



Carn Fearna Wind Farm Limited

Carn Fearna Wind Farm – Noise and Vibration

Technical Appendix 12.1 Baseline Noise Survey Details

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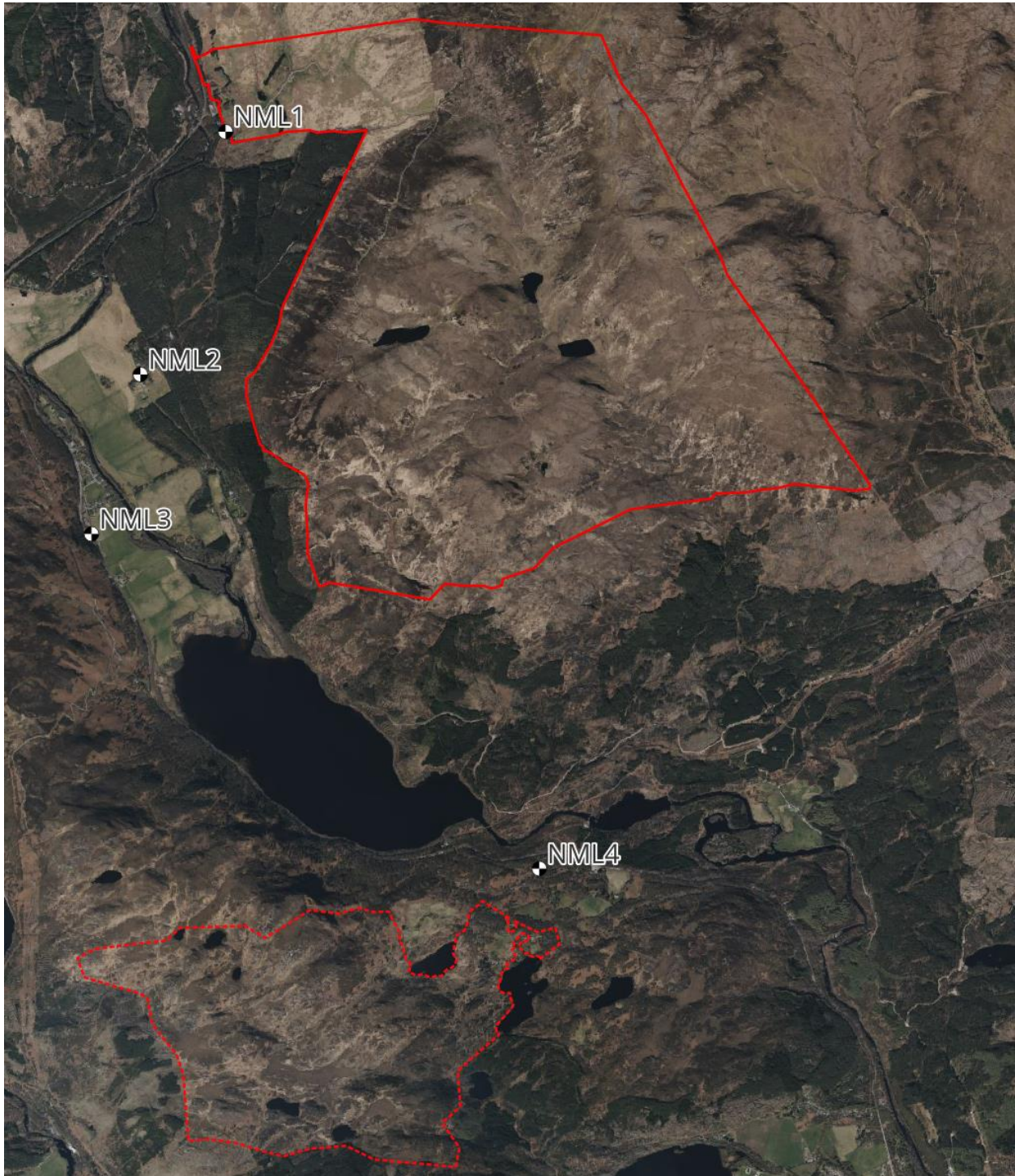
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1 Overview of Survey Locations

Set out below in Plate 1 is an overview of the survey locations, also shown is the approximate red line boundaries for the Proposed Development (solid red) and Tarvie Wind Farm (dashed red). Further details of the installed location and Sound Level Meters (SLM) used are provided in the subsequent sections.

