accordance with BS4142:2014+A1:2019, the proposed development would therefore typically have a low noise impact at the receptor locations during this period.
- During the evening period (19:00-22:00) the rating level of the development would be up to 3dB below the background sound level at the Noise Sensitive Receptors assessed. In accordance with BS4142:2014+A1:2019, the proposed development would therefore typically have a low noise impact at the receptor locations during this period.

It has been concluded from the findings of this assessment that the range of noise impacts for the proposed development have been deemed acceptable with respect to overarching requirements for planning and noise, such that noise should not present reasonable grounds for planning refusal.

APPENDIX 01

Glossary of Terminology

The human ear can detect a very wide range of pressure fluctuations, which are perceived as sound. In order to express these fluctuations in a manageable way, a logarithmic scale called the decibel, or dB scale is used. The decibel scale typically ranges from 0dB (the threshold of hearing) to over 120dB. An indication of the range of sound levels commonly found in the environment is given in the following table.

Table 01-01
Sound Levels Commonly Found in the Environment

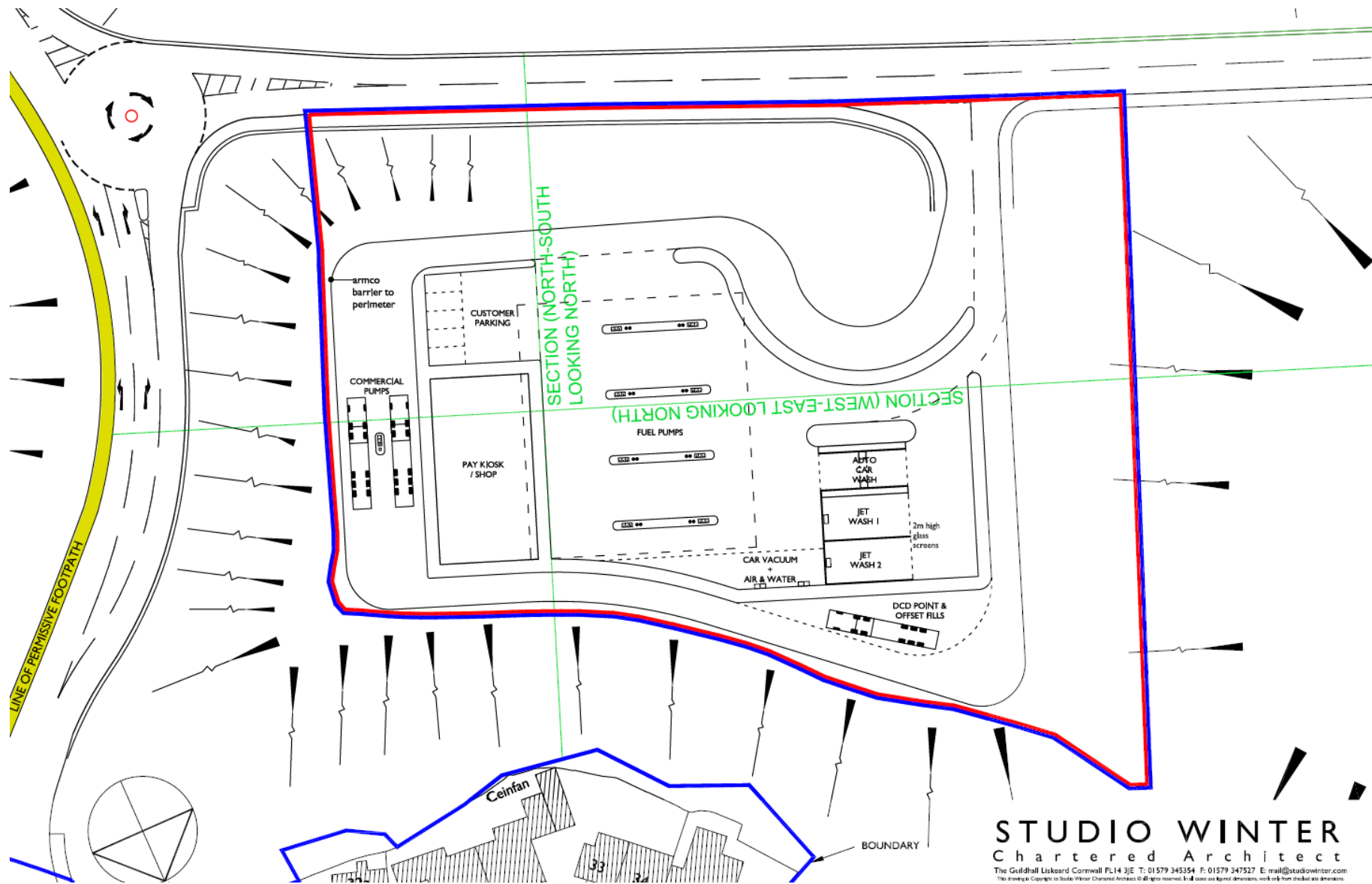
Sound Level	Location
0 dB(A)	Threshold of hearing
20 to 30 dB(A)	Quiet bedroom at night
30 to 40 dB(A)	Living room during the day
40 to 50 dB(A)	Typical office
50 to 60 dB(A)	Inside a car
60 to 70 dB(A)	Typical high street
70 to 90 dB(A)	Inside factory
100 to 110 dB(A)	Burglar alarm at 1m away
110 to 130 dB(A)	Jet aircraft on take off
140 dB(A)	Threshold of Pain

