

NOISE ASSESSMENT

**SOUTHERN BUTTRESS
INFILLING AND STABILISATION WORKS,
SAXON PIT, WHITTLESEY**

EAST MIDLANDS WASTE MANAGEMENT LTD

APRIL 2025

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Revision	Prepared By	Date
1.0	L Jephson BEng (Hons) MIOA	12/4/25

This report has been prepared using all reasonable skill and care within the resources and brief agreed with the client. LFAcoustics Ltd accept no responsibility for matters outside the terms of the brief or for use of this report, wholly or in part, by third parties.

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1. Introduction

- 1.1. LF Acoustics Limited have been appointed to carry out a noise assessment in support of a permit application for further infilling and stabilisation works along the southern buttress at Saxon Pit, Whittlesey.
- 1.2. At present, works are being carried out along the eastern slopes of the pit, which is the closest area to the potentially affected dwellings, located along Priors Road and Snoots Road to the east. Planning consent for the continuation of these works was granted by Cambridgeshire County Council on 26 January 2023 (Application ref. CCC/22/092/VAR), subject to Conditions. The current conditions restrict working on the slopes to between 08:00 – 17:00 Mondays to Fridays, with a limit of 50 vehicles per day importing material.
- 1.3. The southern face of the quarry, adjacent to the railway line, now requires stabilisation and it is proposed to commence in this area once work on the eastern face has been completed. The method of working for the southern face would remain as current, with a dozer primarily used to spread the material. 12 loads per day are anticipated to be imported for the works by HGV.
- 1.4. Planning permission for the southern buttressing stabilisation works was granted by Cambridgeshire County Council on 10 March 2025 (Application Ref. CCC/24/078/FUL). Conditions 18 – 20 of the planning permission control noise levels from on-site operations and these are discussed in more detail in the following section.
- 1.5. This report presents an assessment of the noise levels at surrounding noise sensitive receptors attributable to the operation of the plant during the stabilisation works along the southern buttress. Section 2 provides a summary of the applicable standards, guidelines and current planning conditions relating to noise. Section 3 provides a summary of a noise monitoring exercise undertaken to establish the current noise levels at the neighbouring properties. Calculations and assessment of the noise generated by the proposed operations are provided in Section 4, with recommendations for additional measures to control noise from site operations discussed in Section 5. Finally, Section 6 presents a summary of this report.
- 1.6. This assessment and report has been prepared by L Jephson, BEng (Hons), MIOA, Director of LF Acoustics Ltd.

2. Applicable Standards and Guidance

A description of the noise units referred to within this report is provided in Appendix A.

2.1. British Standard BS 4142

BS 4142 [1] is the British Standard for rating and assessing noise of a commercial or industrial nature.

BS 4142 is a comparative standard in which initial estimates of the potential impacts are assessed on the basis of a comparison of noise levels from the proposed development to the representative / typical background noise level from existing uses.

The background noise level is the L_{A90} noise level, usually measured in the absence of noise from the source being assessed, but may include other existing industrial or commercial sounds. The background noise levels should generally be obtained from a series of measurements each of not less than 15 minute duration and taken over a representative period.

The Rating Level of the noise being assessed is defined as its L_{Aeq} noise level (the 'specific noise level'), with the addition of appropriate corrections should the noise exhibit a marked impulsive and/or tonal component or should the noise be irregular enough in character to attract attention. The extent of the correction is dependent upon the degree of tonality or character in the noise and is determined either by professional judgement, where the plant is not operational at present, or by measurement.

Where the noise is tonal in nature, the standard imposes the following corrections when assessing the rating level:

- 2 dB for a tone which is just perceptible;
- 4 dB where the tone is clearly perceptible; and
- 6 dB where the tone is highly perceptible.

Where noise exhibits other sound characteristics, the Standard advises a correction of 3 dB should be applied.

During the daytime, the specified noise levels are determined over a reference time interval of 1 hour, with a 15 minute reference period adopted when assessing night-time noise.

If the Rating Level of the noise being assessed exceeds the background level by 10 dB or more BS 4142 advises that there is likely to be an indication of a significant adverse impact, depending upon context. A difference between background level and Rating Level of around 5 dB is likely to be an indication of an adverse impact, depending upon context. The lower the Rating Level is, relative to the background noise level, the less likely the specific source will have an adverse or significant adverse impact. Where the Rating Level does not exceed the background noise level is an indication of a low impact, depending upon context.

Where the initial assessment of impact, based upon and assessment of the external noise levels, needs to be modified due to the context, all pertinent factors should be taken into account, including:

- The absolute level of sound;
- Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night; and
- The sensitivity of the receptor and whether the premises will already incorporate measures to ensure good internal and/or external acoustic conditions.

2.2. Environment Agency Guidelines

The Environment Agency (EA) have published guidance on the requirements for noise assessments for permit applications [2].

The guidance requires the use of BS 4142 to quantify the level of environmental noise impact from industrial processes.

Whilst the guidance requires the use of BS 4142 to assess potential impacts, the EA assessment methodology differs from that within BS 4142 and following criteria to be considered:

Unacceptable level of audible or detectable noise

This level of noise means that significant pollution is being, or is likely to be, caused at a receptor (regardless of whether you are taking appropriate measures).

You must take further action or you may have to reduce or stop operations. The environment agencies will not issue a permit if you are likely to be operating at this level.

The closest corresponding BS 4142 descriptor is 'significant adverse impact' (following consideration of the context).

Audible or detectable noise

This level of noise means that noise pollution is being (or is likely to be) caused at a receptor.

Your duty is to use appropriate measures to prevent or, where that is not practicable, minimise noise. You are not in breach if you are using appropriate measures. But you will need to rigorously demonstrate that you are using appropriate measures.

The closest corresponding BS 4142 descriptor is 'adverse impact' (following consideration of the context).

No noise, or barely audible or detectable noise

This level of noise means that no action is needed beyond basic appropriate measures or BAT.

The closest corresponding BS 4142 descriptor is 'low impact or no impact' (following consideration of context).

Low impact does not mean there is no pollution. However, if you have correctly assessed it as low impact under BS 4142, the environment agencies may decide that taking action to minimise noise is a low priority. Note that BS 4142 is unlikely to be the appropriate methodology on its own to assess low frequency noise.