Plate 1 - Overview of the Noise Monitoring Locations



2 NML1 – Tigh Fiodha

2.1 Equipment

Sound level meter (SLM) position:	240435, 863838
SLM type and serial number:	Rion NL-52, sn 00420711
SLM laboratory calibration date:	27/02/2024
Field calibration values:	94.0 dB (start) / 94.0 dB (end) @ 1kHz
Drift in field calibration:	0.0 dB
Date and time of setup:	03/06/2024, 15:20 (BST)
Date and time of collection:	24/06/2024, 13:40 (BST)

Plate 2 - NML1 Tigh Fiodha



2.2 Description of Measurement Location

This receptor is situated to the northwest of the site. The SLM was located approximately 5m from the corner of the front of the dwelling. The rear garden was reviewed, but the selected location was less affected by noise from wind disturbing trees and other mature vegetation. No localised sources of constant noise were noted. This location is elevated from Black Water which runs approximately 120m away, and the A835 which comes within 175m. Photographs of the SLM in situ are provided in Plate 3 to Plate 6. The location of the SLM was discussed and agreed with the residents.

A rural location with a noise climate that can be described as fairly typical for rural amenity with the soundscape dominated by wind disturbed vegetation and distant traffic on the A835. Bird calls were also audible, but not a dominant contributor to the overall noise climate. No water course noise was noted at the measurement location.

