

# Appendix 17.2

## Baseline Noise Survey Report

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## 1 Baseline Noise Survey

### 1.1 Introduction

- 1.1.1 This Appendix reports the measured baseline noise levels along the section of the A9 between Glen Garry and Kincaig prior to the commencement of any physical works in relation to the proposed dualling of the existing trunk road.
- 1.1.2 The survey has been carried out in accordance with applicable British Standards and UK Department of Environment document 'Calculation of Road Traffic Noise' for the assessment of the existing noise levels, together with BS 7445-1: 2003 'Description and measurement of environmental noise Part 1 Guide to quantities and procedures'.
- 1.1.3 This report presents the results of the ambient noise survey.

### 1.2 Baseline Survey Equipment

- 1.2.1 The following equipment was used for all of the surveys:
- 1.2.2 The long term noise surveys, undertaken for periods of 24 hours or more, were undertaken using a 01dB Blue Solo Sound Level Meter (serial number 61046) with a 01dB Pre 21S Pre-amplifier (serial number 16016) and a 01dB MCE212 ½" microphone (serial number 142693). The meter was calibrated using a Castle GA607 Sound Level Calibrator (serial number 035748).
- 1.2.3 The meter and calibrator have been calibrated in an National Physical Laboratory (NPL) accredited laboratory within the past year and the details are shown in **Table 1** below:

Table 1: Sound Level Meter Details and Calibration References and Dates – Long Term Meter

Equipment	Serial Number	NPL Calibration Certificate Number	UKAS/ NPL Calibration Certificate Reference	Last Calibration Date
01dB Blue Solo Sound Level Meter	61046	01655/4	0801	24/01/2014
Castle GA607 Acoustic Calibrator	035748	035748/61288	S6312/07428	09/05/2014

- 1.2.4 The shortened period noise surveys were undertaken using a Castle Pro-DX Vocis GA131M Sound Level Meter (serial number 0062925) with a Castle MKDXP Pre-amplifier (serial number 1026) and a Castle ½" microphone (serial number 5035). The meter was calibrated using a Castle GA607 Sound Level Calibrator (serial number 035748).
- 1.2.5 The meter and calibrator have been calibrated in an NPL accredited laboratory within the past year and the details are shown in **Table 2** below.

Table 2: Sound Level Meter Details and Calibration References and Dates – Short Term Meter

Equipment	Serial Number	NPL Calibration Certificate Number	UKAS/ NPL Calibration Certificate Reference	Last Calibration Date
Castle Vocis M Sound Level Meter	0062925	0062925/61288	S6312	09/09/2014
Castle GA607 Acoustic Calibrator	035748	035748/61288	S6312/07428	09/05/2014

- 1.2.6 It should be noted that the meter was calibrated before and after each measurement to check for 'drift' in the accuracy of the meter. No drift in the calibration level of the meter was found at any time.
- 1.2.7 Noise measurements were taken in accordance with the methodology in British Standard 7445-1: 2003 '*Description and measurement of environmental noise Part 1 Guide to quantities and procedures*', with the microphone between 1.2 and 1.5m above local ground level. All measurement locations were also at least 3.5m away from any reflecting surface, and as a result it can be considered that all measurement locations were 'free-field'.

### 1.3 Baseline Measurement Locations

- 1.3.1 Prior to the commencement of the baseline noise measurement works, consultation took place with Mr R Murdoch, Environmental Health Officer for Highland Council for the area.
- 1.3.2 The locations proposed to be used were identified beforehand and were in the main agreed, or relocated slightly to accommodate the discussions. In the main the measurement locations have remained the same, although a couple have been relocated to reflect access or security issues, although it is considered that the baseline in the vicinity of the A9 within this section of its route has been appropriately captured.
- 1.3.3 The A9 was considered to be freely flowing during all attended (i.e. 3 hour) surveys. For the unattended surveys this cannot be verified, but on setup and collection it was noted that the A9 was freely flowing.
- 1.3.4 Also, on most days when the unattended measurements were being undertaken the surveyor was in the area performing the attended measurements.
- 1.3.5 It should be noted that during all measurements the Average Speed Cameras (ASC) on the A9 were installed but were not yet operational, as such the measurement results represent typical road traffic noise conditions.
- 1.3.6 The results are presented in **Table 3** below:
- 1.3.7 The location of the measurements are indicated in **Figure 1**.