Acoustic Terminology

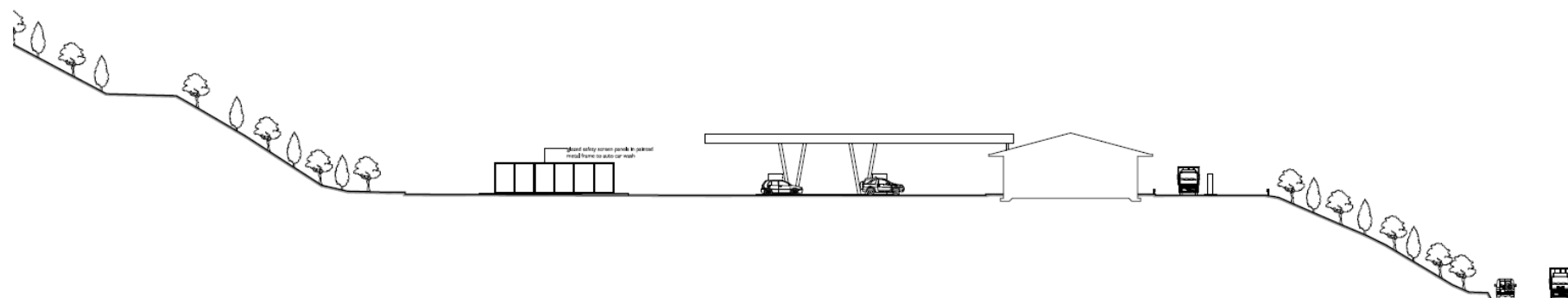
dB (decibel)	The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure (of 20 μ Pa).
dB(A)	A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
$L_{Aeq, T}$	$L_{Aeq, T}$ is defined as the notional steady sound level which, over a stated period T, would contain the same amount of acoustical energy as the A-weighted fluctuating sound measured over that period.
$L_{A10, T}$ & L_{A90}	If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The L_n indices are used for this purpose, and the term refers to the level exceeded for n% of the time. Hence L_{10} is the level exceeded for 10% of the time and as such can be regarded as the 'average maximum level'. Similarly, L_{90} is the 'average minimum level' and is often used to describe the background noise. It is common practice to use the L_{10} index to describe traffic noise.
$L_{Amax(F)}$	$L_{Amax(F)}$ is the maximum A-weighted sound pressure level recorded over the period stated. L_{Amax} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall L_{eq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.

APPENDIX 02

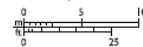
Drawings



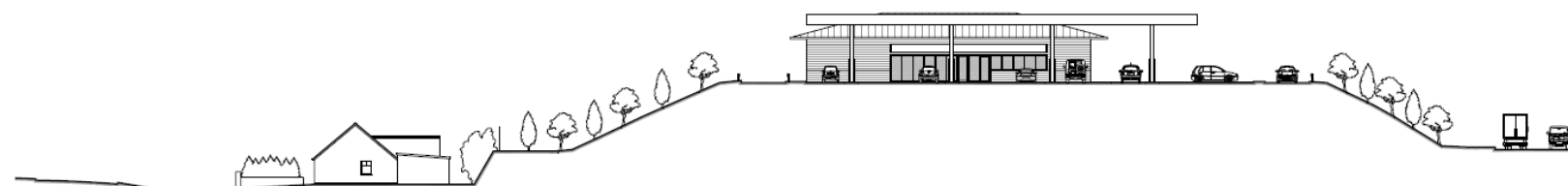
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SECTION (WEST-EAST LOOKING NORTH) @1:200



