

Soil Treatment UK Limited

## Noise Management Plan

Soil Treatment UK Limited  
Finmere Quarry and Landfill Site,  
Banbury Road  
Finmere,  
Oxfordshire,  
MK18 4AJ



PROVIDING SOLUTIONS, ENSURING COMPLIANCE

---

T 01952 879705 E [info@westburyenv.co.uk](mailto:info@westburyenv.co.uk)

A Agriculture House, Southwater Way  
Telford, Shropshire, TF3 4NR

W [www.westburyenv.co.uk](http://www.westburyenv.co.uk)

**Document Control Table**

Project Reference	23/009e
Project Title	Environmental Permit Application
Document Title	Noise Management Plan V1
Document Issue Date	26 October 2023
Client	Soil Treatment UK Limited
Status	Issued

**Change log**

Version	Changes	Produced by	Checked by	Date
1	Original Noise Management Plan	Emma Gibson	Tracey Westbury	26 October 2023



**Contents**

1. Introduction .....1

2. Site Description.....3

3. Noise Sources and Impact.....4

4. Pathway and Receptors.....5

5. Control measures and process monitoring .....7

6. Responsibilities, review, and training.....10

7. Complaints reporting.....11

**Tables**

Table 4.1 Sensitive Receptors ..... 6

Table 5.1 Noise sources and control measures ..... 8

**Drawings**

Drawing No. 23/009c 001	Permit Boundary Plan V1
Drawing No. 23/009c 002	Indicative Site Layout Plan V1
Drawing No. 23/009c 003	Sensitive Receptor Plan V1

**Appendices**

Appendix 1	Noise Assessment
Appendix 2	Complaints Form



## 1. Introduction

- 1.1. Westbury Environmental Limited has prepared this Noise Management Plan (NMP) on behalf of Soil Treatment UK Limited (the Operator). This NMP has been prepared to systematically assess, reduce, and prevent noise emissions in accordance with Environmental Permitting Regulations.
- 1.2. This NMP relates to construction / demolition waste treatment activities authorised under Environmental Permit Ref. **XX** at Finmere Quarry and Landfill, Cherwell District, Oxfordshire, MK18 4AJ. The site is defined as the area within the permit boundary denoted by the green line, see Drawing No. 23/009c 001 Permit Boundary Plan V1 (Site).
- 1.3. This Noise Management Plan has been produced in accordance with the following guidance:
  - Control and monitor emissions for your environmental permit, last updated 24 November 2022 ([www.gov.uk](http://www.gov.uk)).
  - JRC Science for Policy Report: Best available techniques (BAT) reference document for waste treatment, October 2018 (BREF).
  - Non-hazardous and inert waste: appropriate measures for permitted facilities, December 2022 (Appropriate Measures).
  - Chemical waste: appropriate measures for permitted facilities, November 2020 (Appropriate Measures).
  - Noise and vibration management: environmental permits, last updated 31 January 2022 ([www.gov.uk](http://www.gov.uk)).
- 1.4. This NMP will form part of the Environmental Management System (EMS) for the Site. Procedures and Forms referenced within this NMP are included within the EMS, Appendix C, Procedures and Forms.
- 1.5. A copy of the EMS, including the NMP, will be stored in the Site office. In addition, completed forms (records) will be kept, as required by conditions included in the Environmental Permit.

### Objectives

- 1.6. This NMP has been created to aid the decision-making process on the choice of controls, general Site design, and operation practice in line with current industry best practice. The NMP is a working document with the specific aims of ensuring:
  - All potential noise sources are identified.
  - Noise impact is considered as part of routine inspections.
  - Noise is primarily controlled at source by good operational practices, the correct use and maintenance of plant and equipment, and operator training.
  - All appropriate measures are taken to prevent or, where that is not reasonably practicable to minimise noise emissions from the Site.
- 1.7. A Noise Assessment was carried out in October 2022 by LF Acoustics Ltd to assess the noise levels associated with the waste treatment activities at the Site.
- 1.8. The NIA concluded that noise levels, when the site is fully operational, would remain low and of a similar order of magnitude to the prevailing background noise levels, thus ensuring a low potential for adverse impact. On this basis, the operations at the Site are not generating unacceptable noise levels at receptors.
- 1.9. This NMP commits the Operator to implement best practice measures for reducing noise emissions from operations at the Site.
- 1.10. It is noted there is no history of noise complaints being received by the Operator.

### Responsibilities

- 1.11. The Site manager is responsible for the general management of the Site. In relation to this NMP the Site manager will undertake the following responsibilities:



- Implementation of the NMP and ensuring mitigation measures are adhered to.
- Investigate complaints.
- Cease activities in the event of significant complaints / noise emissions.
- Review the NMP to ensure continuing effectiveness of meeting the requirements in the Best Available Techniques (BAT) guidance.
- Delegation of duties to suitably trained personnel.
- Delivery or organise the necessary training for site Operatives.
- Ensure all plant and equipment is maintained as required.

1.12. The Site Manager will ensure all operational staff are familiar with the requirements and conditions of all the documentation to be implemented on Site.

1.13. All Site staff are responsible for:

- Detecting and reporting significant noise emissions from waste operations to management as soon as possible.
- Carrying out routine checks (i.e., using the Inspection Checklist).

### **Review**

1.14. The NMP will be reviewed annually or in the event of the following:

- If the Operator receives persistent noise complaints.
- When a change in operations is deemed to have a potential effect on increasing noise emissions.
- If a failure in the existing mitigation measures has been identified.

### **Structure of the NMP**

1.15. This NMP is structured as follows:

- Section 1 Introduction.
- Section 2 provides a description of the location of the Site and Site activities.
- Section 3 provides a description of noise sources.
- Section 4 describes the nearby sensitive receptors and noise pathway to the receptors.
- Section 5 describes the proposed control measures and monitoring along with actions to be taken in case of a complaint.
- Section 6 describes when and how the Noise Management Plan will be updated and reviewed.
- Section 7 describes the complaints reporting procedure.



## 2. Site Description

### Location

- 2.1. The Site is within the existing Finmere Quarry and Landfill. The quarry is divided into two sections: the northern and southern. The northern section of the quarry is currently operated under a landfill and waste recovery permit with an approved restoration scheme. The southern area of the quarry includes the waste operations relating to this NMP.
- 2.2. The Site is approximately 650m south-west of the village of Finmere. In terms of larger settlements, Buckingham is 5.6km east and Bicester 8.4km south. The approximate centre of the Site is located at National Grid reference SP 62771 32028.
- 2.3. The Site is approximately 8.3 hectares (ha) in size and is denoted by Drawing No. 23/009c 001 Permit Boundary Plan V1. The Site comprises of waste treatment and storage areas.
- 2.4. The Site shares an access road with the northern section of the quarry off the A421 (Banbury Road). This is the only road that can be used to access the Site.
- 2.5. Immediately adjacent to the western boundary is a railway line currently undergoing major construction works for the high-speed railway development HS2.
- 2.6. Finmere airfield is approximately 1km east of the Site boundary. The remaining surrounding land to the Site includes woodland and agricultural land.

### Operations at the Site

- 2.7. Hazardous and non-hazardous construction / demolition waste is accepted at the Site for storage and treatment.
- 2.8. Waste will undergo the following treatment on Site:
  - Handpicking
  - Screening
  - Washing
  - Crushing
  - Composting
- 2.9. Treatment of waste materials will be undertaken within the permitted area within Finmere Quarry and Landfill, see Drawing No. 23/009c 001 Permit Boundary Plan V1
- 2.10. All waste treatment activities will be restricted to the operational hours of the Site. Operational hours are between 07:00 hours and 18:00 hours Monday to Friday and 07:00 hours to 13:00 hours on Saturdays.
- 2.11. The Site does not operate on Sundays or bank holidays.



### **3. Noise Sources and Impact**

#### **Noise Sources**

3.1. The activities with the potential to cause noise emissions from the Site are:

- Treatment (crushing / screening) of waste.
- Vehicle movements.
- Movement of materials.

#### **Other sources of noise**

- 3.2. The primary off-site source of noise can be associated with the landfill and restoration of the northern section of Finmere Quarry, and landfill.
- 3.3. There are major construction works being undertaken to the west of the permit boundary associated with the high-speed railway development HS2 which is considered to cause significant amounts of noise.
- 3.4. Finmere airfield is approximately 1km east of the Site boundary and is considered to contribute significantly to noise within the area.
- 3.5. Bucks Concrete Ltd is situated 300m northwest of the Site which is considered likely to generate sufficient noise.
- 3.6. Passing traffic on the A421 is considered to produce noise emissions.