In undertaking the assessment and deriving the rating level of noise, the EA guidance specifies “where the sound is neither impulsive nor tonal, but you can readily distinguish it against the usual residual acoustic environment, the environment agencies will expect you to apply a minimum character correction of +3 decibels (dB) ‘other’. This is unless you can robustly justify that you do not need such a correction.”

2.3. Planning Conditions

2.3.1. The planning permission covering the southern buttressing stabilisation works was granted in March 2025.

2.3.2. Conditions have been attached to the planning permission which include controls on the hours of operation and noise levels generated by the plant operating on site. The conditions have been reproduced below for reference.

Hours of operation

17. No development including the entry and exit of HCVs shall take place outside the hours of:

07:00 – 17:00 on Mondays to Fridays except bank or public holidays; and

07:00 – 13:00 on Saturdays.

No development authorised by this permission shall take place on Sundays or on bank or public holidays.

Reason: To minimise disturbance to residents and users of the area in accordance with the Policy 18 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) policies LP2 and LP16 of the Fenland Local Plan 2014.

Noise limit

18. Noise emitted from the Site shall not exceed 10 dB above the background (LA90) noise level subject to a maximum value of 55 dB LAeq, 1 hour (free field) as measured at any noise sensitive property.

Reason: In the interests of residential amenity in accordance with Policy 18 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2021 and policies LP2 and LP16 of the Fenland Local Plan 2014.

Noise management, monitoring and mitigation scheme

19. No development shall commence until a scheme for the management, monitoring and mitigation of noise has been submitted to and approved in writing by the waste planning authority. The scheme shall include, but not be limited to:

i) the frequency of and methodology for the monitoring of operational noise levels;

ii) confirmation that the results of the noise monitoring will be made public and the mechanism for this;

iii) what steps will to be taken to ensure that noise emitted from the Site does not exceed the level set out in condition 18;

- iv) that if the noise levels in condition 18 are exceeded, mitigation measures will be designed for approval by the waste planning authority;*
- v) the procedure for the recording, investigation and response to complaints; and*
- vi) a schedule for reviewing and updating the plan and sending proposed updates to the waste planning authority for approval.*

The development shall be carried out in accordance with the approved scheme

Reason: In the interests of residential amenity in accordance with Policy 18 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2021 and policies LP2 and LP16 of the Fenland Local Plan 2014.

Maintenance of plant and vehicle reversing alarms

20. All plant and machinery shall be maintained and silenced at all times to meet the manufacturers' noise rating level. No reversing alarm shall be fitted to any mobile plant or vehicles importing waste associated with the development hereby permitted except in accordance with the scheme approved under condition 19.

Reason: In the interests of local amenity in accordance with Policy 18 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021) and policies LP2 and LP16 of the Fenland Local Plan 2014.

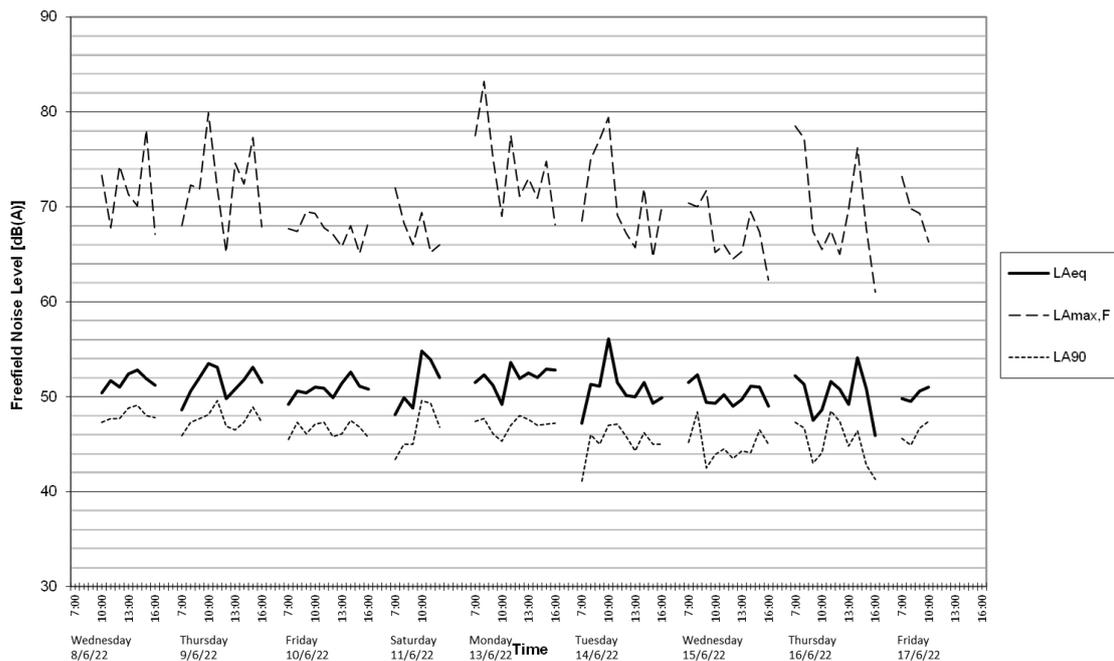
3. Baseline Noise Monitoring

3.1. Noise Sensitive Receptors

- 3.1.1. There are no residential properties in close proximity to the proposed stabilisation works along the southern buttress.
- 3.1.2. The closest proposed receptors are the dwellings along Priors Road and Snoots Road, which are adjacent to the current working areas. These properties will be approximately 280 metres from the closest working area along the southern face and thus considerably further from the working areas than the present works, being carried out along the eastern face.
- 3.1.3. At present, noise levels at these properties are influenced by the stabilisation works being undertaken along the eastern face, which are controlled through separate planning conditions; traffic noise associated with vehicles travelling along Peterborough Road to the north; train movements along the railway line to the south; and neighbouring site operations within the pit, which are controlled through separate planning permissions.