Plate 3 – NML1 Looking North



Plate 4 – NML1 Looking East

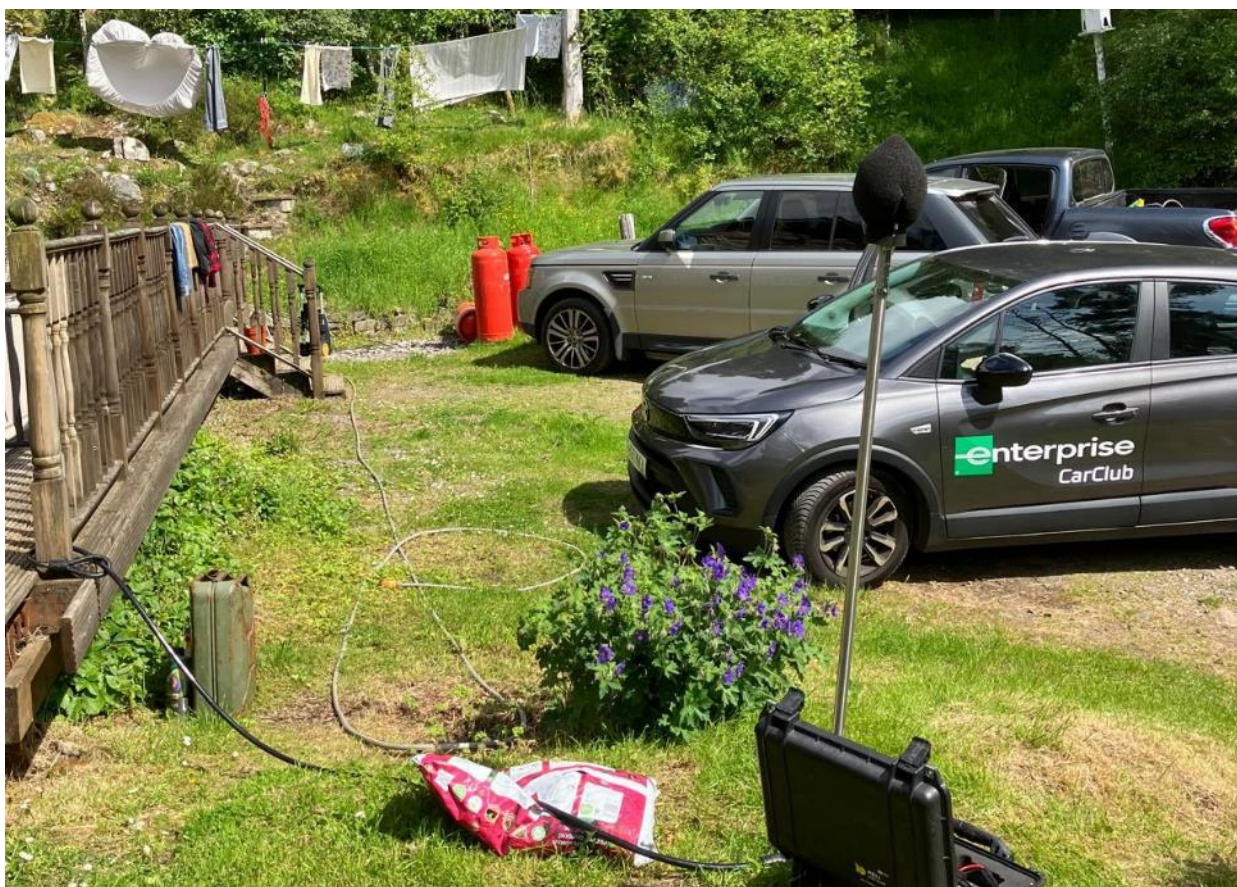


Plate 5 – NML1 Looking South



Plate 6 – NML1 Looking West



3 NML2 – The Cottage

3.1 Equipment

Sound level meter (SLM) position:	239874, 862197
SLM type and serial number:	Rion NL-52, sn 00620872
SLM laboratory calibration date:	09/01/2024
Field calibration values:	94.0 dB (start) / 94.0 dB (end) @ 1kHz
Drift in field calibration:	0.0 dB
Date and time of setup:	03/06/2024, 16:00 (BST)
Date and time of collection:	24/06/2024, 13:30 (BST)

Plate 7 – NML2 The Cottage



3.2 Description of Measurement Location

This receptor is situated to the west of the site within Strath Garve. The position of the SLM was discussed and agreed with the resident. The measurement location was approximately 15 m southwest of the house in the garden, away from mature vegetation and sources of constant noise. Photographs of the SLM in situ are provided in Plate 8 to Plate 11. A rain gauge was installed at this location.

A rural location with a noise climate that can be described as fairly typical for rural amenity with distant natural noises such as birds and wind disturbed vegetation. Very distant traffic on the A835 was audible.

Plate 8 – NML2 Looking North



Plate 9 – NML2 Looking East



Plate 10 – NML2 Looking South



Plate 11 – NML2 Looking West



4 NML3 – Station Road

4.1 Equipment

Sound level meter (SLM) position:	239542, 861143
SLM type and serial number:	Rion NL-52, sn 00231665
SLM laboratory calibration date:	06/10/2023
Field calibration values:	94.0 dB (start) / 94.1 dB (end) @ 1kHz
Drift in field calibration:	0.1 dB
Date and time of setup:	03/06/2024, 18:00 (BST)
Date and time of collection:	24/06/2024, 13:30 (BST)

Plate 12 – NML3 Station Road



4.2 Description of Measurement Location

This receptor is situated to the southwest of the site, within the area of Garve at the request of nearby residents. The SLM was originally installed in the garden area of number 4 Station Road on 03/06/2024, during which it was noted that the garden of number 5 would be better suited to a noise survey, but the residents were not in to obtain permission. The SLM was moved on 04/06/2024 to number 5 once permission had been sought. The property is situated between the A835, Straton Road, and the railway line, approximately 170m from Garve Station. The SLM was positioned in the garden area approximately 1m from the boundary, 10m from the house, 35m from the A835 and 10m from the railway track. Tall trees were noted on the other side of the A835. There were no sources of constant noise noted. Photographs of the SLM in situ are provided in Plate 13 to Plate 16.

A village location with a noise climate that can be described as fairly typical for rural amenity close to transportation links. The soundscape was dominated by road traffic noise with other sources present noted to be passing trains and wind disturbed vegetation.

Plate 13 – NML3 Looking North



Plate 14 – NML3 Looking East



Plate 15 – NML3 Looking South



Plate 16 – NML3 Looking West



5 NML4 – Cluaran

5.1 Equipment

Sound level meter (SLM) position:	242542, 858903
SLM type and serial number:	Rion NL-52, sn 00620872
SLM laboratory calibration date:	09/01/2024
Field calibration values:	94.0 dB (start) / 94.0 dB (end) @ 1kHz
Drift in field calibration:	0.0 dB
Date and time of setup:	03/06/2024, 17:20 (BST)
Date and time of collection:	24/06/2024, 13:10 (BST)

Plate 17 – NML4 Cluaran



5.2 Description of Measurement Location

This receptor is situated to the far south of the site, within a group of properties adjacent to the proposed Tarvie Wind Farm, in the area of Tarvie. The SLM was located at approximately 90m south of the A835 in the garden area of the property and 12m north of the dwelling. There are a number of tall trees nearby, which was observed to be representative of other dwellings in the area. There were no sources of constant noise noted at the monitoring position. Photographs of the SLM in situ are provided in Plate 18 to Plate 21. The location of the SLM was discussed with the owner of the property. A rain gauge was installed at this location.

A rural location with a noise climate that can be described as fairly typical for rural amenity with natural noises such as birds and wind disturbed vegetation, with distant noise from vehicles on the A835.

Plate 18 – NML4 Looking North



Plate 19 – NML4 Looking East



Plate 20 – NML4 Looking South



Plate 21 – NML4 Looking West