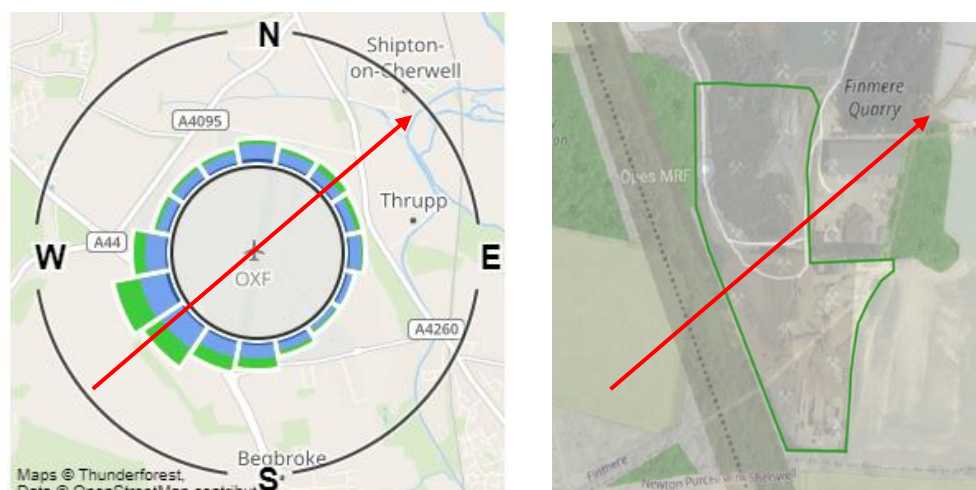


## 4. Pathway and Receptors

### Pathway

- 4.1. Wind direction plays a significant role in the potential impact experienced from noise. Noise will be 'carried' by the wind. It is therefore considered that noise is more likely to travel towards sensitive receptors that are 'down-wind' of the Site.
- 4.2. The distance from the Site boundary to the sensitive receptor plays an important role in the potential impact experienced from noise. Noise at sensitive receptors will reduce with distance from the source. Noise has an increased potential to cause a nuisance where sensitive receptors are closer to the source.
- 4.3. Wind speed and direction data have been obtained from London Oxford Airport weather station for the period from 04/2015 to 05/2023. London Oxford Airport weather station is located approximately 22km southwest of the Site. This observing station is the closest wind station to the Site according to "Windfinder.com" and has wind speed and direction data appropriate for characterisation of the wind climate at the Site, see Figure 4.1.

**Figure 4.1 Wind rose from Oxford Airport weather station**



### Receptors

- 4.1. The proposed operations on the Site have the potential to cause noise emissions. Noise emissions can create a potential nuisance in the community (residents and employees of nearby businesses) or can have an impact on local wildlife.
- 4.2. This Noise Management Plan identifies receptors that may be sensitive to noise emissions.
- 4.3. The direction and distances from the permit boundary to the closest boundary of sensitive receptors, within 1km of the Site, are provided in Table 4.1.
- 4.4. A Sensitive Receptors Plan has been prepared, see Drawing No. 23/009c 003 Sensitive Receptor Plan V1.



**Table 4.1 Sensitive Receptors**

Ref No.	Receptor	Description	Direction from Site boundary	Approximate distance from Site boundary (m)
1	Deciduous woodland	Protected habitat	East	0
2	Deciduous woodland	Protected habitat	West	0
3	OPES MRS landfill site	Industrial	West	0
4	Railway line	Infrastructure	West	10
5	Lagoon	Surface water body	East	80
6	Boundary Farm	Agricultural buildings	Southeast	215
7	Bucks Concrete	Industrial	North	220
8	Foxley Fields Farms	Agricultural buildings	Northeast	330
9	Barleyfields Barn Farm	Agricultural buildings	South	410
10	Widmore Farm	Agricultural buildings	Northwest	420
11	A4421 Road	Infrastructure	Southeast	590
12	A421 Road	Infrastructure	North	615
13	Residential dwellings	Residential	Northeast	670
14	Gravel Farm	Agricultural buildings	Northeast	800
15	Banbury Road	Residential dwellings	Northeast	915

- 4.5. There is a large presence of trees along many of the boundaries to act as a barrier against any potential noise emissions.
- 4.6. There is a large bund adjacent to the southeastern boundary of the Site which would act as a barrier from any potential noise emissions.
- 4.7. Due to the predominant wind direction from the west-southwest, it is considered that receptors located east-northeast of the Site are at greater risk of experiencing adverse impacts of noise emissions from the Site. Receptors to the east-northeast of the Site include Boundary Farm and residential dwellings in Finmere. All the receptors in this direction are more than 250m from the Site boundary and therefore have a minimal risk of being impacted by noise from the operations undertaken at the Site.
- 4.8. Finmere airfield is approximately 1km east of the Site boundary and is considered to contribute significantly to noise within the area.



## **5. Control measures and process monitoring**

- 5.1. There is a large bund along the southeastern boundary of the Site that will act as a barrier against noise.
- 5.2. The table below includes information on how the Operator will manage activities that can cause noise, see Table 5.1 Noise sources and control measures. Table 5.1 outlines the anticipated contribution of each activity to overall noise emissions both before and after the implementation of control measures.

**Table 5.1 Noise sources and control measures**

Potential noise source	Operational times	Contribution to overall impact	Control measures	Contribution to overall impact post control measures	Action taken following a noise complaint
Waste treatment activities (screening, crushing, washing of waste)	07:00 – 16:30 Monday to Friday only.	Medium	<p>Siting of mobile plant to place maximum distance between plant and nearby sensitive receptors.</p> <p>Crushing and screening will be undertaken to the south of the Site, due to the prominent wind direction being towards the north-northeast. This will create the furthest distance possible to the most sensitive receptor (residential area).</p> <p>The crusher and screener will be orientated with the quietest elevation pointing eastwards (outward conveyor end facing east).</p> <p>Crushing and screening will only be carried out during operational hours.</p>	Low	<p>Investigate complaint.</p> <p>Check that operations are being carried out in accordance with the Noise Management Plan and EMS.</p> <p>Provide additional staff training should it be required to ensure that requirements are implemented.</p> <p>Plant and equipment will be checked for faults that could lead to increased noise. Repairs/maintenance carried out if necessary.</p> <p>Temporary cessation of activities that are identified to be a source of noise emissions that could be causing a nuisance (as a result of investigation of a complaint).</p>
Vehicle movements	07:00 – 16:30 Monday to Friday	Low to Medium	<p>The speed limit for all vehicles on Site is 5mph. Speed humps will not be used on Site.</p> <p>The Site surface (including the haul road) will be maintained to ensure the surface is kept free from potholes and ruts.</p> <p>All mobile plant used on Site will have 'broadband' type reverse alarms (i.e. no tonal beeper type).</p> <p>Where practicable, Heavy Goods Vehicles (HGV's) within the control of the Site operator will have similar reverse type alarms fitted or the use of a banksman to reduce the need for alarms.</p> <p>Where HGV's are sub-contractor vehicles they will be encouraged to use this type of alarm.</p>	Low	<p>Investigate complaint.</p> <p>Plant and vehicles will be checked for faults that could lead to increased noise. Repairs/maintenance carried out if necessary.</p> <p>Check that operations are being carried out in accordance with the Noise Management Plan and EMS.</p> <p>Provide additional staff training should it be required.</p>



Potential noise source	Operational times	Contribution to overall impact	Control measures	Contribution to overall impact post control measures	Action taken following a noise complaint
			Driver's of HGVs or mobile plant will be instructed to avoid leaving engines running unnecessarily or excessive revving of engines.		
Movement of materials	07:00 – 16:30 Monday to Friday	Low to Medium	<p>The speed limit for all vehicles on Site is 5mph. Speed humps will not be used on Site.</p> <p>No unnecessary double handling of material.</p> <p>Drop heights will be minimised, which will reduce noise.</p>	Low	<p>Investigate complaint.</p> <p>Check that operations are being carried out in accordance with the Noise Management Plan and EMS.</p> <p>Provide additional staff training should it be required.</p>



## **6. Responsibilities, review, and training**

- 6.1. This Noise Management Plan forms part of the Environmental Management System (EMS). The EMS, including this Noise Management Plan, will be kept on Site and made available to all relevant staff.

### Responsibilities

- 6.2. The Site manager is responsible for implementation of the requirements of the Noise Management Plan and for ensuring that the control measures are implemented.
- 6.3. Site staff are responsible for detecting/reporting noise emissions from waste operations that may cause a nuisance to local receptors.

### Review

- 6.4. The Site manager is responsible for ensuring this Noise Management Plan is reviewed to ensure its continuing effectiveness.
- 6.5. The Noise Management Plan will be reviewed:
- If the Site receive persistent noise complaints.
  - When a change in operations is deemed to have a potential effect on increasing noise emissions.
  - If a failure in the existing mitigation measures has been identified.

### Training

- 6.6. Procedures within the EMS requires staff to be trained on the details included within this Noise Management Plan, particularly noise mitigation measures and the monitoring of noise. Staff training is typically completed via toolbox talks.
- 6.7. It is the responsibility of the Site manager to ensure that appropriate training is carried out. A record of this training will be maintained on each staff members Training Record. Copies of the staff Training Records are kept on Site.
- 6.8. Should any noise complaint investigations conclude that a noise emission arose as a result of the requirements of the Noise Management Plan not being followed by Site staff, further training will be completed on implementation of this Noise Management Plan.



## **7. Complaints reporting**

- 7.1. In the case of any incidents that cause significant noise emissions, staff will report the incident to the Site Manager.
- 7.2. The Site Manager will record the incident and any steps taken to resolve the issue e.g., pausing operation or repairing failing machinery. Procedures and forms relating to the recording of incidents are included within the EMS.
- 7.3. If the incident gave rise to a complaint, a Complaint Form will be completed. All complaints are acknowledged and recorded.
- 7.4. The Complaint Form will record the incident that led to the complaint and any remedial action taken, see Appendix 3 Complaints Form.
- 7.5. It is the responsibility of the Site Manager or their delegate to complete the Complaints Form.
- 7.6. Staff will investigate all complaints to identify the source of the problem. All incidents / complaints will be investigated on the same day. The investigation will include.
  - Travel to the site from which the complaint is reported to originate to make checks on noise levels.
  - Ensuring the inspections of plant /equipment have been complete.
  - Ensuring this Noise Management Plan is being followed accordingly.
  - Aural monitoring of noise emissions from the area from which the noise originated.
  - If noise is detectable, identification of where on site the noise may be originating.
- 7.7. The complainant will be notified if the source of the noise is found to be from another source or from the Site. If the source of the noise is from another source, the source details will be recorded on the complaint form.
- 7.8. The Operator will then identify the reason for the noise emission e.g., breach of procedure, lack of training, mitigation not being implemented or increase in noise from an identified source.
- 7.9. Records of any monitoring carried out as part of the complaint investigation process will be kept with the completed complaint form.
- 7.10. A complaint is considered to be resolved when the source of the noise is identified, and remedial action is taken (if required) and relevant persons notified.
- 7.11. Should the investigation identify the need for additional mitigation or other remedial action, the appropriate mitigation / action will be implemented as soon as practicable.