3.2. Noise Monitoring

- 3.2.1. As indicated previously, works are presently progressing along the eastern boundary of the pit.
- 3.2.2. To evaluate the present noise levels attributable to site operations, an unattended noise monitoring exercise was carried out to the rear of 101 Priors Road between Wednesday 8th June and Friday 17th June 2022.
- 3.2.3. The aim of the exercise was to establish the noise levels attributable to the present operations, which are being carried out during the permitted working hours. The results of the daytime noise monitoring have been reported previously and accompanied the recent planning application for the continuation of stabilisation works along the eastern boundary [3].
- 3.2.4. The results of the survey are summarised below.



- 3.2.5. Whilst the survey results included the influence of the operation of the plant along the eastern buttress at times during the day, there were periods where no activity was being undertaken on site or generally the plant was not fully operational, thus less likely to have influenced the background (L_{A90}) noise levels.
- 3.2.6. An evaluation of the results indicated that the typical background noise levels monitored during the daytime periods remained generally above 45 dB L_{A90} , which is consistent with the background levels assumed for the current works along the eastern face.

4. Calculation and Assessment of Noise Levels from Proposed Operations Along Southern Face

4.1. Proposed Operations

- 4.1.1. The proposed working area is indicated on Figure 1.
- 4.1.2. The southern face of Saxon Pit requires stabilisation, which would be carried out in a similar manner to the present works, which are being undertaken to stabilise the eastern face, by importing material to infill part of the pit to create a shallower and stable face.
- 4.1.3. The plant required to undertake the works would be equivalent to that presently used within the site and would principally include:
 - an excavator;
 - a dozer;
 - HGVs delivering material; and
 - Occasional use of ADTs to move material within the site.
- 4.1.4. Materials are imported into the site by HGV, with up to 50 loads per day brought onto site during Phase 1. The number of HGVs would reduce during the operations within Phase 2, with a maximum of 12 loads per day permitted within the planning permission.
- 4.1.5. As with the current operations, it is proposed to screen the imported material to recycle material where possible, thus only sending material not suitable for recycling to the southern buttress. The screening plant would be located at the base of the pit, close to the weighbridge, as per the current operations.
- 4.1.6. The materials would be generally spread using the dozer, which would operate periodically throughout the day. An excavator would periodically and principally be used to load soils from other parts of the pit into the ADTs for restoration purposes and for general restoration along the new slopes.

4.2. Source Term Information

- 4.2.1. Source term noise measurements of the plant anticipated to be used on site have been obtained from either plant presently operating on site or from similar operations, considered to be representative for this site.
- 4.2.2. The noise source terms which have been assumed for this assessment are provided below.

Source	SWL (dB(A))	L _{Aeq} at 10m	Number	% On-Time
Excavator working and loading soils	101	72.9	1	100
Dozer	107	79.3	1	100
Screening Plant	102	74.0	1	100
Loading Shovel (within screening area)	101	73.1	1	100
HGV Passby	103	-	8 movements per hour	-
ADT Passby	106	-	8 movements per hour	-
HGV / ADT Tipping	106	-	8 loads per hour	-

Table 4.1 Source Term Noise Levels

4.3. Criteria to be Adopted for the Assessment

- 4.3.1. The results of the background noise monitoring indicated typical background noise levels of 45 dB L_{A90} or higher during the daytime periods along the boundary with the neighbouring properties. On this basis, the noise limit proposed in accordance with the requirements of Condition 18 of the planning permission would indicate a limit of 55 dB L_{Aeq, 1 hour} at the properties.

This limit would additionally ensure that noise levels assessed in accordance with the EA guidelines would not exceed a level corresponding to an “Unacceptable level of audible or detectable noise”. Noise levels would be controlled and minimised to ensure levels remained within acceptable limits defined within the EA guidelines.

4.4. Calculation Methodology

- 4.4.1. The calculations of the noise levels from the infilling and screening operations at the closest properties have been made using the methodology contained within ISO 9613-2 [4].
- 4.4.2. A noise model has been prepared using the SoundPlan computer modelling package to predict the noise levels from site operations.
- 4.4.3. Calculations have been made at four positions along Priors Road / Snoots Road to the east, which are considered to be representative of the dwellings along the road, which would be potentially most likely to be impacted by the proposed works.
- 4.4.4. Calculations of the noise levels have been made on the basis of likely worst-case conditions, assuming all plant fully operational and with the plant working along the butress positioned closest to the properties.
- 4.4.5. Generally, noise levels would be lower than predicted, as not all plant would be generally operating at the same time, nor working within the same area.
- 4.4.6. The details of the calculations are provided in Appendix B, with a graphical summary provided on Figure 2.

4.5. Assessment of Noise Levels

4.5.1. An assessment of the noise levels attributable to the proposed operations has been made in accordance with the requirements of BS 4142 and the EA guidelines.

4.5.2. Noise levels attributable to the proposed operations would be equivalent in character to those presently being carried out along the eastern face. The noise from the plant would be generally attributable to the engine noise and thus not tonal or impulsive in nature. A 3 dB other character correction has, however, been applied in accordance with the EA guidelines.

4.5.3. The assessment has been based upon a lower typical background noise level of 45 dB L_{A90} derived from the monitoring carried out previously.

4.5.4. The assessment of the noise levels at the neighbouring properties is provided below.

Location	Calculated Noise Levels [dB $L_{Aeq,T}$]			Typical Background Noise Level [dB L_{A90}]	Difference re Background
	Specific Noise Level	Correction	Rating Level		
95 Snoots Road	44	3	47	45	+2
99 Priors Road	45	3	48	45	+3
81 Priors Road	45	3	48	45	+3
63 Priors Road	43	3	46	45	+1

Table 4.1 Assessment of Noise Levels from Southern Buttress Operations

4.5.5. The calculations above indicate that the noise levels attributable to the proposed operations would remain substantially below the 55 dB $L_{Aeq, 1 hr}$ limit specified in Condition 18 of the planning permission. Noise levels on this basis would remain acceptable.

4.5.6. With regards to the ES guidelines, the assessment above indicates rating levels of noise between +1 to +3 dB above the prevailing background noise levels. On this basis, the assessment indicates *“No noise, or barely audible or detectable noise”* when considered against the EA guidelines, with noise levels remaining below the adverse impact threshold within BS 4142 of 5 dB above the prevailing background noise levels.