Table 3: Baseline Noise Measurement Locations

ID Number	Location	Measurement Duration	GPS Location for Measurement
MP1	Station House, Dalnaspidal, Pitlochry	3 Hr	NN64450 BNG73353
MP2	Balsporran Cottages, Dalwhinnie	24 Hr	NN62711 BNG79196
MP3	Drumochter Lodge, Dalwhinnie	3 Hr	NN63065 BNG79591
MP4	Loch Ericht Hotel, Dalwhinnie	3 Hr	NN63812 BNG84953
MP5	2, Truim View, Dalwhinnie	24 Hr	NN63693 BNG84335
MP6	Willet Cottage, Cuaich, Dalwhinnie	24 Hr	NN65573 BNG87071
MP7	Crubenmore Lodge, Newtonmore	3 Hr	NN67513 BNG91014
MP8	Invernahavon Caravan Park, Glentruim	3 Hr	NN68851 BNG94972
MP9	Ptarmigan Lodge, West Ralia	3 Hr	NN70467 BNG97075
MP10	Upper Nuide, Newtonmore	3 Hr	NN72837 BNG98471
MP11	Ruthven Farm House, Kingussie	3 Hr	NH75924 BNG00628
MP12	The Spinney, Spey Street, Kingussie	24 Hr	NH75948 BNG00558
MP13	Craig-An-Darach, Kingussie	24 Hr	NH76415 BNG00997
MP14	Three Bridges, Kingussie	3 Hr	NH77045 BNG01207
MP15	Kerrow Cottage, Kingussie	3 Hr	NH76635 BNG01227
MP16	Croila Road, Kingussie	3 Hr	NH76321 BNG01156
MP17	Ard Dalle, Lynchat, Kingussie	24 Hr	NH78148 BNG01832
MP18	Mains of Balavil, Kingussie	24 Hr	NH79025 BNG02279
MP19	Balavil House, Kingussie	3 Hr	NH79087 BNG02609
MP20	Dunachton Lodge, Kingussie	3 Hr	NH82237 BNG04734
MP21	Silverwood, Dunachton Road, Kincaig	24 Hr	NH82824 BNG05536
MP22	17, Suidhe Crescent, Kincaig	3 Hr	NH83251 BNG06015
MP23	The Old Manse, Alvie Estate, Kincaig	24 Hr	NH83485 BNG06506