## Drawings

Drawing No. 23/009c 001	Permit Boundary Plan V1
Drawing No. 23/009c 002	Indicative Site Layout Plan V1
Drawing No. 23/009c 003	Sensitive Receptor Plan V1

Soil Treatment UK Limited

Soil Treatment UK Limited

Permit Boundary Plan

23/009c 001

Finmere Quarry and Landfill  
Site,  
Cherwell District,  
Oxfordshire,  
MK18 4AJ.

Scale: 1:3,000

24th October 2023

Created by: EG  
Checked by: TW

— Permit boundary

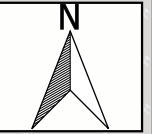


T 01952 879705 E [info@westburyenv.co.uk](mailto:info@westburyenv.co.uk)

A Agriculture House, Southwater Way  
Telford, Shropshire, TF3 4NR

W [www.westburyenv.co.uk](http://www.westburyenv.co.uk)

0 100 200 m

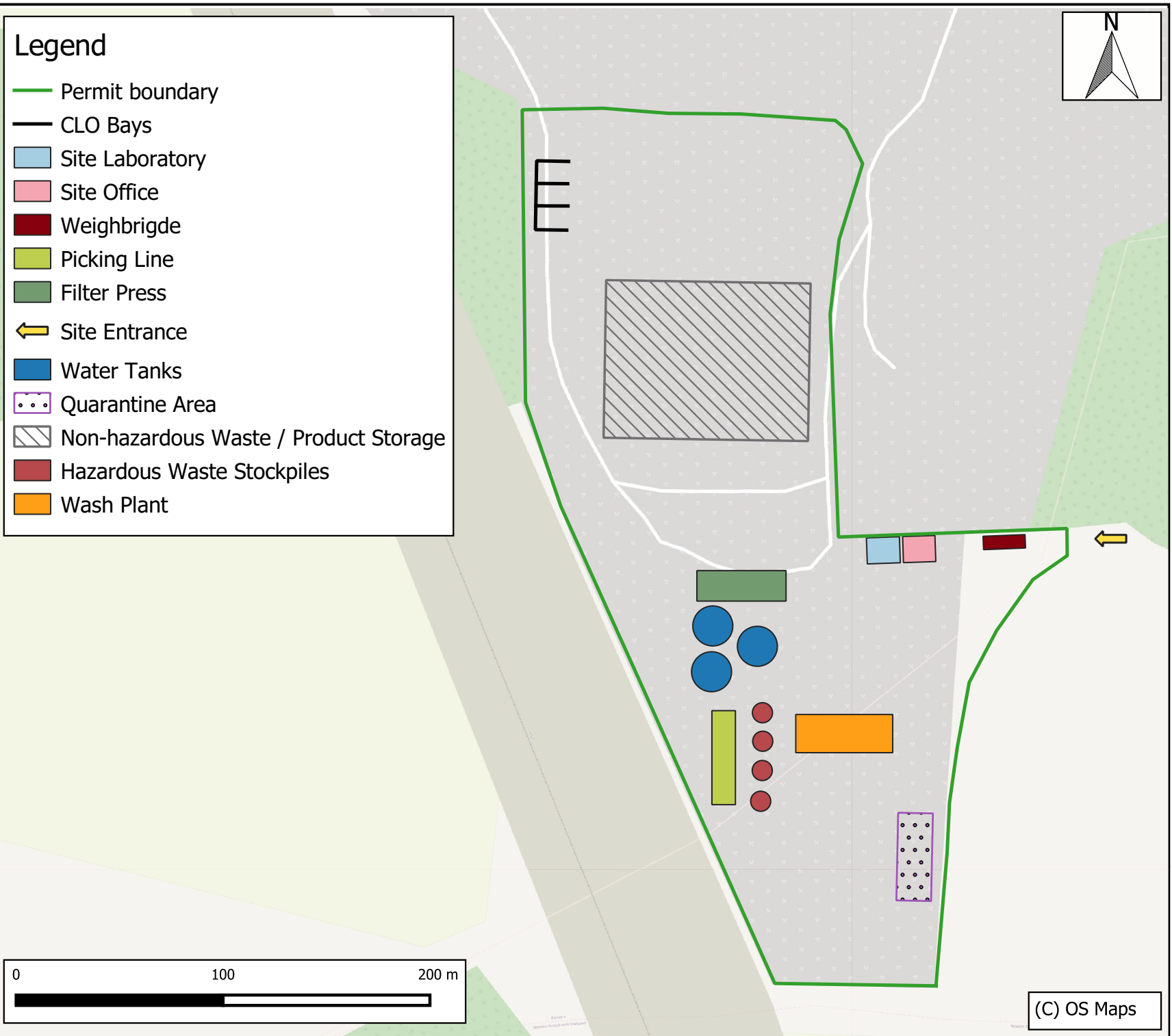


(C) OS Maps



## Legend

- Permit boundary
- CLO Bays
- Site Laboratory
- Site Office
- Weighbridge
- Picking Line
- Filter Press
- Site Entrance
- Water Tanks
- Quarantine Area
- Non-hazardous Waste / Product Storage
- Hazardous Waste Stockpiles
- Wash Plant



Soil Treatment UK Limited

Soil Treatment UK Limited

Site Layout Plan

23/009c 002

Finmere Quarry and Landfill,  
Cherwell District,  
Oxfordshire,  
MK18 4AJ.

Scale: 1:2,500

24th October 2023

Created by: EG  
Checked by: TW

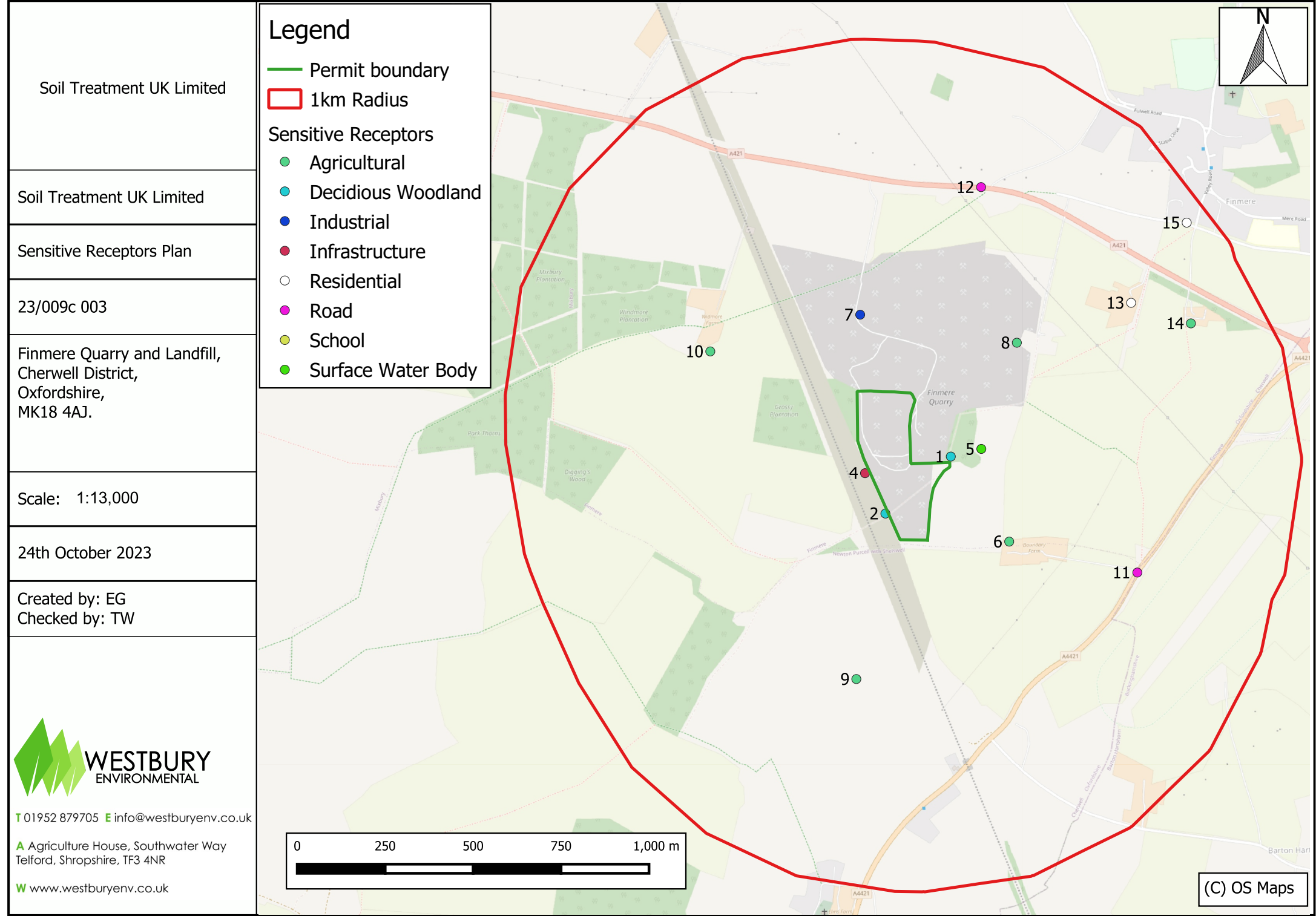


T 01952 879705 E [info@westburyenv.co.uk](mailto:info@westburyenv.co.uk)