4.5.7. This level of noise means that no action is needed beyond basic appropriate measures or BAT. On this basis, with appropriate site controls adopted to minimise noise, the operations would generate acceptable levels of noise at the neighbouring properties.

5. Requirement for Noise Control Measures and Periodic Noise Monitoring

- 5.1. The assessment within Section 4 indicates that noise levels associated with the proposed infilling and restoration operations associated with the stabilisation works within the southern area of the pit would remain within acceptable limits and not result in a potential for adverse noise impacts.
- 5.2. Appropriate noise control measures would be adopted to ensure noise associated with the operation was minimised and would include:
 - Undertaking periodic noise monitoring at the neighbouring residential properties;
 - Ensuring all plant is kept well maintained;
 - Ensuring silencers on plant are effective;
 - Turning off plant when not in use; and
 - Use of non-tonal reversing signals on mobile plant operating on the site.
- 5.3. A noise management, monitoring and mitigation scheme has been prepared to satisfy Condition 19 of the planning permission. A copy of the scheme is provided in Appendix C of this report.

6. Summary

- 6.1. LF Acoustics Limited were appointed to carry out a noise assessment in support of a planning application for further infilling and stabilisation works at Saxon Pit, Whittlesey.
- 6.2. At present, works are being carried out along the eastern slopes of the pit, which is the closest area to the potentially affected dwellings, located along Priors Road to the east.
- 6.3. The southern face of the quarry, adjacent to the railway line, now requires stabilisation and it is proposed to commence in this area once work on the eastern face has been completed. Planning permission for these works has been recently granted subject to Conditions.
- 6.4. Noise monitoring has been undertaken recently to establish the current noise levels at surrounding properties potentially affected by the present operations, which would also be potentially affected by the proposed works.
- 6.5. An assessment of the likely noise levels associated with the operation of the site indicates that the site operations would generate noise levels below appropriate noise limits and would therefore remain acceptable to ensure any potential adverse impacts to the occupants of surrounding properties are minimised.
- 6.6. Appropriate on site controls and monitoring would be undertaken to ensure noise levels remain acceptable during the works.

References

1. British Standards Institute. Methods for Rating and Assessing Industrial and Commercial Sound. BS 4142:2014 +A1:2019.
2. Environment Agency. Noise and Vibration Management: Environmental Permits. Published 23 July 2021.
3. East Midlands Waste Management Ltd. Unattended Noise Monitoring Exercise. Saxon Works, Whittlesey. LF Acoustics Ltd. June 2022.
4. Bsi. Acoustics – Attenuation of Sound During Propagation Outdoors – Part 2: Engineering Method for the Prediction of Sound Pressure Levels Outdoors. BS ISO 9613-2. 2024.