220,000m



SECTION (NORTH-SOUTH LOOKING EAST) @1:200



220,000m

APPENDIX 03

Survey Results

Table 03-01
15-minute Unattended Noise Survey Results, dB

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Fri 27/01/2023 12:15	54.6	51.1	55.6	70.8	
Fri 27/01/2023 12:30	53.8	51.7	55.4	64.2	
Fri 27/01/2023 12:45	51.5	48.0	53.6	64.1	
Fri 27/01/2023 13:00	51.4	48.5	53.7	62.5	
Fri 27/01/2023 13:15	53.6	51.6	55.1	63.8	
Fri 27/01/2023 13:30	54.9	52.4	56.5	63.1	
Fri 27/01/2023 13:45	54.2	49.9	56.0	70.2	
Fri 27/01/2023 14:00	55.7	53.7	57.1	64.5	
Fri 27/01/2023 14:15	56.1	53.1	57.9	71.1	
Fri 27/01/2023 14:30	55.7	53.7	57.1	60.9	
Fri 27/01/2023 14:45	57.0	53.8	58.7	79.3	
Fri 27/01/2023 15:00	55.5	53.2	57.0	62.0	
Fri 27/01/2023 15:15	55.1	52.7	56.6	65.7	
Fri 27/01/2023 15:30	54.8	52.4	56.3	64.6	
Fri 27/01/2023 15:45	55.3	53.1	56.8	70.2	
Fri 27/01/2023 16:00	55.2	53.0	56.7	66.2	
Fri 27/01/2023 16:15	55.6	53.1	57.3	68.2	
Fri 27/01/2023 16:30	53.7	51.4	55.2	60.9	
Fri 27/01/2023 16:45	57.4	52.5	56.7	82.1	
Fri 27/01/2023 17:00	54.9	51.6	57.0	64.4	
Fri 27/01/2023 17:15	54.0	51.7	55.3	66.6	
Fri 27/01/2023 17:30	53.5	51.6	55.0	62.8	
Fri 27/01/2023 17:45	54.4	51.7	55.7	66.4	
Fri 27/01/2023 18:00	54.1	50.1	56.2	65.1	
Fri 27/01/2023 18:15	53.1	50.2	55.1	59.1	
Fri 27/01/2023 18:30	53.8	51.3	55.5	59.5	
Fri 27/01/2023 18:45	53.4	50.9	55.2	61.2	
Fri 27/01/2023 19:00	50.9	48.3	52.9	59.1	
Fri 27/01/2023 19:15	50.3	46.3	52.4	61.5	
Fri 27/01/2023 19:30	50.8	46.2	53.0	60.5	
Fri 27/01/2023 19:45	52.0	48.7	54.1	60.5	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Fri 27/01/2023 20:00	50.7	47.0	52.8	63.8	
Fri 27/01/2023 20:15	49.5	45.4	52.0	57.4	
Fri 27/01/2023 20:30	50.2	46.0	52.5	58.5	
Fri 27/01/2023 20:45	48.0	43.3	50.7	58.5	
Fri 27/01/2023 21:00	49.1	44.7	51.9	58.2	
Fri 27/01/2023 21:15	48.3	43.5	50.8	59.5	
Fri 27/01/2023 21:30	47.6	41.9	50.4	61.1	
Fri 27/01/2023 21:45	47.2	40.7	50.1	55.8	
Fri 27/01/2023 22:00	46.4	38.3	49.5	57.0	
Fri 27/01/2023 22:15	45.1	38.3	48.2	57.7	
Fri 27/01/2023 22:30	46.0	39.1	48.8	57.7	
Fri 27/01/2023 22:45	44.9	38.9	48.0	56.1	
Fri 27/01/2023 23:00	43.9	34.8	47.4	57.5	
Fri 27/01/2023 23:15	43.8	35.4	47.4	56.7	
Fri 27/01/2023 23:30	43.5	33.6	47.3	59.3	
Fri 27/01/2023 23:45	43.2	33.5	47.0	56.4	
Sat 28/01/2023 00:00	42.0	32.2	45.3	56.0	
Sat 28/01/2023 00:15	39.8	30.5	43.8	50.4	
Sat 28/01/2023 00:30	43.1	32.1	46.8	57.9	
Sat 28/01/2023 00:45	42.0	30.4	45.8	58.3	
Sat 28/01/2023 01:00	38.2	27.3	41.7	56.3	
Sat 28/01/2023 01:15	41.1	29.3	44.4	58.3	
Sat 28/01/2023 01:30	39.0	27.5	43.5	54.5	
Sat 28/01/2023 01:45	37.7	28.0	41.8	53.2	
Sat 28/01/2023 02:00	42.9	29.0	47.3	57.2	
Sat 28/01/2023 02:15	40.7	29.6	45.5	55.3	
Sat 28/01/2023 02:30	40.1	29.0	44.2	56.9	
Sat 28/01/2023 02:45	37.5	27.7	41.6	53.2	
Sat 28/01/2023 03:00	39.2	28.1	43.8	53.2	
Sat 28/01/2023 03:15	37.2	27.7	41.5	53.4	
Sat 28/01/2023 03:30	39.1	28.2	43.7	52.8	
Sat 28/01/2023 03:45	33.3	27.6	35.8	48.4	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Sat 28/01/2023 04:00	41.0	25.8	44.7	62.6	
Sat 28/01/2023 04:15	34.9	25.6	37.4	53.2	
Sat 28/01/2023 04:30	37.2	26.6	40.5	54.6	
Sat 28/01/2023 04:45	40.1	28.4	45.0	58.0	
Sat 28/01/2023 05:00	41.2	28.3	43.8	64.1	
Sat 28/01/2023 05:15	41.4	31.2	45.6	55.7	
Sat 28/01/2023 05:30	42.2	32.4	46.2	56.7	
Sat 28/01/2023 05:45	44.0	34.7	47.8	58.1	
Sat 28/01/2023 06:00	44.0	34.4	47.2	63.1	
Sat 28/01/2023 06:15	43.1	36.4	46.4	56.0	
Sat 28/01/2023 06:30	45.3	38.5	48.1	62.0	
Sat 28/01/2023 06:45	45.6	38.3	48.7	58.8	
Sat 28/01/2023 07:00	45.0	37.3	48.5	57.1	
Sat 28/01/2023 07:15	47.1	38.6	49.9	62.5	
Sat 28/01/2023 07:30	45.2	38.1	48.4	57.2	
Sat 28/01/2023 07:45	48.9	42.9	51.6	60.3	
Sat 28/01/2023 08:00	47.4	42.5	50.3	59.0	
Sat 28/01/2023 08:15	48.9	43.9	51.4	61.7	
Sat 28/01/2023 08:30	50.2	46.3	52.3	60.5	
Sat 28/01/2023 08:45	49.4	45.1	52.0	59.8	
Sat 28/01/2023 09:00	49.0	45.1	51.5	59.5	
Sat 28/01/2023 09:15	51.1	48.2	53.1	60.5	