A Agriculture House, Southwater Way  
Telford, Shropshire, TF3 4NR

W [www.westburyenv.co.uk](http://www.westburyenv.co.uk)

(C) OS Maps





## **Appendix 1**

### Noise Assessment

## **NOISE ASSESSMENT**

# **RETROSPECTIVE APPLICATION FOR THE RETENTION OF A CONCRETE BATCHING PLANT AND PROCESSING OF SAND AND GRAVEL AT FINMERE QUARRY**

**BUCKS CONCRETE LTD**

**OCTOBER 2022**

LF Acoustics Ltd  
Pond Farm  
7 High Street  
Pulloxhill, Beds  
MK45 5HA

t: 01525 888046  
e: [mail@lfacoustics.co.uk](mailto:mail@lfacoustics.co.uk)

Registered in England  
Company Reg: 8434608



## NOISE ASSESSMENT

# RETROSPECTIVE APPLICATION FOR THE RETENTION OF A CONCRETE BATCHING PLANT AND PROCESSING OF SAND AND GRAVEL AT FINMERE QUARRY

BUCKS CONCRETE LTD

OCTOBER 2022

Status	Prepared By	Date
1.0	L Jephson BEng (Hons) MIOA	20/10/22

This report has been prepared using all reasonable skill and care within the resources and brief agreed with the client. LF Acoustics 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.

## **Contents**

1.	Introduction	1
2.	Applicable Standards and Guidance	2
3.	Planning Permission for the Quarry	4
4.	Site Location and Identification of Noise Sensitive Receptors	5
5.	Site Operations	6
6.	Noise Monitoring	7
7.	Calculations and Assessment	9
8.	Summary	12

References

Figures

Appendices

## **1. Introduction**

LF Acoustics Limited have been appointed by Bucks Concrete Ltd to carry out an assessment of the noise levels associated with the operation of a concrete batching plant and processing of recycled aggregates at their site within Finmere Quarry.

The site has been operational for a number of years, originally set up to use sand and gravel extracted from Finmere Quarry and to use recycled material from the Material Recovery Facility, operating under planning permission for the quarry. Extraction within the quarry has now ceased and the aggregate to operate the site is now imported.

Retrospective planning permission is now being sought to continue the use of the concrete batching plant and associated processing operations for a temporary period linked to the life of the Approved Landfill Site.

This report presents an assessment of the noise levels associated with the proposed operation of the concrete batching plant and processing of sand and gravel upon the occupants of surrounding residential properties.

This report has been prepared by Les 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. National Planning Policy Framework and Minerals Guidance

The principal planning guidance in the UK is presented within the National Planning Policy Framework (July 2021) [1]. At the heart of the NPPF is a presumption in favour of sustainable development, although environmental criteria should be set out to ensure that the permitted operations do not have unacceptable adverse impacts, with appropriate noise limits adopted to control noise.

The current Planning Practice Guidance (PPG) attached to the NPPF relating to noise associated with minerals operations, was last updated in March 2014 [2]. The guidance includes other related operations and is considered appropriate when considering noise from the operation of the site.

For normal daytime works, the guidance seeks to ensure that the operations do not result in significant adverse effects and advises for normal daytime operations that the following limits (in terms of  $L_{Aeq, 1 \text{ hour}}$  freefield noise levels) should not be exceeded:

- 10 dB above the background ( $L_{A90}$ ) noise level; subject to
- a maximum value of 55 dB  $L_{Aeq, 1 \text{ hour}}$  (free field).

Where background noise levels are low, the guidance accepts that it may be very difficult to achieve a limit based upon background + 10 dB(A) without imposing unreasonable burdens on the mineral operator. In such cases, the limit set should be as near that level as practicable during normal working hours and should not exceed 55 dB  $L_{Aeq, 1 \text{ hour}}$  (free field).

The PPG advises in the evening (19:00 – 22:00)  $L_{Aeq, 1 \text{ hour}}$  noise levels should not exceed the background ( $L_{A90}$ ) noise level by more than 10 dB and during the night-time a limit of 42 dB  $L_{Aeq, 1 \text{ hour}}$  should be adopted.

In addition to the general daytime works, the guidance advises that all mineral operations will have some particularly noisy short-term activities that cannot meet the limits set for normal operations. These include soil-stripping, construction or removal of bunding or spoil heaps and construction of new permanent landforms. A level of 70 dB  $L_{Aeq, 1 \text{ hour}}$  is suggested as a limit for these activities for periods of up to eight weeks in any one year. Where the duration of temporary works may exceed eight weeks it can be appropriate to apply a lower limit for a longer period. The guidance also recognises that, in wholly exceptional cases, where there is no viable alternative, a limit of more than 70 dB  $L_{Aeq, 1 \text{ hour}}$  may be appropriate in order to obtain other environmental benefits.

### 2.2. British Standard BS 4142

BS 4142 [3] is the British Standard for rating and assessing noise of a commercial or industrial nature and is relevant to the noise associated with the operation of the proposed plant, given that the quarrying operations have now ceased.

BS 4142 is a comparative standard in which the estimated noise levels from the proposed development are compared to the representative / typical background noise level from existing uses.



The initial assessment of impacts relates the likelihood of adverse impact to the difference between the Rating Level of the noise being assessed and the background noise level.

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.

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 penalties 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 penalty 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.

The assessment method outlined above is intended for the assessment of external noise levels and is not intended to assess the extent of impact at internal locations.

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.

### 3. Planning Permission for the Quarry

Consideration has been given to the noise limits imposed within the planning conditions attached to the main Finmere Quarry and Landfill Site which seek to ensure that the site operations do not result in adverse noise impacts at the neighbouring properties.

Condition 12 attached to Planning Permission OCC Ref. MW.0083/17, which related to the extraction of sand, gravel, and clay at the Finmere Quarry and Landfill Site specifies the following limits for daytime operations:

12. Between 0700 hours and 1800 hours Mondays to Fridays and 0700 hours to 1300 hours on Saturdays the noise levels arising from the development shall not exceed 55 dB (A) LAeq,1 hour (free field) at any of the following noise sensitive receptors:

- Warren House Farm
- Hill Leys
- Foxley Fields Farm
- Widmore Farm
- Boundary Farm
- Gravel Farm

Condition 12 attached to Planning Permission OCC Ref. MW.0003/19 which relates to the landfill operations at the Finmere Quarry and Landfill Site specifies the following limits for daytime operations:

12. Between the hours of 07:00 and 18:00 the noise levels arising from the development shall not exceed 55 dB(LAeq) (1 hour) freefield at Warren Farm House, Hill Leys, Foxley, Widmore Farm, Boundary Farm or Gravel Farm.

The above planning consents also contain conditions which stipulate the good maintenance of vehicles, plant and machinery and do not allow discrete continuous noise that is distinguishable at any noise sensitive receptors (whine, hiss, continuous screech, hum etc. or distinct impulses) (see Conditions 14 and 15 of OCC Ref. MW.0083/17 and Conditions 13 and 14 of OCC Ref. MW.0003/19).

#### **4. Site Location and Identification of Noise Sensitive Receptors**

The site is located within the southern area of Finmere Quarry, on land to the south of the Materials Recovery Facility. The site location is indicated on Figure 1.

There is a storage area within the north-western area of the site for storage of imported construction waste. The aggregate recycling and processing plant is positioned centrally within the site, with the concrete batching plant located within the southern part of the site.

There are no noise sensitive receptors within close proximity to the site. The closest identified properties are:

- Widmore Farm to the north-west, located 600 metres from the closest site boundary;
- Foxley Fields Farm to the north-east, 400 metres from the site boundary;
- Boundary Farm to the east, 350 metres from the closest site boundary; and
- Barley Fields and Station House to the South, 550 metres from the southern site boundary.

The properties are indicated on Figure 1.

## 5. Site Operations

The site layout is indicated on Figure 2.

The site is split into two main areas: the aggregate processing plant, located centrally within the site; and the concrete batching plant, located within the southern part of the site.

The aggregate processing plant is used to process recycled soils and aggregates, which are then used within the concrete batching plant.

Materials are brought onto the site and stored within stockpiles within the north-western area of the site. The materials are then extracted from the stockpiles using an excavator and loaded into a hopper. The material is then processed through the processing plant, which comprises a trommel, wash plant and screens, to produce the recycled aggregate. A loading shovel is then used to transport the processed material into the batching plant stock bays.

The operation of the concrete batching plant is dependent upon the concrete requirement in the surrounding areas.

The plant is capable of loading up to 6 vehicles per hour. For each load, the plant would be fully operational for between 10 – 12 minutes loading materials from the stock bays and loading the vehicle. During the loading process, the vehicle would be running, with the drum rotating. At peak capacity, the plant is operational 100% of the time.

Cement deliveries are made periodically during the day, with between 1 – 3 loads per day delivered. These deliveries are made using tankers. The tanker connects to the storage silos, located in the south-eastern corner of the site, and blows the cement in utilising a pump mounted beneath the tanker. This operation would typically take between 30 – 45 minutes to complete for each delivery.

With regards HGV movements, there would be up to 60 movements per day associated with the concrete deliveries and importation of materials to the site.