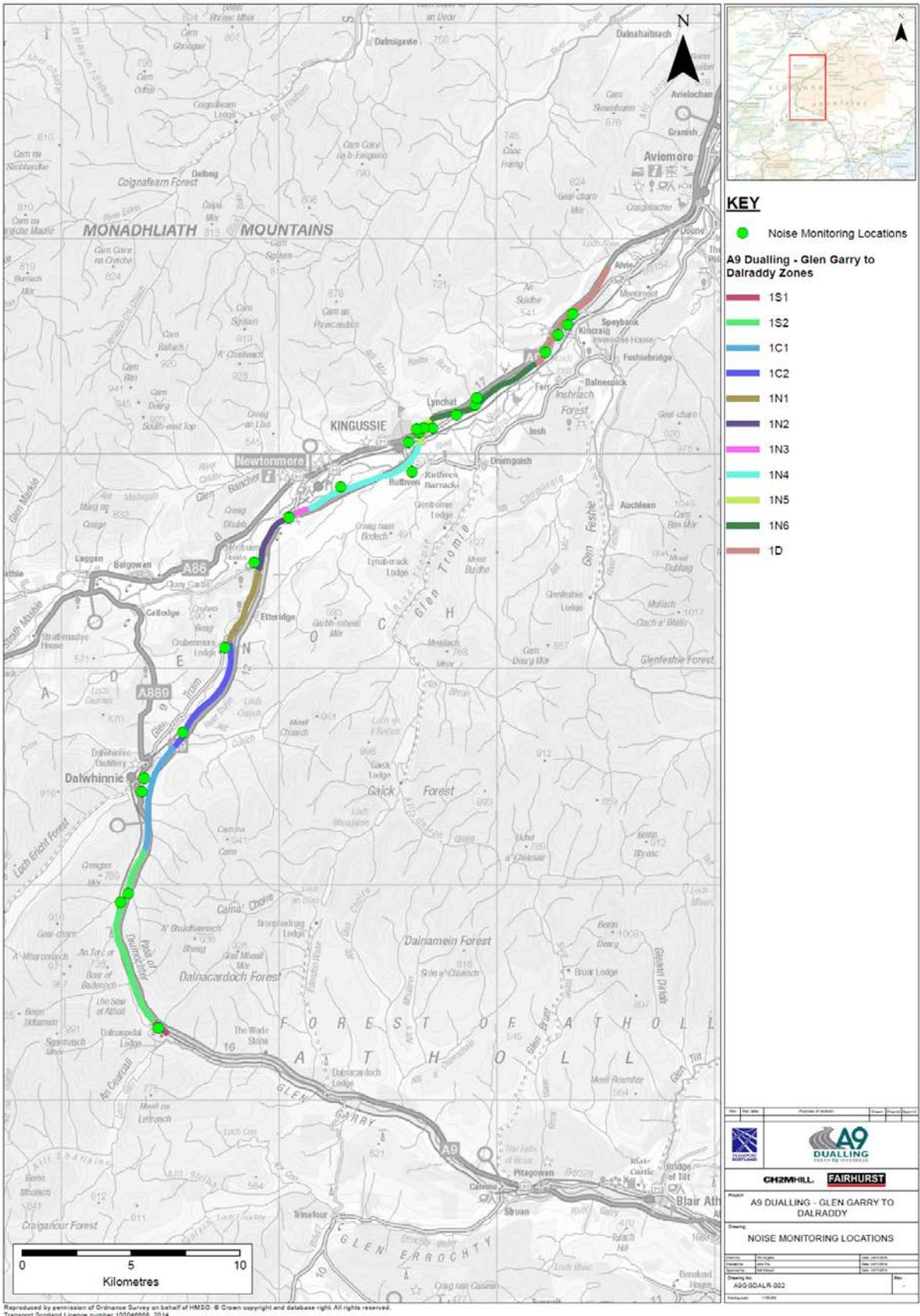


Figure 1: Noise Measurement Locations

## 1.4 Baseline Noise Survey Results

1.4.1 A summary of the results of the baseline survey are recorded in **Table 4** below.

Table 4: Summary of Measured Baseline Noise Levels

Location	Measurement Duration	L <sub>Aeq,T</sub> dB	L <sub>A10,T</sub> dB
MP1, Station House	3 Hr	57.5	61.3
MP2, Balsporran Cottages	06:00 – 24:00	57.4	59.6
	00:00 – 06:00	51.0	55.5
MP3, Drumochter Lodge	3 Hr	58.8	63.6
MP4, Loch Ericht Hotel	3 Hr	50.6	52.8
MP5, 2 Truim View	06:00 – 24:00	46.0	47.9
	00:00 – 06:00	38.6	42.3
MP6, Willet Cottage	06:00 – 24:00	55.5	57.7
	00:00 – 06:00	49.2	53.3
MP7, Crubenmore Lodge	3 Hr	50.3	53.4
MP8, Invernahavon Caravan Park	3 Hr	44.7	47.0
MP9, Ptarmigan Lodge	3 Hr	61.3	60.4
MP10, Upper Nuide	3 Hr	49.4	54.3
MP11, Ruthven Farm House	3 Hr	50.9	55.3
MP12, The Spinney	06:00 – 24:00	50.3	47.8
	00:00 – 06:00	39.2	42.7
MP13, Craig-An-Darach	06:00 – 24:00	52.0	54.6
	00:00 – 06:00	45.9	50.2
MP14, Three Bridges	3 Hr	53.2	57.3
MP15, Kerrow Cottage	3 Hr	52.8	57.6
MP16, Croila Road	3 Hr	45.9	42.1
MP17, Ard Dalle	06:00 – 24:00	52.0	54.2
	00:00 – 06:00	49.7	50.2
MP18, Mains of Balavil	06:00 – 24:00	61.6	65.8
	00:00 – 06:00	56.7	60.0
MP19, Balavil House	3 Hr	54.7	59.0
MP20, Dunachton Lodge	3 Hr	55.1	59.4
MP21, Silverwood	06:00 – 24:00	55.5	58.9
	00:00 – 06:00	49.1	53.1
MP22, 17 Suidhe Crescent	3 Hr	54.3	58.7
MP23, The Old Manse	06:00 – 24:00	55.3	57.4
	00:00 – 06:00	52.5	54.6

1.4.2 Full Measurement record sheets are provided at the end of this Appendix.

1.4.3 Given the above measured noise levels, together with the guidance provided on the correction of shortened measurements contained within 'Calculation of Road Traffic Noise', **Table 5** reports the measured and subsequently corrected L<sub>A10,18hr</sub> noise levels for each of the measurement