Sat 28/01/2023 09:30	50.3	46.9	52.4	61.7	
Sat 28/01/2023 09:45	50.8	47.0	52.9	63.8	
Sat 28/01/2023 10:00	49.1	45.3	51.3	57.9	
Sat 28/01/2023 10:15	50.0	46.4	52.1	61.5	
Sat 28/01/2023 10:30	49.9	46.1	52.3	63.7	
Sat 28/01/2023 10:45	50.0	45.2	52.3	72.4	
Sat 28/01/2023 11:00	50.3	46.1	52.5	61.4	
Sat 28/01/2023 11:15	50.5	46.0	52.3	67.8	
Sat 28/01/2023 11:30	49.7	46.8	51.7	57.3	
Sat 28/01/2023 11:45	51.6	47.5	53.1	68.2	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Sat 28/01/2023 12:00	50.7	46.9	53.0	63.3	
Sat 28/01/2023 12:15	51.1	46.5	53.0	71.2	
Sat 28/01/2023 12:30	51.1	47.6	52.9	64.3	
Sat 28/01/2023 12:45	51.0	47.0	53.3	67.0	
Sat 28/01/2023 13:00	49.1	45.3	51.2	58.7	
Sat 28/01/2023 13:15	51.4	46.4	52.6	66.7	
Sat 28/01/2023 13:30	49.2	45.3	51.6	57.4	
Sat 28/01/2023 13:45	50.0	45.9	52.4	60.7	
Sat 28/01/2023 14:00	49.1	45.0	51.6	58.1	
Sat 28/01/2023 14:15	49.4	45.8	51.5	57.4	
Sat 28/01/2023 14:30	50.2	45.8	51.5	72.7	
Sat 28/01/2023 14:45	49.5	45.0	51.0	71.7	
Sat 28/01/2023 15:00	49.6	45.8	51.8	62.4	
Sat 28/01/2023 15:15	48.6	44.7	51.0	58.9	
Sat 28/01/2023 15:30	48.4	44.2	50.8	59.5	
Sat 28/01/2023 15:45	49.2	45.1	51.4	60.3	
Sat 28/01/2023 16:00	49.7	44.3	52.1	65.3	
Sat 28/01/2023 16:15	49.2	45.6	51.4	57.0	
Sat 28/01/2023 16:30	49.5	46.0	51.7	57.9	
Sat 28/01/2023 16:45	49.3	45.1	51.3	66.5	
Sat 28/01/2023 17:00	50.1	46.6	51.7	68.5	
Sat 28/01/2023 17:15	49.1	45.0	51.3	60.4	
Sat 28/01/2023 17:30	50.2	45.1	51.9	72.0	
Sat 28/01/2023 17:45	49.0	43.6	51.8	62.5	
Sat 28/01/2023 18:00	49.9	44.3	52.0	67.2	
Sat 28/01/2023 18:15	48.6	43.7	51.2	56.5	
Sat 28/01/2023 18:30	49.2	44.3	51.4	62.6	
Sat 28/01/2023 18:45	47.7	42.7	50.3	56.1	
Sat 28/01/2023 19:00	47.8	42.4	50.4	56.4	
Sat 28/01/2023 19:15	49.2	42.8	51.3	67.8	
Sat 28/01/2023 19:30	48.5	40.2	50.2	71.7	
Sat 28/01/2023 19:45	47.4	41.7	50.4	56.6	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Sat 28/01/2023 20:00	47.8	42.7	50.6	56.9	
Sat 28/01/2023 20:15	46.6	39.1	49.5	57.2	
Sat 28/01/2023 20:30	46.1	37.3	49.4	57.0	
Sat 28/01/2023 20:45	45.0	37.5	47.9	65.9	
Sat 28/01/2023 21:00	44.9	35.3	48.5	56.4	
Sat 28/01/2023 21:15	45.6	39.5	48.5	57.3	
Sat 28/01/2023 21:30	45.8	35.7	49.0	65.3	
Sat 28/01/2023 21:45	44.9	37.1	48.2	56.3	
Sat 28/01/2023 22:00	44.1	35.6	47.2	57.7	
Sat 28/01/2023 22:15	43.9	31.7	47.6	54.9	
Sat 28/01/2023 22:30	44.2	34.0	47.4	56.8	
Sat 28/01/2023 22:45	45.4	33.1	48.6	56.4	
Sat 28/01/2023 23:00	43.1	32.9	46.6	59.5	
Sat 28/01/2023 23:15	43.1	32.2	46.6	55.3	
Sat 28/01/2023 23:30	43.7	32.8	47.4	57.7	
Sat 28/01/2023 23:45	44.1	34.4	47.1	67.2	
Sun 29/01/2023 00:00	41.7	33.0	45.2	55.3	
Sun 29/01/2023 00:15	41.2	31.7	45.0	53.3	
Sun 29/01/2023 00:30	40.0	30.3	44.0	55.9	
Sun 29/01/2023 00:45	40.8	29.9	45.0	54.7	
Sun 29/01/2023 01:00	41.1	30.1	44.7	58.7	
Sun 29/01/2023 01:15	40.5	28.8	44.8	57.8	
Sun 29/01/2023 01:30	42.1	27.5	46.1	58.1	
Sun 29/01/2023 01:45	40.3	28.2	43.7	56.9	
Sun 29/01/2023 02:00	40.7	28.0	45.1	58.1	
Sun 29/01/2023 02:15	40.5	26.8	43.6	58.0	
Sun 29/01/2023 02:30	36.7	27.4	40.3	54.1	
Sun 29/01/2023 02:45	38.1	27.4	42.9	53.3	
Sun 29/01/2023 03:00	37.0	27.5	40.9	51.3	
Sun 29/01/2023 03:15	39.1	26.7	43.8	55.5	
Sun 29/01/2023 03:30	37.3	27.7	41.6	53.4	
Sun 29/01/2023 03:45	33.3	27.2	33.8	50.2	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Sun 29/01/2023 04:00	36.3	27.1	39.2	56.6	*
Sun 29/01/2023 04:15	33.7	27.4	33.3	51.6	
Sun 29/01/2023 04:30	40.4	28.2	45.5	56.0	
Sun 29/01/2023 04:45	41.7	29.5	46.1	59.2	
Sun 29/01/2023 05:00	39.5	27.0	43.7	58.0	*
Sun 29/01/2023 05:15	40.7	30.5	44.4	57.1	
Sun 29/01/2023 05:30	39.0	30.3	43.2	54.2	
Sun 29/01/2023 05:45	34.3	30.0	35.9	51.2	
Sun 29/01/2023 06:00	42.0	31.8	46.5	56.0	*
Sun 29/01/2023 06:15	42.7	34.2	46.7	55.8	
Sun 29/01/2023 06:30	45.7	37.1	48.8	58.0	*
Sun 29/01/2023 06:45	46.0	37.9	49.6	58.8	
Sun 29/01/2023 07:00	46.5	39.0	48.5	75.6	*
Sun 29/01/2023 07:15	43.3	37.7	46.5	59.1	