The site operates the same hours as for the main landfill and MRF operations:

- Between 07:00 – 18:00 hours Mondays to Fridays (excluding Public Holidays); and
- 07:00 – 13:00 hours Saturdays.

## 6. Noise Monitoring

### 6.1. Noise Monitoring at Foxley Fields Farm

HS2 construction works are presently progressing to the west and south of the site, with construction activities influencing noise levels at these locations.

To ascertain the typical noise levels within the surrounding area, noise measurements were obtained at one position, Foxley Fields Farm, which is located away from HS2, with noise levels associated with the operations within the Quarry also very low. Noise levels at this location are presently influenced primarily by road traffic on the surrounding roads. Noise levels monitored at this location were considered therefore to be representative of the other surrounding properties, which, with the exception of the properties to the south, are also a similar distance from the surrounding roads. The properties to the south are located closer to the A4421 and thus noise levels at these locations are likely to be higher.

A noise monitoring exercise was carried out during the morning of Monday 10 October 2022 to evaluate the baseline noise levels.

Weather conditions for the survey were good, remaining dry and calm.

Noise measurements were obtained at a position to the south of the property, as indicated on Figure 1. Measurements were made using a Rion NL-52 Class 1 Sound level Meter, with the instrument calibrated before and after the exercise using a Rion NC-74 Class 1 Acoustic Calibrator. The meter was set with the microphone at a height of 1.2 metres above the ground and in freefield conditions.

Measurements were taken between 09:30 and 10:45 hours. The measurements were obtained over 15 minute periods to enable the typical background noise levels to be established. The results of the monitoring exercise are presented below.

Time Period	Measured Noise Levels [dB]		
	$L_{Aeq}$	$L_{Amax,F}$	$L_{A90}$
09:30 – 09:45	46.2	54.8	42.6
09:45 – 10:00	45.6	53.4	42.1
10:00 – 10:15	44.8	53.3	39.9
10:15 – 10:30	44.4	52.2	40.2
10:30 – 10:45	45.2	55.9	40.6

**Table 6.1 Results of Noise Monitoring at Foxley Fields Farm**

As indicated above, noise levels monitored at this location were principally influenced by road traffic on the A421 and A4421. Noise from the operation of the site was not audible, and whilst the operation of the MRF was just audible at times, the operations had minimal influence on the measured noise levels.

## 6.2. On Site Noise Monitoring

To enable calculations and an assessment of the noise levels attributable to the operation of the concrete batching plant and aggregate processing plant to be made, a series of noise measurements were made around the plant whilst it was fully operational.

Measurements were made adjacent to the main noise generating areas of the plant and adjacent to other activities, including a cement delivery.

The measurements were made using a Rion NL-52 Class 1 Sound level Meter, with the instrument calibrated before and after the exercise using a Rion NC-74 Class 1 Acoustic Calibrator. The meter was set with the microphone generally at a height of 1.2 metres above the ground and in freefield conditions.

The results of the noise monitoring are presented below.

Plant / Source	Measurement Distance [m]	Measured Noise Level [dB L <sub>Aeq</sub> ]	Comment
Concrete Batching Plant Generator	5	77.2	
Concrete Batching Plant Loading Vehicle	15	74.2	
Loading Shovel	10	73.6	Operates between aggregate and concrete batching plants
Excavator loading aggregate plant	10	75.6	
Aggregate plant generator	5	82.7	
Trommel	1	83.1	
Wash Plant	5	83.2	
Main Screen	10	80.3	
Secondary Duo Screen	5	81.1	
Cement delivery	5	82.8	Load typically takes between 30 – 45 minutes to complete.
HGV Movement	-	103.4 dB(A) SWL	Based upon maximum passby noise level. Calculations assume vehicles travelling at 15km/h.

**Table 6.2 Measured On-Site Noise Levels**

A further measurement was obtained at a distance of 50 metres to the north-east of the aggregate processing plant to provide a validation point for the calculations, as indicated on Figure 2. The noise level monitored at this location was 69.8 dB L<sub>Aeq,5 min</sub>.

## 7. Calculations and Assessment

### 7.1. Proposed Operations

Calculations of the noise levels have been made at the surrounding noise sensitive receptors on the basis of the normal daytime operation, where the aggregate processing and concrete batching plants would be fully operational. Further calculations have been prepared covering the periods when there would be a cement delivery, which would represent worst case conditions.

### 7.2. Calculation Methodology

Calculations of the noise levels at the surrounding properties have been made using the SoundPlan computer modelling package, which implements the calculation methodology from ISO 9613-2. The calculations have taken account of the land formation around the site based upon Lidar mapping, which includes the bunding which has been constructed around the boundaries of the landfill site.

Calculations have been made over an assessment period of 1 hour, in accordance with the requirements of the minerals planning guidance and BS 4142.

The noise modelling has taken account of all plant operational on the site, as presented in Table 6.2. For the purposes of the modelling, it has been assumed that there would be 10 HGV movements during the period of 1 hour, which are likely to represent worse cast conditions.

As indicated previously, a measurement was obtained at a distance of 50 metres from the aggregate processing plant to provide a reference / validation point for the calculations. The comparison between the measured and calculated noise levels indicated a difference of less than 0.5 dB(A), thus providing confidence in the calculated noise levels.

The results of the calculations at the surrounding properties are presented on Figure 3 covering the normal operation and on Figure 4 covering the period when a cement delivery is being made. Details of the calculations are provided in Appendix B. The calculations presented the following noise levels:

- Widmore Farm – 39 dB  $L_{Aeq, 1 \text{ hr}}$ ;
- Foxley Fields Farm – 39 dB  $L_{Aeq, 1 \text{ hr}}$ ;
- Boundary Farm – 40 - 41 dB  $L_{Aeq, 1 \text{ hr}}$ ;
- Barley Fields – 42 dB  $L_{Aeq, 1 \text{ hr}}$ ;

The calculations indicate that there is little change in the overall site noise levels during the periods of the cement deliveries, with noise levels at the surrounding properties increasing by less than 1 dB(A) during a delivery.

The calculated noise levels are consistent with the observations made on site, in that the noise from the operation of the plant was not audible at the surrounding properties.

### 7.3. Assessment

The noise levels calculated at the surrounding properties attributable to the operation of the site are low, with calculated levels of between 39 – 42 dB  $L_{Aeq, 1 \text{ hr}}$ .

Assessing the noise levels against the noise limit of 55 dB  $L_{Aeq, 1 \text{ hr}}$  specified within the planning conditions for the previous extraction, landfilling and MRF operations, indicates that the levels attributable to the operation are at least 13 dB(A) below that limit. Noise levels associated with the operation of the site would therefore not influence noise levels attributable to the overall permitted site operations.

Taking account of the noise measurements obtained at Foxley Fields Farm, which indicated a typical background noise level of 41 dB  $L_{A90}$  based upon the survey results, an assessment against the minerals planning guidance would indicate a permitted noise level of 51 dB  $L_{Aeq, 1 \text{ hr}}$  at the surrounding properties. The calculated noise levels are at least 9 dB(A) below this limit, providing further reassurance that the operations do not result in adverse noise impacts.

An initial assessment of the calculated noise levels has also been made in accordance with the requirements of BS 4142.

For the purposes of the assessment, the background levels obtained at Foxley Fields Farm have been assumed for the other properties, as this will provide a worst case, particularly as the properties to the south are alongside the A4421 and thus likely to be higher.

The noise from the operation of the site was not considered to be tonal or impulsive in nature, but it does have other characteristics. On this basis, a correction of 3 dB(A) has been applied to determine the rating levels of noise at the properties.

The initial assessment is provided in Table 7.1.

Description	Location			
	Widmore Farm	Foxley Fields Farm	Boundary Farm	Barley Fields
Calculated Noise Level at Dwelling [dB $L_{Aeq, T}$ ]	39	39	41	42
Character Correction	3	3	3	3
Rating Level [dB $L_{Aeq, 1 \text{ hour}}$ ]	42	42	44	45
Background Level [dB $L_{A90}$ ]	41	41	41	41
Excess Over Background	+1	+1	+3	+4
Likelihood of Impact	Indication of Low Impact	Indication of Low Impact	Indication of Low Impact	Indication of Low Impact

**Table 7.1 Initial BS 4142 Assessment**

The initial BS 4142 assessment at the four locations identified above indicates that the noise levels attributable to the operation of the site are below a level which would result in an adverse impact, which accords with the assessments based upon the planning conditions and minerals planning guidance.

BS 4142 requires an assessment of context to evaluate the potential adverse effects. In this location, road traffic noise is the main influence on the noise environment at the surrounding properties, with road traffic noise levels above those associated with the operation of the plant.



This provides further justification that noise levels attributable to the operation of the plant are acceptable and not resulting in adverse impacts or effects.

In summary, the operation of the aggregate recycling and concrete batching plant is therefore generating acceptable levels of noise, with no adverse impacts identified.

## **8. Summary**

LF Acoustics Limited were appointed by Bucks Concrete Ltd to carry out an assessment of the noise levels associated with the operation of a concrete batching plant and the processing of recycled aggregates at their site within Finmere Quarry.

The site has been operational for number of years, originally set up to use sand and gravel extracted from Finmere Quarry and to use recycled material from the Material Recovery Facility, operating under planning permission for the quarry. Extraction within the quarry has now ceased and the aggregate to operate the site is now imported.

Retrospective planning permission is now being sought to continue the use of the concrete batching plant and associated processing operations for a temporary period linked to the life of the Approved Landfill Site.