Figures

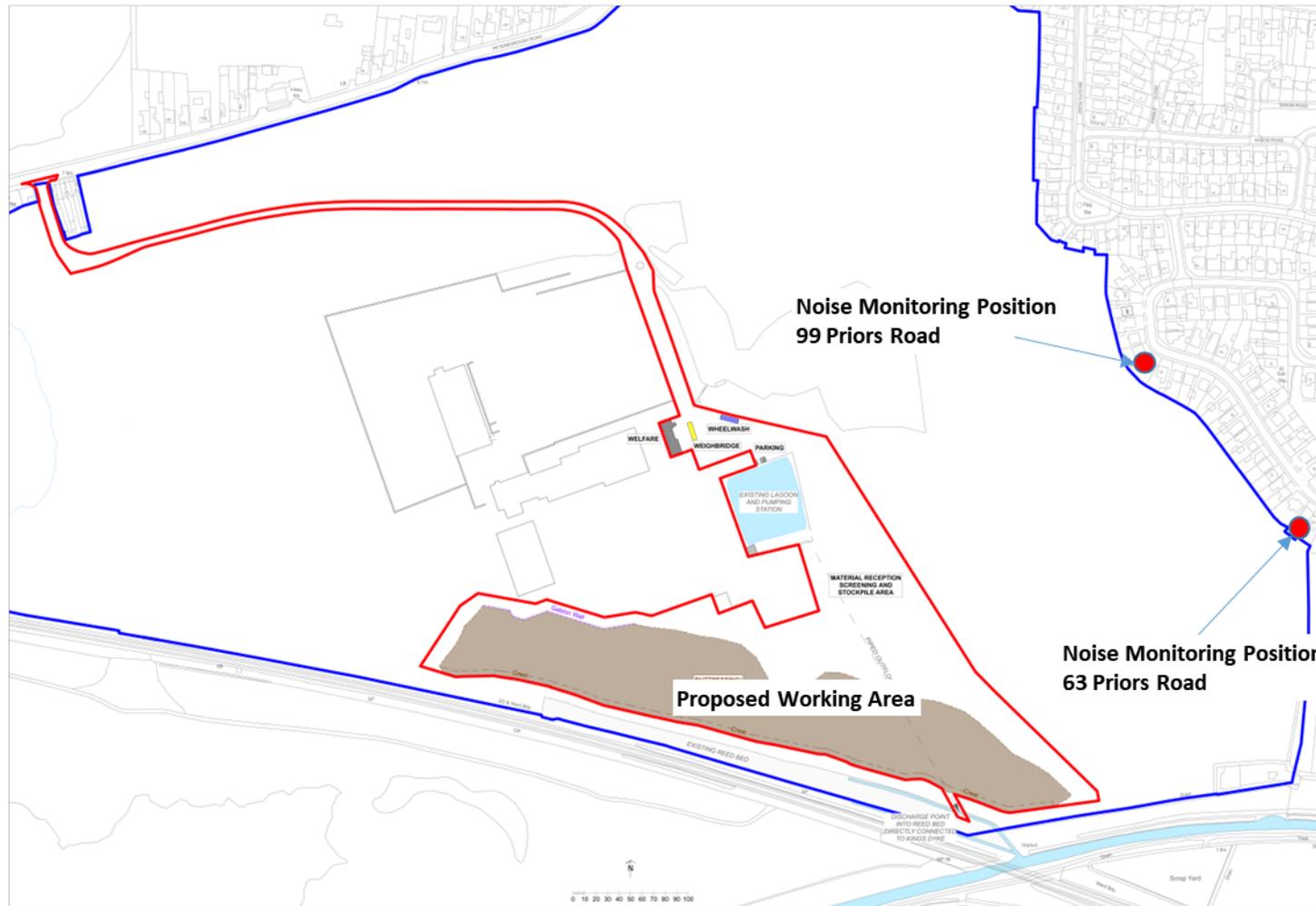


Figure 1:
Site Location and
Noise Monitoring Positions



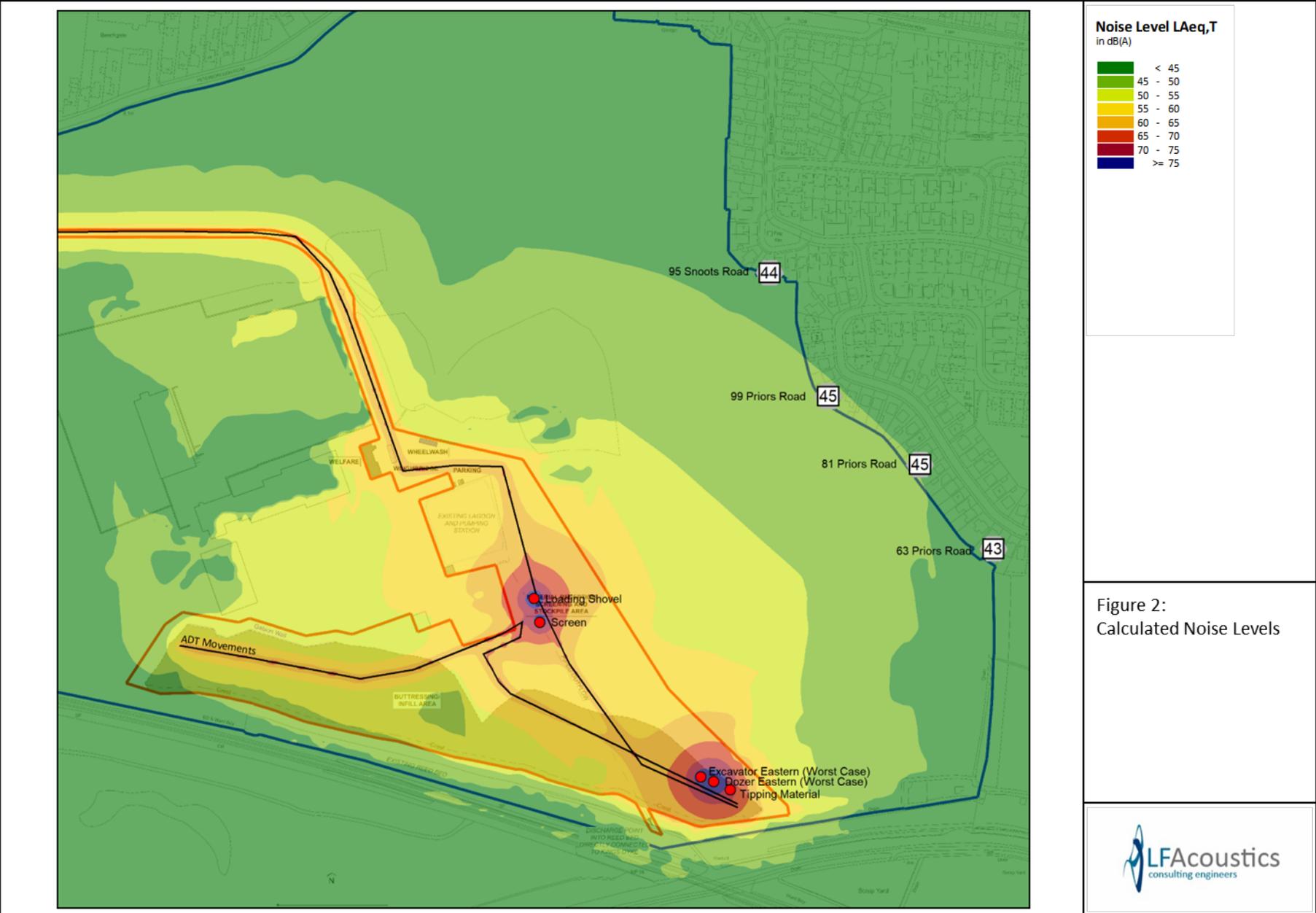


Figure 2:
Calculated Noise Levels



Appendix A Noise Units

Decibels (dB)

Noise can be considered as 'unwanted sound'. Sound in air can be considered as the propagation of energy through the air in the form of oscillatory changes in pressure. The size of the pressure changes in acoustic waves is quantified on a logarithmic decibel (dB) scale firstly because the range of audible sound pressures is very great, and secondly because the loudness function of the human auditory system is approximately logarithmic.

The dynamic range of the auditory system is generally taken to be 0 dB to 140 dB. Generally, the addition of noise from two sources producing the same sound pressure level will lead to an increase in sound pressure level of 3 dB. A 3 dB noise change is generally considered to be just noticeable, a 5 dB change is generally considered to be clearly discernible and a 10 dB change is generally accepted as leading to the subjective impression of a doubling or halving of loudness.

A-Weighting

The bandwidth of the frequency response of the ear is usually taken to be from about 18 Hz to 18,000 Hz. The auditory system is not equally sensitive throughout this frequency range. This is taken into account when making acoustic measurements by the use of A-weighting, a filter circuit that has a frequency response similar to the human auditory system. All the measurement results referred to in this report are A-weighted.

Units Used to Describe Time-Varying Noise Sources (L_{Aeq} , L_{Amax} , L_{A10} , and L_{A90})

Instantaneous A-weighted sound pressure level is not generally considered as an adequate indicator of subjective response to noise because levels of noise usually vary with time.

For many types of noise the Equivalent Continuous A-Weighted Sound Pressure Level ($L_{Aeq,T}$) is used as the basis of determining community response. The $L_{Aeq,T}$ is defined as the A-weighted sound pressure level of the steady sound which contains the same acoustic energy as the noise being assessed over a specific time period, T.