Sun 29/01/2023 07:30	47.0	40.2	49.9	63.0	
Sun 29/01/2023 07:45	46.1	38.1	49.7	58.9	
Sun 29/01/2023 08:00	44.2	37.1	47.7	57.9	
Sun 29/01/2023 08:15	45.3	37.6	49.0	57.5	
Sun 29/01/2023 08:30	46.8	38.6	50.2	59.1	
Sun 29/01/2023 08:45	49.2	40.2	51.3	65.7	*
Sun 29/01/2023 09:00	48.2	42.7	51.2	57.6	
Sun 29/01/2023 09:15	48.5	42.5	51.4	60.7	
Sun 29/01/2023 09:30	47.7	42.0	50.4	60.6	
Sun 29/01/2023 09:45	49.3	43.5	52.0	65.0	*
Sun 29/01/2023 10:00	50.0	44.4	52.8	65.6	
Sun 29/01/2023 10:15	50.9	46.1	53.4	67.5	*
Sun 29/01/2023 10:30	50.5	45.9	53.2	60.5	*
Sun 29/01/2023 10:45	50.9	47.1	53.3	66.8	
Sun 29/01/2023 11:00	50.8	45.8	53.4	59.6	
Sun 29/01/2023 11:15	53.0	46.6	56.0	69.8	
Sun 29/01/2023 11:30	50.7	47.3	52.9	60.2	
Sun 29/01/2023 11:45	50.5	46.8	52.7	59.8	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Sun 29/01/2023 12:00	50.4	46.8	52.6	58.8	
Sun 29/01/2023 12:15	50.5	47.3	52.7	58.2	
Sun 29/01/2023 12:30	51.0	48.5	52.9	57.6	
Sun 29/01/2023 12:45	54.4	48.3	53.3	78.8	
Sun 29/01/2023 13:00	51.0	47.7	53.2	60.4	
Sun 29/01/2023 13:15	55.4	47.6	53.7	76.1	
Sun 29/01/2023 13:30	50.9	47.8	52.7	60.0	
Sun 29/01/2023 13:45	50.6	47.4	52.8	58.0	
Sun 29/01/2023 14:00	50.7	47.8	52.5	58.8	
Sun 29/01/2023 14:15	51.3	48.6	53.2	59.2	
Sun 29/01/2023 14:30	50.0	46.5	52.1	63.4	
Sun 29/01/2023 14:45	49.3	44.7	51.7	61.4	
Sun 29/01/2023 15:00	49.8	45.7	52.1	57.9	
Sun 29/01/2023 15:15	49.5	45.4	52.0	57.6	
Sun 29/01/2023 15:30	50.5	45.4	51.9	73.8	
Sun 29/01/2023 15:45	49.2	45.6	51.3	69.5	
Sun 29/01/2023 16:00	50.8	45.8	52.0	68.5	
Sun 29/01/2023 16:15	51.1	44.2	51.7	69.9	
Sun 29/01/2023 16:30	48.6	43.9	51.2	66.0	
Sun 29/01/2023 16:45	49.0	44.0	51.6	59.5	
Sun 29/01/2023 17:00	47.6	43.1	49.9	61.8	
Sun 29/01/2023 17:15	47.9	43.0	50.4	58.7	
Sun 29/01/2023 17:30	48.5	43.8	50.9	64.4	
Sun 29/01/2023 17:45	48.1	43.3	50.8	57.3	
Sun 29/01/2023 18:00	48.9	44.9	51.4	57.6	
Sun 29/01/2023 18:15	49.4	44.6	52.0	58.7	
Sun 29/01/2023 18:30	48.4	44.1	51.1	60.6	
Sun 29/01/2023 18:45	47.9	41.7	51.0	59.3	
Sun 29/01/2023 19:00	47.8	42.6	50.7	57.8	
Sun 29/01/2023 19:15	45.7	40.2	48.7	55.8	
Sun 29/01/2023 19:30	46.7	40.0	49.8	59.2	
Sun 29/01/2023 19:45	47.0	40.1	50.0	63.9	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Sun 29/01/2023 20:00	45.8	39.0	48.8	56.4	
Sun 29/01/2023 20:15	45.1	38.8	48.1	56.2	
Sun 29/01/2023 20:30	45.2	36.8	48.2	58.8	
Sun 29/01/2023 20:45	48.5	36.3	49.4	67.7	
Sun 29/01/2023 21:00	44.0	35.7	47.0	62.8	
Sun 29/01/2023 21:15	43.8	34.9	47.0	65.1	
Sun 29/01/2023 21:30	44.0	36.1	47.5	56.2	
Sun 29/01/2023 21:45	43.3	36.1	46.6	55.9	
Sun 29/01/2023 22:00	42.7	37.2	45.5	55.6	
Sun 29/01/2023 22:15	43.7	35.4	47.0	58.7	
Sun 29/01/2023 22:30	44.9	36.7	48.5	57.0	
Sun 29/01/2023 22:45	42.4	35.3	46.0	58.6	
Sun 29/01/2023 23:00	41.7	35.0	45.4	57.6	*
Sun 29/01/2023 23:15	42.8	34.3	46.7	57.7	*
Sun 29/01/2023 23:30	39.2	32.1	43.1	52.0	*
Sun 29/01/2023 23:45	38.2	31.7	40.4	58.0	
Mon 30/01/2023 00:00	40.5	33.2	44.4	54.0	*
Mon 30/01/2023 00:15	41.8	33.4	45.5	55.7	*
Mon 30/01/2023 00:30	36.5	31.5	39.1	49.0	
Mon 30/01/2023 00:45	39.2	31.9	42.5	52.4	
Mon 30/01/2023 01:00	39.5	31.1	43.6	54.8	
Mon 30/01/2023 01:15	36.1	30.3	38.5	49.0	
Mon 30/01/2023 01:30	38.9	32.3	42.4	55.0	
Mon 30/01/2023 01:45	35.9	31.8	38.6	47.0	
Mon 30/01/2023 02:00	37.7	29.8	38.9	56.8	*
Mon 30/01/2023 02:15	38.0	31.4	41.4	51.4	
Mon 30/01/2023 02:30	40.3	32.8	42.3	57.0	
Mon 30/01/2023 02:45	35.4	31.4	37.9	49.1	
Mon 30/01/2023 03:00	40.1	31.5	43.4	55.5	
Mon 30/01/2023 03:15	37.9	30.6	40.5	56.7	
Mon 30/01/2023 03:30	38.0	28.9	41.3	53.9	
Mon 30/01/2023 03:45	36.6	30.3	39.0	54.0	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Mon 30/01/2023 04:00	37.8	30.4	40.5	56.1	
Mon 30/01/2023 04:15	39.1	29.6	42.5	55.7	
Mon 30/01/2023 04:30	41.1	31.1	45.1	57.9	
Mon 30/01/2023 04:45	42.0	32.7	46.2	59.1	
Mon 30/01/2023 05:00	41.6	30.9	46.1	57.0	
Mon 30/01/2023 05:15	45.0	35.1	48.8	56.5	