To evaluate the noise levels attributable to the operations, calculations and an assessment of the noise levels associated with the operation of the aggregate recycling and concrete batching plants has been made at the surrounding properties and assessed against the current minerals planning guidance and BS 4142 methodology.

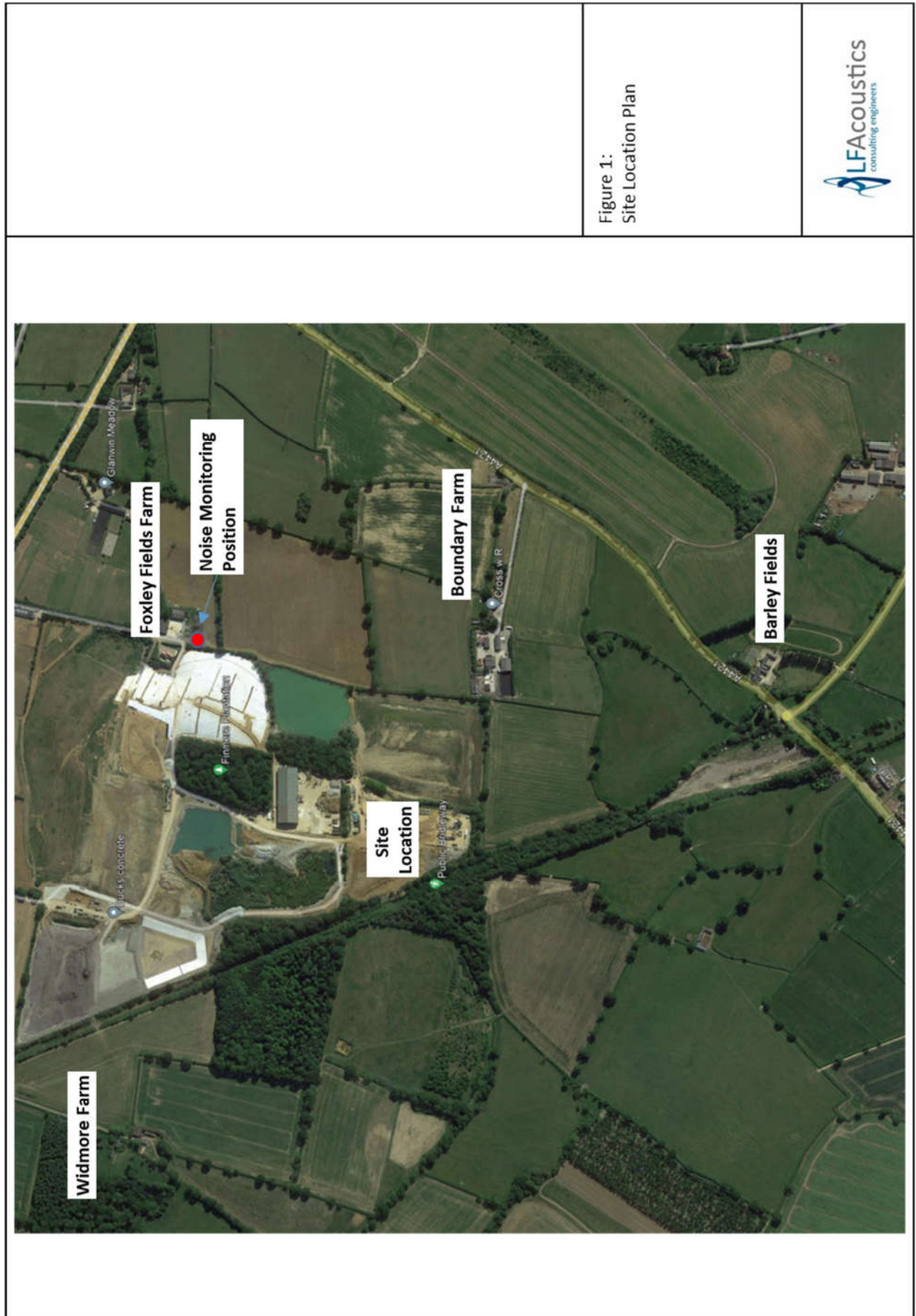
The assessment, made against the appropriate Standards and guidance, indicated that noise levels, when the site is fully operational, would remain low and of a similar order of magnitude to the prevailing background noise levels, thus ensuring a low potential for adverse impact.

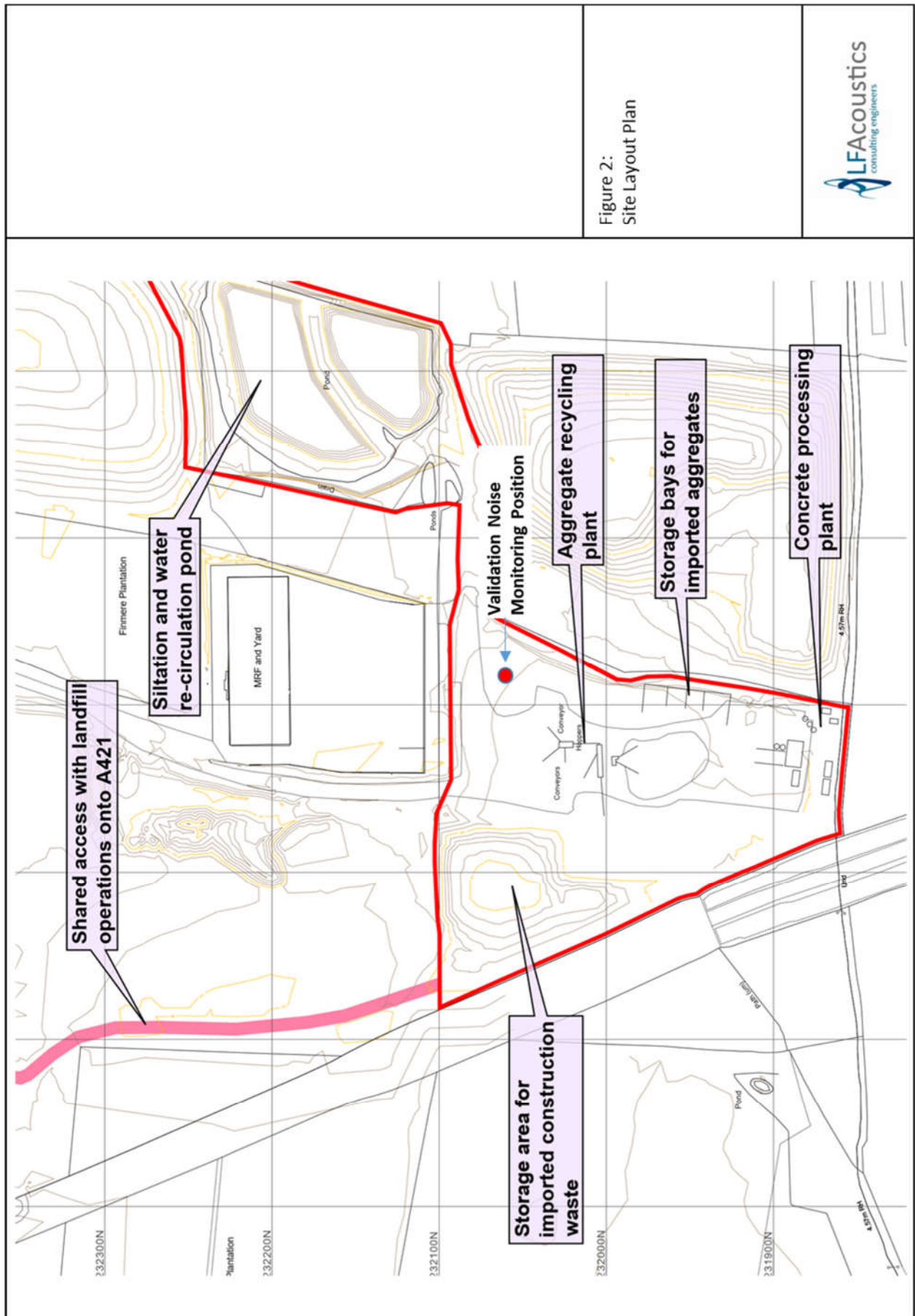
On this basis, the operation of the site is generating acceptable levels of noise at the surrounding properties and thus acceptable.