The L_{Amax} is the maximum value that the A-weighted sound pressure level reaches during a measurement period. $L_{Amax,F}$, or Fast, is averaged over 0.125 of a second and $L_{Amax,S}$, or Slow, is averaged over 1 second. All L_{Amax} values referred to in this report are Fast.

The L_{A90} is the noise level exceeded for 90% of the measurement period. It is generally used to quantify the background noise level, the underlying level of noise that is present even during the quieter parts of measurement period.

Appendix B
Calculation Details

Saxon Works Southern Buttressing Mean propagation Leq - Model 0425

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Legend

Source		Source name
Source type		Type of source (point, line, area)
Time slice		Name of time slice
Lw	dB(A)	Sound power level per m, m ²
Lw	dB(A)	Sound power level per unit
I or A	m, m ²	Size of source (length or area)
S	m	Distance source - receiver
Adiv	dB	Mean attenuation due to geometrical spreading
Agr	dB	Mean attenuation due to ground effect
Abar	dB	Mean attenuation due to screening
Aatm	dB	Mean attenuation due to air absorption
Ls	dB(A)	Unassessed sound pressure level at receiver
$L_s = L_w + K_o + ADI + Adiv + Agr + Abar + Aatm + A_{fol_site_house} + A_{wind} + dL_{ref}$		
dLw	dB	Correction due to source operation time
Lr	dB(A)	Assessed level of time slice

Saxon Works Southern Buttressing Mean propagation Leq - Model 0425

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Source	Source type	Time slice	L'w dB(A)	Lw dB(A)	l or A m,m²	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Ls dB(A)	dLw dB	Lr dB(A)
Receiver 83 Priors Road FI GF dB(A) LAeq,T 43.2 dB(A)													
ADT Movements	Line	LAeq,T	62.8	90.8	634.6	450.84	-64.1	-1.3	-0.1	-2.5	22.8	9.0	31.8
Dozer Eastern (Worst Case)	Point	LAeq,T	107.3	107.3		322.43	-61.2	-1.5	-3.3	-1.8	39.5	0.0	39.5
Excavator Eastern (Worst Case)	Point	LAeq,T	100.9	100.9		328.90	-61.3	-2.4	-2.1	-1.5	33.5	0.0	33.5
HGV Movements	Line	LAeq,T	60.4	91.3	1243.8	533.11	-65.5	-1.0	-0.4	-3.1	21.5	9.0	30.6
Loading Shovel	Point	LAeq,T	101.1	101.1		410.97	-63.3	0.4	-0.3	-2.2	35.7	0.0	35.7
Screen	Point	LAeq,T	102.2	102.2		408.55	-63.2	-1.7	0.0	-2.6	34.6	0.0	34.6
Tipping Material	Point	LAeq,T	106.2	106.2		315.93	-61.0	-0.4	0.0	-3.2	41.5	-17.8	23.8
Receiver 81 Priors Road FI GF dB(A) LAeq,T 44.9 dB(A)													
ADT Movements	Line	LAeq,T	62.8	90.8	634.6	429.50	-63.7	-1.1	-0.1	-2.5	23.4	9.0	32.4
Dozer Eastern (Worst Case)	Point	LAeq,T	107.3	107.3		334.39	-61.5	-1.5	-0.2	-2.2	41.9	0.0	41.9
Excavator Eastern (Worst Case)	Point	LAeq,T	100.9	100.9		337.53	-61.6	-2.4	-0.3	-1.8	34.8	0.0	34.8
HGV Movements	Line	LAeq,T	60.4	91.3	1243.8	485.75	-64.7	-1.0	-0.3	-2.9	22.6	9.0	31.7
Loading Shovel	Point	LAeq,T	101.1	101.1		383.39	-62.2	0.5	-0.2	-2.0	37.1	0.0	37.1
Screen	Point	LAeq,T	102.2	102.2		365.81	-62.3	-1.1	-0.1	-2.4	36.3	0.0	36.3
Tipping Material	Point	LAeq,T	106.2	106.2		332.63	-61.4	-0.4	-0.2	-3.5	40.6	-17.8	22.8
Receiver 95 Snoots Road FI GF dB(A) LAeq,T 43.6 dB(A)													
ADT Movements	Line	LAeq,T	62.8	90.8	634.6	460.37	-64.3	-0.6	-0.1	-2.7	23.1	9.0	32.2
Dozer Eastern (Worst Case)	Point	LAeq,T	107.3	107.3		451.30	-64.1	-1.5	0.0	-2.9	38.8	0.0	38.8
Excavator Eastern (Worst Case)	Point	LAeq,T	100.9	100.9		448.66	-64.0	-2.4	0.0	-2.4	32.1	0.0	32.1
HGV Movements	Line	LAeq,T	60.4	91.3	1243.8	437.67	-63.8	-1.2	-1.4	-2.6	23.0	9.0	32.1
Loading Shovel	Point	LAeq,T	101.1	101.1		355.98	-62.0	0.7	-0.5	-2.0	37.2	0.0	37.2
Screen	Point	LAeq,T	102.2	102.2		370.00	-62.4	-0.4	-0.1	-2.4	36.9	0.0	36.9
Tipping Material	Point	LAeq,T	106.2	106.2		457.00	-64.2	-0.4	0.0	-4.1	37.4	-17.8	19.7
Receiver 99 Priors Road FI GF dB(A) LAeq,T 45.4 dB(A)													
ADT Movements	Line	LAeq,T	62.8	90.8	634.6	406.88	-63.2	-0.8	0.0	-2.4	24.4	9.0	33.4
Dozer Eastern (Worst Case)	Point	LAeq,T	107.3	107.3		354.74	-62.0	-1.5	0.0	-2.4	41.4	0.0	41.4
Excavator Eastern (Worst Case)	Point	LAeq,T	100.9	100.9		354.36	-62.0	-2.4	-0.1	-2.0	34.5	0.0	34.5
HGV Movements	Line	LAeq,T	60.4	91.3	1243.8	430.17	-63.7	-1.0	-0.2	-2.7	24.2	9.0	33.3
Loading Shovel	Point	LAeq,T	101.1	101.1		317.19	-61.0	0.5	-0.3	-1.8	38.4	0.0	38.4
Screen	Point	LAeq,T	102.2	102.2		325.15	-61.2	-0.8	0.0	-2.2	37.9	0.0	37.9
Tipping Material	Point	LAeq,T	106.2	106.2		357.66	-62.1	-0.4	0.0	-3.5	40.2	-17.8	22.4

Appendix C
Noise Monitoring Scheme
(Appended to this Document)

**East Midlands Waste Management Limited
Saxon Pit Southern Butress Stabilisation Works**

**Scheme for Noise Monitoring and Control
Version 2.0: 22 April 2025**

Preamble

Conditions 18 to 20 of the planning permission for the southern buttress works at Saxon Pit (Application Ref. CCC/24/078/FUL) specifies noise limits at neighbouring residential properties and requires a scheme for noise monitoring and control to be prepared to ensure the proposed operations result in acceptable levels of noise at the properties.