Mon 30/01/2023 05:30	45.0	36.5	48.4	57.9	
Mon 30/01/2023 05:45	44.6	37.5	48.1	57.1	
Mon 30/01/2023 06:00	47.1	40.0	49.9	64.0	
Mon 30/01/2023 06:15	47.3	40.2	50.7	60.3	
Mon 30/01/2023 06:30	47.0	40.7	49.8	57.1	
Mon 30/01/2023 06:45	47.8	41.6	50.7	57.6	
Mon 30/01/2023 07:00	49.8	45.3	52.2	60.4	
Mon 30/01/2023 07:15	49.3	43.6	52.1	58.8	
Mon 30/01/2023 07:30	50.3	43.8	53.0	66.6	
Mon 30/01/2023 07:45	50.5	45.3	52.9	63.5	
Mon 30/01/2023 08:00	50.3	45.3	53.1	61.5	
Mon 30/01/2023 08:15	52.1	46.6	54.5	67.2	
Mon 30/01/2023 08:30	50.8	44.8	52.9	66.8	
Mon 30/01/2023 08:45	49.4	46.0	51.7	63.9	
Mon 30/01/2023 09:00	51.1	47.5	52.9	62.8	
Mon 30/01/2023 09:15	49.9	46.6	51.9	67.6	
Mon 30/01/2023 09:30	49.7	46.0	51.9	67.4	
Mon 30/01/2023 09:45	48.8	44.5	50.4	66.6	
Mon 30/01/2023 10:00	48.5	45.0	50.5	64.0	
Mon 30/01/2023 10:15	49.2	45.8	51.4	59.8	
Mon 30/01/2023 10:30	48.6	46.0	50.5	58.6	
Mon 30/01/2023 10:45	48.5	45.5	50.8	58.6	
Mon 30/01/2023 11:00	50.1	47.3	51.9	63.5	
Mon 30/01/2023 11:15	48.7	45.7	50.8	59.8	
Mon 30/01/2023 11:30	50.0	43.6	50.6	65.4	
Mon 30/01/2023 11:45	53.4	44.4	59.0	66.4	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Mon 30/01/2023 12:00	47.2	42.8	49.8	59.8	
Mon 30/01/2023 12:15	46.9	43.0	48.8	66.0	
Mon 30/01/2023 12:30	48.1	43.1	50.4	66.0	
Mon 30/01/2023 12:45	48.1	44.5	50.3	64.8	
Mon 30/01/2023 13:00	49.9	46.2	51.5	70.1	
Mon 30/01/2023 13:15	50.9	46.3	52.4	71.9	
Mon 30/01/2023 13:30	51.8	48.2	53.2	68.8	
Mon 30/01/2023 13:45	50.4	47.3	51.8	66.9	
Mon 30/01/2023 14:00	50.7	47.5	52.8	66.2	
Mon 30/01/2023 14:15	50.5	47.9	52.2	61.5	
Mon 30/01/2023 14:30	50.4	46.7	52.1	74.6	
Mon 30/01/2023 14:45	50.4	47.0	52.3	65.9	
Mon 30/01/2023 15:00	50.6	47.6	52.6	61.1	
Mon 30/01/2023 15:15	51.4	48.9	53.0	67.7	
Mon 30/01/2023 15:30	52.2	49.7	53.7	64.4	
Mon 30/01/2023 15:45	52.3	49.9	53.9	68.5	
Mon 30/01/2023 16:00	52.1	49.5	54.0	62.9	
Mon 30/01/2023 16:15	52.2	49.2	53.6	66.8	
Mon 30/01/2023 16:30	51.5	48.8	53.1	62.3	
Mon 30/01/2023 16:45	52.0	49.8	53.6	59.9	
Mon 30/01/2023 17:00	53.8	49.6	54.3	70.7	
Mon 30/01/2023 17:15	51.7	49.4	53.3	59.3	
Mon 30/01/2023 17:30	51.1	48.8	52.8	58.1	
Mon 30/01/2023 17:45	52.0	47.3	52.9	71.6	
Mon 30/01/2023 18:00	49.9	46.6	51.9	63.1	
Mon 30/01/2023 18:15	53.8	46.8	54.9	72.3	
Mon 30/01/2023 18:30	50.9	48.1	52.8	61.2	
Mon 30/01/2023 18:45	50.4	46.5	52.6	57.9	
Mon 30/01/2023 19:00	52.1	45.3	54.3	69.5	
Mon 30/01/2023 19:15	48.9	44.2	51.4	57.9	
Mon 30/01/2023 19:30	50.1	46.2	52.0	63.0	
Mon 30/01/2023 19:45	49.9	45.3	52.1	56.7	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Mon 30/01/2023 20:00	50.7	46.8	52.9	59.5	
Mon 30/01/2023 20:15	49.9	45.5	52.1	63.8	
Mon 30/01/2023 20:30	49.7	44.6	52.3	57.8	
Mon 30/01/2023 20:45	49.5	43.6	52.1	57.5	
Mon 30/01/2023 21:00	49.0	43.5	51.8	60.7	
Mon 30/01/2023 21:15	47.2	42.4	50.0	58.6	
Mon 30/01/2023 21:30	47.0	40.2	49.9	57.5	
Mon 30/01/2023 21:45	46.4	39.5	49.7	58.0	
Mon 30/01/2023 22:00	48.2	41.2	51.3	56.0	
Mon 30/01/2023 22:15	46.7	40.7	49.8	56.2	
Mon 30/01/2023 22:30	43.0	35.2	46.7	53.2	
Mon 30/01/2023 22:45	43.5	34.0	46.2	66.4	
Mon 30/01/2023 23:00	42.7	34.7	46.5	54.1	
Mon 30/01/2023 23:15	42.7	30.1	47.4	56.1	
Mon 30/01/2023 23:30	38.9	28.7	43.4	52.5	
Mon 30/01/2023 23:45	37.8	30.0	41.4	54.2	
Tue 31/01/2023 00:00	38.0	29.9	41.5	54.3	
Tue 31/01/2023 00:15	35.5	29.5	38.7	50.8	
Tue 31/01/2023 00:30	33.0	27.6	35.9	43.5	
Tue 31/01/2023 00:45	36.3	27.4	39.7	53.8	
Tue 31/01/2023 01:00	31.8	26.1	33.8	50.9	
Tue 31/01/2023 01:15	39.4	28.0	42.8	55.5	
Tue 31/01/2023 01:30	29.5	25.2	32.6	40.9	
Tue 31/01/2023 01:45	31.6	24.6	30.9	52.3	
Tue 31/01/2023 02:00	33.0	23.8	33.6	54.0	
Tue 31/01/2023 02:15	32.8	25.7	35.7	49.0	
Tue 31/01/2023 02:30	31.8	25.6	33.1	47.6	
Tue 31/01/2023 02:45	31.6	27.0	34.1	42.6	
Tue 31/01/2023 03:00	32.8	26.7	34.5	48.3	
Tue 31/01/2023 03:15	36.7	27.8	39.8	53.2	
Tue 31/01/2023 03:30	39.1	32.6	42.0	53.3	
Tue 31/01/2023 03:45	38.2	29.2	41.2	53.9	*