## References

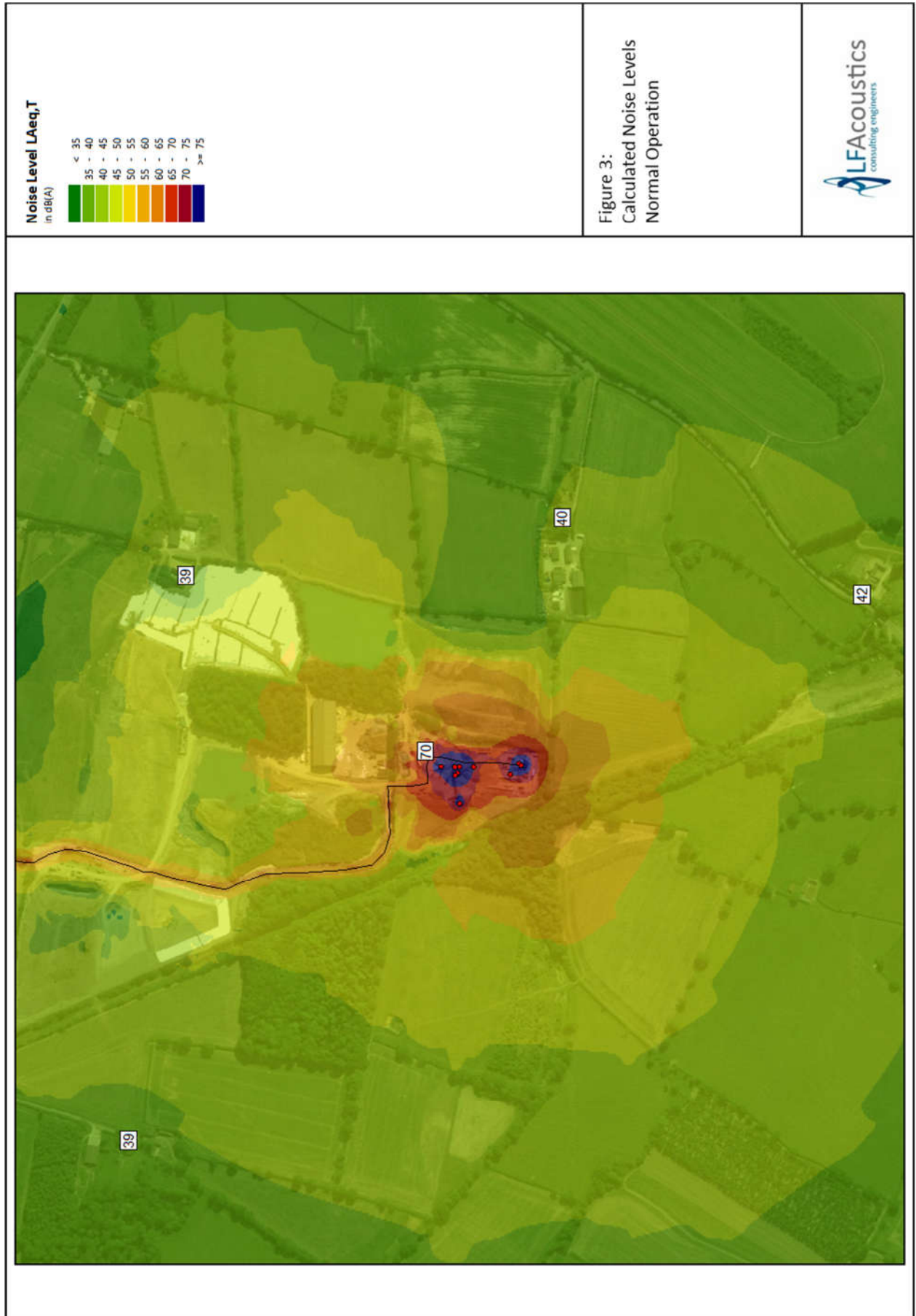
1. Ministry of Housing, Communities and Local Government. National Planning Policy Framework. July 2021.
2. Department for Communities and Local Government. Planning Practice Guidance. Assessing Environmental Impacts from Minerals Extraction. 6 March 2014.
3. British Standards Institute. Methods for Rating and Assessing Industrial and Commercial Sound. BS 4142. 2014+A1:2019.

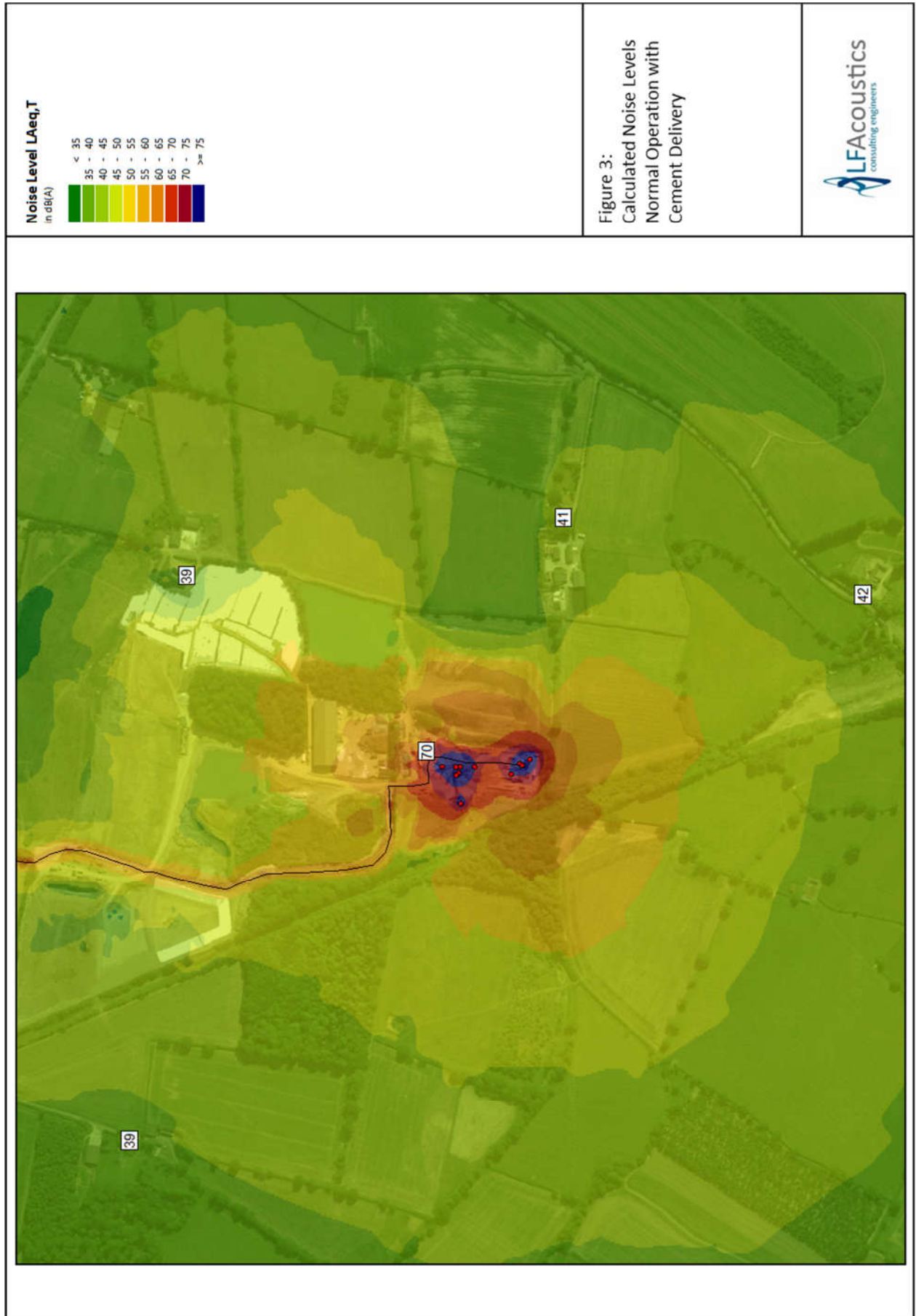
## Figures













## **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**

## Finmere Bucks Concrete Mean propagation Leq - Base Model (Cement Delivery)

**10**

### Legend

Source		Source name
Source type		Type of source (point, line, area)
L <sub>w</sub>	dB(A)	Sound power level per m, m <sup>2</sup>
L <sub>w</sub>	dB(A)	Sound power level per unit
l or A	m, m <sup>2</sup>	Size of source (length or area)
S	m	Distance source - receiver
A <sub>div</sub>	dB	Mean attenuation due to geometrical spreading
A <sub>gr</sub>	dB	Mean attenuation due to ground effect
A <sub>bar</sub>	dB	Mean attenuation due to screening
A <sub>atm</sub>	dB	Mean attenuation due to air absorption
L <sub>s</sub>	dB(A)	Unassessed sound pressure level at receiver
$L_s = L_w + K_o + A_{di} + A_{div} + A_{gr} + A_{bar} + A_{atm} + A_{fol\_site\_house} + A_{wind} + d_{Lrefl}$		
dL <sub>w</sub>	dB	Correction due to source operation time
L <sub>r</sub>	dB(A)	Assessed level of time slice