The relevant Conditions are reproduced below for reference:

Noise limit

18. Noise emitted from the Site shall not exceed 10 dB above the background (LA90) noise level subject to a maximum value of 55 dB LAeq, 1 hour (free field) as measured at any noise sensitive property.

Reason: In the interests of residential amenity in accordance with Policy 18 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2021 and policies LP2 and LP16 of the Fenland Local Plan 2014.

Noise management, monitoring and mitigation scheme

19. No development shall commence until a scheme for the management, monitoring and mitigation of noise has been submitted to and approved in writing by the waste planning authority. The scheme shall include, but not be limited to:

- i) the frequency of and methodology for the monitoring of operational noise levels;*
- ii) confirmation that the results of the noise monitoring will be made public and the mechanism for this;*
- iii) what steps will to be taken to ensure that noise emitted from the Site does not exceed the level set out in condition 18;*
- iv) that if the noise levels in condition 18 are exceeded, mitigation measures will be designed for approval by the waste planning authority;*
- v) the procedure for the recording, investigation and response to complaints; and*
- vi) a schedule for reviewing and updating the plan and sending proposed updates to the waste planning authority for approval.*

The development shall be carried out in accordance with the approved scheme

Reason: In the interests of residential amenity in accordance with Policy 18 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2021 and policies LP2 and LP16 of the Fenland Local Plan 2014.

Maintenance of plant and vehicle reversing alarms

20. All plant and machinery shall be maintained and silenced at all times to meet the manufacturers' noise rating level. No reversing alarm shall be fitted to any mobile plant or vehicles importing waste associated with the development hereby permitted except in accordance with the scheme approved under condition 19.

Reason: In the interests of local amenity in accordance with Policy 18 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021) and policies LP2 and LP16 of the Fenland Local Plan 2014.

A noise assessment was prepared by LF Acoustics Ltd to support the planning application. The assessment identified the residential properties along Priors Road and Snoots Road to the north east of the proposed operational areas as being those potentially most affected. These locations are indicated on Figure 1.

Noise Mitigation and Control Measures

The noise assessment prepared to accompany the planning application indicated that noise levels associated with the proposed operations would remain substantially below a noise limit defined in accordance with the requirements of Condition 18. No specific noise mitigation measures were therefore identified to be required to be adopted during these works.

Measures would, however, be adopted to ensure noise levels attributable to the site operations were minimised, including consideration of the requirements of Condition 20, as follows:

- Ensuring all plant is kept well maintained;
- Ensuring silencers on plant are effective;
- Turning off plant when not in use;
- Use of non-tonal reversing signals on mobile plant operating on the site; and
- Maintaining an appropriate site speed limits for vehicles entering the site;
- Minimising the requirement for HGVs to reverse on site;
- Ensuring that loads are tipped carefully.

Noise Monitoring

In accordance with the requirements of Condition 19, noise monitoring would be carried out to demonstrate that noise levels associated with the operations are minimised on the following occasions:

- At the commencement of operations along the southern buttress;
- At 6 monthly intervals; and
- following a justified complaint from local resident or members of the Site Liaison Group.

During each measurement exercise, noise measurements would be taken at a publicly accessible locations to the rear of 63 and 99 Priors Road, as indicated on Figure 1 (or at the complainant's property, should the exercise be undertaken following receipt of a justified complaint).

The measurements would be taken by a suitably qualified person.

The measurements would be made at a freefield location (at least 3.5 metres from the property facade) and a height of 1.2 - 1.5 metres above ground level. Where it were necessary to make measurements adjacent to a property facade (i.e. at a distance of 1 metre from the facade), a correction of -3dB(A) would be made to the measured values to convert between facade and equivalent freefield levels.

The measurements would be made in accordance with the requirements of BS7445 using a Sound Level Meter designed to a minimum Class 2 specification in accordance with BS-EN 61672, which would be field calibrated before and after each exercise using a suitable acoustic calibrator.

The surveys would only be carried out during dry conditions and when wind speeds averaged less than 5 m/s.

Measurements would only be taken during periods of normal operation (e.g. excluding periods of plant maintenance and breakdowns) and when the site was fully operational.

Measurements would be obtained over a period of at least 1 hour at each position during each measurement exercise (split into 15 minute monitoring periods).

For each measurement, the following parameters shall be recorded:

- measurement position;
- $L_{Aeq, 15 \text{ minute}}$, L_{A90} and $L_{Amax,F}$ noise levels;
- weather conditions, wind speeds and direction;
- details of activities being carried out on site; and
- other influences on noise levels.

Where the measurements obtained were clearly influenced by noise from other sources (e.g. rail traffic), if possible, the extraneous noise would be paused out of the measurement using the pause function on the sound level meter and a note made (or utilising shorter monitoring sample periods (e.g. 1 second) and removing the periods which are influenced by extraneous noise by post processing the measured results), or a note made to the effect that the other sources of noise were identified to be the principal noise source.

The measured noise levels would be compared against the noise limits defined in accordance with the requirements of Condition 18.

Records of each noise monitoring exercise would be made available within 14 days of completion of the monitoring exercise to the Waste Planning Authority, with a copy of the monitoring report held within the site office. Copies of the monitoring report would also be made available to members of the Site Liaison Group.

Where noise levels attributable to the site operations were noted to be above the limits defined in accordance with the requirements of Condition 18 at the surrounding properties, measures would be identified to reduce noise levels.