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Tue 31/01/2023 04:00	33.5	28.9	36.0	46.6	
Tue 31/01/2023 04:15	39.4	31.3	40.7	58.8	
Tue 31/01/2023 04:30	39.5	31.5	43.2	54.1	
Tue 31/01/2023 04:45	42.0	34.4	45.7	55.0	
Tue 31/01/2023 05:00	43.0	35.7	46.6	57.6	
Tue 31/01/2023 05:15	43.8	37.3	47.0	55.8	
Tue 31/01/2023 05:30	45.9	38.2	48.9	58.6	
Tue 31/01/2023 05:45	46.0	38.9	49.4	59.0	
Tue 31/01/2023 06:00	47.1	40.4	50.2	58.6	*
Tue 31/01/2023 06:15	46.7	41.1	49.8	60.0	*
Tue 31/01/2023 06:30	49.0	44.3	51.7	58.9	*
Tue 31/01/2023 06:45	48.4	43.1	51.2	60.8	*
Tue 31/01/2023 07:00	50.0	45.0	52.6	59.4	*
Tue 31/01/2023 07:15	50.8	45.9	53.5	60.6	*
Tue 31/01/2023 07:30	50.8	46.9	53.0	62.6	*
Tue 31/01/2023 07:45	52.8	48.8	55.0	66.3	*
Tue 31/01/2023 08:00	53.7	49.2	56.2	64.8	*
Tue 31/01/2023 08:15	54.1	49.9	55.7	70.9	*
Tue 31/01/2023 08:30	54.0	51.3	56.0	63.8	*
Tue 31/01/2023 08:45	53.2	50.0	55.5	60.0	*
Tue 31/01/2023 09:00	53.0	49.7	54.9	68.8	*
Tue 31/01/2023 09:15	52.4	49.4	54.5	63.9	*
Tue 31/01/2023 09:30	51.9	48.7	53.9	61.2	
Tue 31/01/2023 09:45	52.0	48.3	54.3	63.0	
Tue 31/01/2023 10:00	52.1	48.6	54.2	64.7	
Tue 31/01/2023 10:15	51.3	47.9	53.6	59.6	
Tue 31/01/2023 10:30	51.6	48.3	53.7	60.4	
Tue 31/01/2023 10:45	51.6	48.6	53.6	64.6	
Tue 31/01/2023 11:00	51.1	48.1	53.1	61.1	
Tue 31/01/2023 11:15	51.4	48.4	53.4	60.6	
Tue 31/01/2023 11:30	52.5	48.3	55.1	64.2	
Tue 31/01/2023 11:45	51.7	48.8	53.7	58.6	