LF Acoustics

1

## Finmere Bucks Concrete Mean propagation Leq - Base Model (Cement Delivery)

**10**

Source	Source type	Lw	Lw	I or A	S	Adiv	Agr	Abar	Aatm	Ls	dLw	Lr
		dB(A)	dB(A)	m,m <sup>2</sup>	m	dB	dB	dB	dB	dB(A)	dB	dB(A)
Receiver Barley Fields FI GF Lday,lim dB(A) Lday 42.3 dB(A)												
Blowing in Cement	Point	104.5	104.5		583.19	-66.3	-1.2	0.0	-3.5	33.4	0.0	33.4
Concrete Batching Plant	Point	108.7	108.7		598.38	-66.5	-2.1	0.0	-2.8	37.3	0.0	37.3
Concrete Batching Plant Generator	Point	86.1	86.1		600.28	-66.6	-4.5	0.0	-1.2	13.8	0.0	13.8
Excavator	Point	103.6	103.6		711.31	-68.0	-1.2	-3.7	-2.6	28.1	0.0	28.1
HGV Movements	Line	59.5	83.5	254.7	693.62	-67.8	-0.7	-3.1	-3.1	8.8	10.0	18.8
HGVs on Main Quarry Access	Line	59.5	89.1	922.1	1098.48	-71.8	-1.7	-5.2	-4.2	6.3	10.0	16.3
Loading Shovel (Batching)	Point	95.8	95.8		619.94	-66.8	0.0	0.0	-6.9	22.1	-3.0	19.1
Loading Shovel (Processing)	Point	95.8	95.8		666.78	-67.5	0.4	0.0	-7.1	21.7	-3.0	18.7
Primary Screen	Point	109.2	109.2		693.97	-67.8	-0.3	-4.0	-3.3	33.9	0.0	33.9
Processing Plant Generator	Point	104.7	104.7		687.31	-67.7	-1.5	-3.2	-1.9	30.4	0.0	30.4
Screen	Point	103.8	103.8		713.34	-68.1	0.3	-5.0	-4.2	26.9	0.0	26.9
Trommel	Point	103.9	103.9		698.29	-67.9	-0.2	0.0	-3.9	31.9	0.0	31.9
Wash Plant	Point	105.1	105.1		693.65	-67.8	0.3	0.0	-2.8	34.8	0.0	34.8
Receiver Boundary Farm FI GF Lday,lim dB(A) Lday 40.8 dB(A)												
Blowing in Cement	Point	104.5	104.5		382.83	-62.7	-1.3	-10.3	-0.7	29.5	0.0	29.5
Concrete Batching Plant	Point	108.7	108.7		394.09	-62.9	-2.1	-4.6	-1.0	38.1	0.0	38.1
Concrete Batching Plant Generator	Point	86.1	86.1		391.99	-62.9	-4.6	-5.6	-0.3	12.7	0.0	12.7
Excavator	Point	103.6	103.6		476.14	-64.5	-0.3	-9.9	-0.9	28.0	0.0	28.0
HGV Movements	Line	59.5	83.5	254.7	429.72	-63.7	-1.0	-14.1	-0.9	3.8	10.0	13.8
HGVs on Main Quarry Access	Line	59.5	89.1	922.1	773.43	-68.8	-1.9	-8.5	-2.5	7.5	10.0	17.5
Loading Shovel (Batching)	Point	95.8	95.8		410.78	-63.3	0.0	-12.7	-2.0	17.9	-3.0	14.9
Loading Shovel (Processing)	Point	95.8	95.8		414.78	-63.3	-0.1	-15.4	-1.6	15.5	-3.0	12.5
Primary Screen	Point	109.2	109.2		426.05	-63.6	-0.7	-13.9	-0.9	30.1	0.0	30.1
Processing Plant Generator	Point	104.7	104.7		422.71	-63.5	-1.6	-10.9	-0.5	28.2	0.0	28.2
Screen	Point	103.8	103.8		433.91	-63.7	-0.2	-15.8	-1.4	22.7	0.0	22.7
Trommel	Point	103.9	103.9		437.48	-63.8	-0.5	-10.4	-0.9	28.2	0.0	28.2
Wash Plant	Point	105.1	105.1		432.80	-63.7	0.0	-9.9	-0.5	31.0	0.0	31.0
Receiver Foxley Fields Farm FI GF Lday,lim dB(A) Lday 39.3 dB(A)												
Blowing in Cement	Point	104.5	104.5		610.84	-66.7	-0.3	-9.8	-1.2	26.4	0.0	26.4
Concrete Batching Plant	Point	108.7	108.7		604.84	-66.6	-1.8	-4.9	-1.3	34.0	0.0	34.0
Concrete Batching Plant Generator	Point	86.1	86.1		600.40	-66.6	-3.4	-3.2	-0.6	12.3	0.0	12.3
Excavator	Point	103.6	103.6		559.07	-65.9	-0.4	-8.2	-1.3	27.8	0.0	27.8
HGV Movements	Line	59.5	83.5	254.7	512.80	-65.2	-0.9	-12.2	-1.2	4.0	10.0	14.0
HGVs on Main Quarry Access	Line	59.5	89.1	922.1	505.66	-65.1	-2.0	-13.5	-1.1	7.4	10.0	17.4
Loading Shovel (Batching)	Point	95.8	95.8		597.05	-66.5	0.6	-9.5	-3.4	17.0	-3.0	14.0
Loading Shovel (Processing)	Point	95.8	95.8		542.23	-65.7	0.7	-10.3	-3.0	17.6	-3.0	14.6
Primary Screen	Point	109.2	109.2		518.31	-65.3	-0.1	-9.0	-1.6	33.2	0.0	33.2
Processing Plant Generator	Point	104.7	104.7		523.55	-65.4	-1.2	-10.2	-0.7	27.2	0.0	27.2
Screen	Point	103.8	103.8		500.25	-65.0	0.1	-16.9	-1.6	20.5	0.0	20.5
Trommel	Point	103.9	103.9		526.55	-65.4	-0.3	-8.2	-1.5	28.4	0.0	28.4
Wash Plant	Point	105.1	105.1		527.17	-65.4	0.3	-7.6	-1.0	31.4	0.0	31.4
Receiver Site Validation Point FI GF Lday,lim dB(A) Lday 69.8 dB(A)												
Blowing in Cement	Point	104.5	104.5		162.74	-55.2	2.6	-4.7	-1.2	45.9	0.0	45.9
Concrete Batching Plant	Point	108.7	108.7		151.66	-54.6	1.5	0.0	-0.8	54.8	0.0	54.8
Concrete Batching Plant Generator	Point	86.1	86.1		147.83	-54.4	1.3	-4.1	-0.2	28.6	0.0	28.6
Excavator	Point	103.6	103.6		97.30	-50.8	1.5	0.0	-0.5	53.9	0.0	53.9
HGV Movements	Line	59.5	83.5	254.7	36.20	-42.2	1.9	-0.1	-0.2	43.0	10.0	53.0
HGVs on Main Quarry Access	Line	59.5	89.1	922.1	257.99	-59.2	-0.4	-0.4	-1.1	28.0	10.0	38.0
Loading Shovel (Batching)	Point	95.8	95.8		137.59	-53.8	2.5	0.0	-2.2	42.4	-3.0	39.4
Loading Shovel (Processing)	Point	95.8	95.8		79.05	-49.0	2.0	0.0	-1.4	47.5	-3.0	44.5
Primary Screen	Point	109.2	109.2		52.04	-45.3	2.0	0.0	-0.4	65.4	0.0	65.4
Processing Plant Generator	Point	104.7	104.7		58.00	-46.3	1.4	0.0	-0.3	59.6	0.0	59.6
Screen	Point	103.8	103.8		33.77	-41.6	2.1	0.0	-0.4	64.0	0.0	64.0
Trommel	Point	103.9	103.9		59.80	-46.5	2.0	0.0	-0.5	58.9	0.0	58.9
Wash Plant	Point	105.1	105.1		60.43	-46.6	2.1	0.0	-0.4	60.1	0.0	60.1

LF Acoustics

1

# **Finmere Bucks Concrete** **Mean propagation Leq - Base Model (Cement Delivery)**

**10**

Source	Source type	L'w	Lw	I or A	S	Adiv	Agr	Abar	Aatm	Ls	dLw	Lr	
		dB(A)	dB(A)	m,m <sup>2</sup>	m	dB	dB	dB	dB	dB(A)	dB	dB(A)	
Receiver Widmore Farm FI GF Lday,lim dB(A) Lday 39.1 dB(A)													
Blowing in Cement	Point	104.5	104.5		867.69	-69.8	0.1	-5.1	-3.2	26.4	0.0	26.4	
Concrete Batching Plant	Point	108.7	108.7		852.40	-69.6	-1.9	-2.9	-2.4	31.8	0.0	31.8	
Concrete Batching Plant Generator	Point	86.1	86.1		851.65	-69.6	-3.6	-1.9	-1.2	9.7	0.0	9.7	
Excavator	Point	103.6	103.6		741.95	-68.4	-1.6	-3.7	-2.8	27.1	0.0	27.1	
HGV Movements	Line	59.5	83.5	254.7	768.29	-68.7	-0.9	-3.2	-3.5	7.2	10.0	17.2	
HGVs on Main Quarry Access	Line	59.5	89.1	922.1	490.46	-64.8	-1.9	-0.9	-2.8	18.8	10.0	28.8	
Loading Shovel (Batching)	Point	95.8	95.8		830.39	-69.4	-0.1	-4.4	-7.0	14.9	-3.0	11.9	
Loading Shovel (Processing)	Point	95.8	95.8		798.56	-69.0	0.4	-7.3	-5.0	15.0	-3.0	12.0	
Primary Screen	Point	109.2	109.2		778.45	-68.8	-0.4	-3.9	-3.5	32.5	0.0	32.5	
Processing Plant Generator	Point	104.7	104.7		783.53	-68.9	-1.6	-3.0	-2.1	29.1	0.0	29.1	
Screen	Point	103.8	103.8		765.40	-68.7	0.0	-4.0	-4.5	26.7	0.0	26.7	
Trommel	Point	103.9	103.9		769.54	-68.7	-0.5	-3.6	-3.2	27.8	0.0	27.8	
Wash Plant	Point	105.1	105.1		774.52	-68.8	0.1	-3.7	-2.4	30.4	0.0	30.4	

LF Acoustics

2

SoundPLAN 8.2



## **Appendix 2**

### Complaints Form

**Form No. XX Complaints Form****V.1, October 2023**

Who made the complaint?	Name:	
	Address:	
	Phone No.:	
Date and time they made the complaint:		
What happened? What was it about?		
Was anyone else aware of this – other neighbours or your staff? If so, who?		
Did the complaint relate to your site? If so, what happened? What went wrong?		
What have you done to make sure that it does not happen again?		
Was there any significant pollution – for example: dust, odour or noise outside the Site or spillage of polluting liquids onto the ground, into a drain or a watercourse?		
If there was, then you must notify the Environment Agency on 0800 807060 and any other relevant regulators.  Have you done so?    Yes <input type="checkbox"/> No <input type="checkbox"/>		At what time did you phone?
You must also write or send an email to confirm this to your local Environment Agency office.  Have you done so?    Yes <input type="checkbox"/> No <input type="checkbox"/>		What date did you contact?
Please print and sign your name:		