Where an exceedance of the planning condition limit was identified, the Waste Planning Authority would be informed of the exceedance within a period of 7 days of the monitoring exercise, with the report and any remedial measures required to reduce the noise provided to the Waste Planning Authority within a period of 14 days of the monitoring exercise. The measures shall be agreed with the Waste Planning Authority and implemented as soon as practically possible, with the timescale for implementation agreed. Upon completion of the remedial works, the measurement exercise would be repeated to ensure that the noise levels have reduced to a satisfactory standard.

Complaints Procedure

All complaints regarding noise from the site operations should be addressed to the site manager via the published email and telephone number. (These will be published in the final draft).

The complainant should provide the following information.

- Name, address and contact details.
- Their location when hearing the noise.
- The time and date when the noise was heard.

The complaint will be followed up within a period of 24 hours of the complaint being received during working hours.

The same process would be followed should the complaint be made directly to the Waste Planning Authority.

The manager would discuss the nature of the complaint with the complainant and undertake an initial subjective assessment of the noise giving rise to the complaint.

Where the source of the noise was identified, e.g. associated with plant operating close to the boundary with the property, appropriate remedial action would be taken where necessary to reduce the noise. A visit would be made to the complainant's property upon completion of the remedial action to evaluate whether the measures have reduced the noise. Depending upon the nature of the remedial action, the aim would be to complete the works within a period of 48 hours of the initial complaint.

Should the site manager consider the remedial measures do not address the nature of the complaint, a noise monitoring exercise would be arranged and carried out in accordance with this scheme, within a period of 1 week of the completion of the remedial works (subject to suitable weather conditions).

If the noise levels monitored were found to be above the noise limits specified in Condition 18 at the property, further noise mitigation and control measures would be identified. The proposed measures would be presented to the Waste Planning Authority within a period of 1 week of the monitoring exercise for their approval. Any remedial works would be completed in a timely manner and within a timescale to be agreed with the Waste Planning Authority.

Any noise complaints received on site would be logged, with copies of any complaints received directly on site forwarded to the Waste Planning Authority for their information. A record of all complaints received would be maintained on site and available for inspection by the Waste Planning Authority and members of the Site Liaison Group upon request.

Periodic Review

This document will be reviewed on an annual basis.

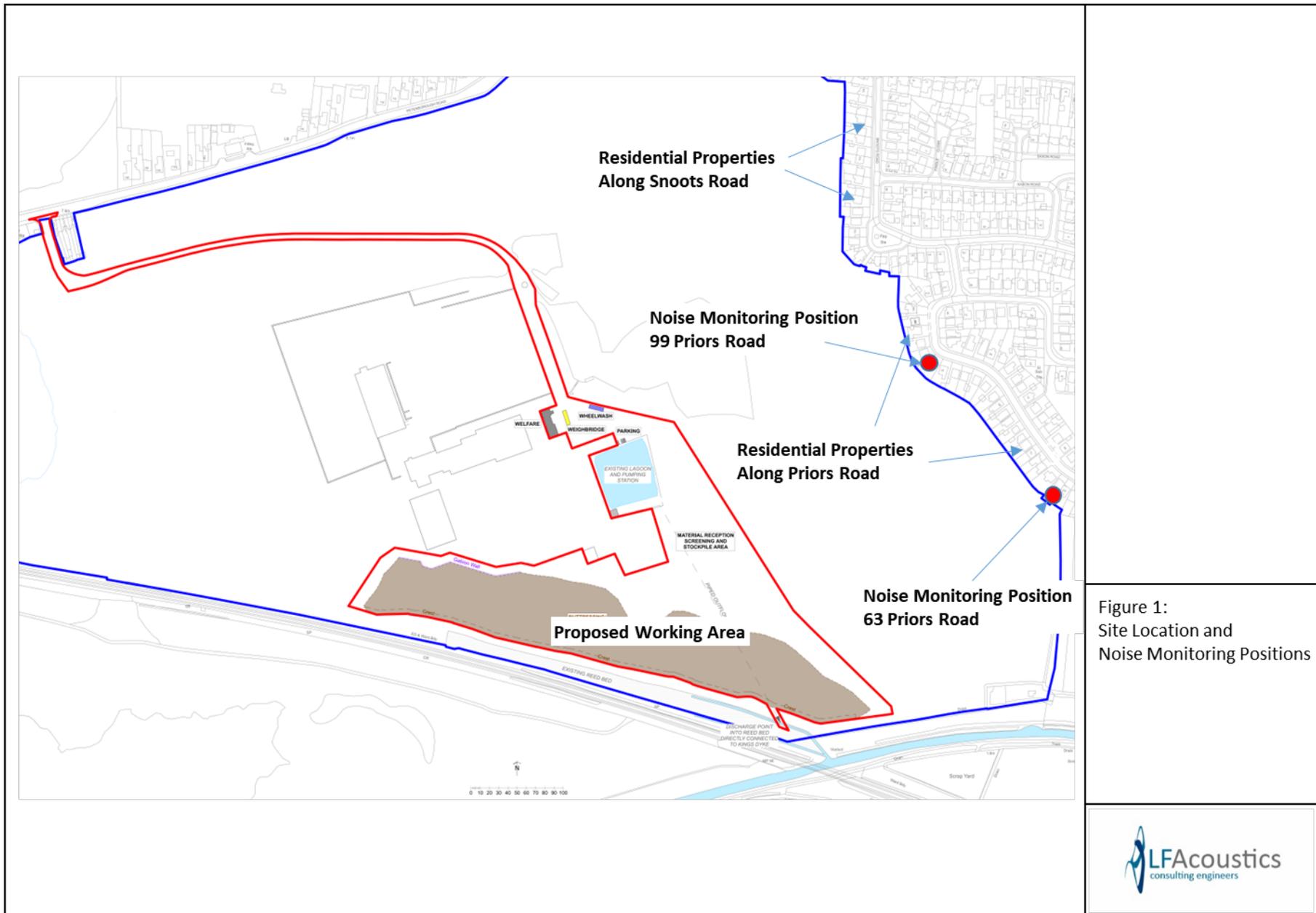


Figure 1:
Site Location and
Noise Monitoring Positions