Day, Date and Time	L _{Aeq} , 15 min	L _{A90} , 15 min	L _{A10} , 15 min	L _{Amax} (F)	Weather Excl.
Tue 31/01/2023 12:00	50.9	47.8	52.9	61.8	
Tue 31/01/2023 12:15	52.1	48.7	54.2	63.3	
Tue 31/01/2023 12:30	52.5	49.3	54.0	69.3	
Tue 31/01/2023 12:45	51.5	48.3	53.5	63.0	

Figure 03-01
Time History Graph Location 1, dB

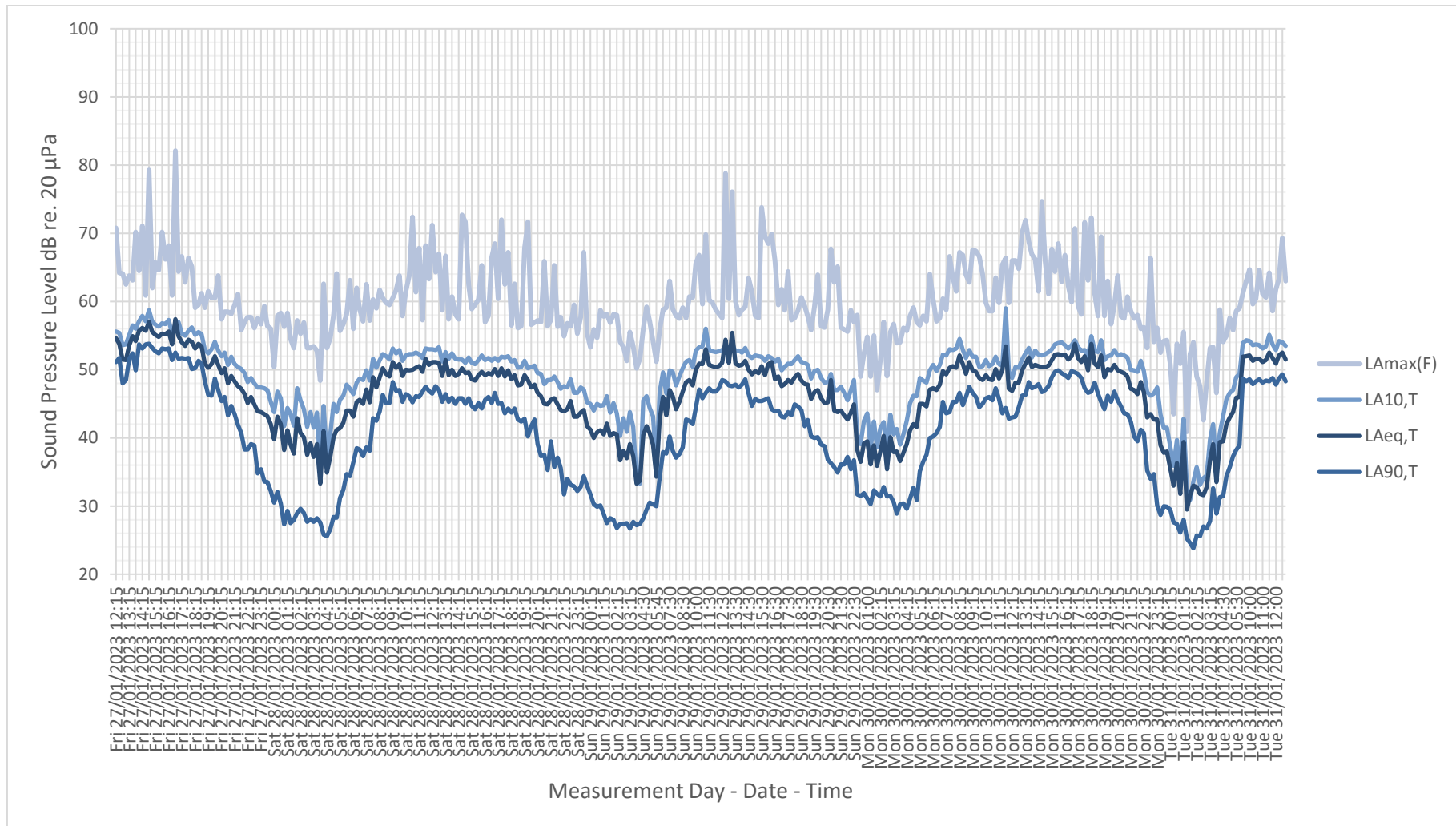
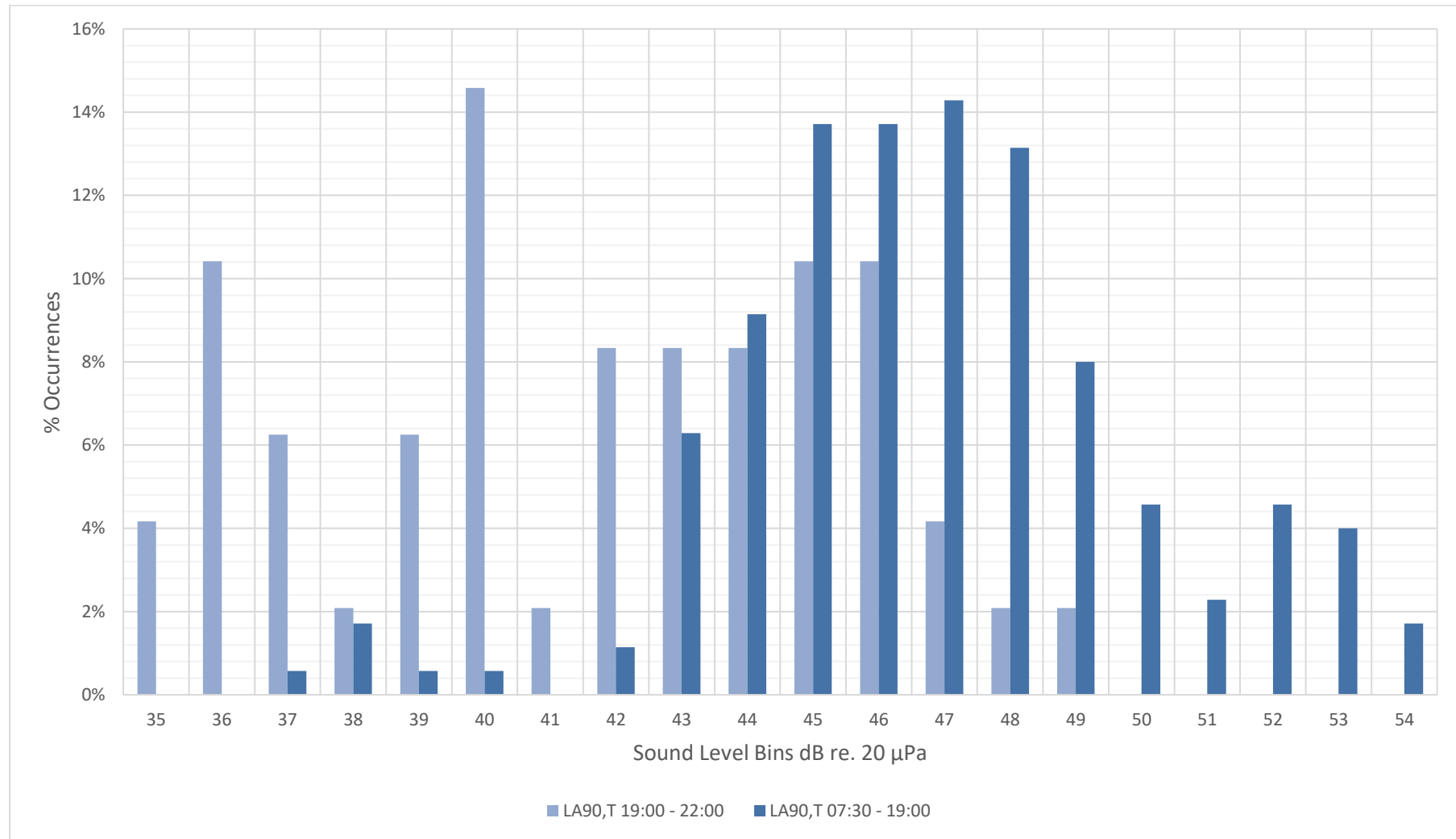


Figure 03-02
Background Sound Level Histogram – Day and Evening, Location 1, Weather Filtered dB



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