locations. It should be noted however that the 3 hour measurements taken are just that; an individual measurement with a statistical average of the 3 measurements. Therefore the procedure described in CRTN was not strictly followed. However, from observations made by the surveyor it is not considered likely that this will have resulted in any significant difference in the reported noise levels, and if required the shortened measurement procedure could be relied upon to provide an approximation to the 18-hour value.

Table 5: Measured or Corrected  $L_{A10,18h}$ , dB noise levels

Location	$L_{A10,18h}$ dB
Station House, Dalnaspidal, Pitlochry	60.3
Balsporran Cottages, Dalwhinnie	59.6
Drumochter Lodge, Dalwhinnie	62.6
Loch Ericht Hotel, Dalwhinnie	51.8
2, Truim View, Dalwhinnie	47.9
Willet Cottage, Cuaich, Dalwhinnie	57.7
Crubenmore Lodge, Newtonmore	52.4
Invernahavon Caravan Park, Glentruim	46.0
Ptarmigan Lodge, West Ralia	59.4
Upper Nuide, Newtonmore	53.3
Ruthven Farm House, Kingussie	54.3
The Spinney, Spey Street, Kingussie	47.8
Craig-An-Darach, Kingussie	54.6
Three Bridges, Kingussie	56.3
Kerrow Cottage, Kingussie	56.6
Croila Road, Kingussie	41.1
Ard Dalle, Lynchat, Kingussie	54.2
Mains of Balavil, Kingussie	65.8
Balavil House, Kingussie	58.0
Dunachton Lodge, Kingussie	58.4
Silverwood, Dunachton Road, Kincaig	58.9
17, Suidhe Crescent, Kincaig	57.7
The Old Manse, Alvie Estate, Kincaig	57.4

## 1.5 Discussion

- 1.5.1 A detailed baseline noise assessment has been carried out along the route of the proposed dualling of the A9 Trunk Road between Glen Garry and Kincaig. This revealed a relatively stable noise environment in the vicinity, punctuated by other sources. Examples of this, which are not reflected in the measured results, could be found in Dalwhinnie, adjacent to the Loch Ericht Hotel measurement location.
- 1.5.2 In this vicinity, a construction contractor's compound operates, connected to the upgrade of high tension power lines in the area. Noise levels associated with these activities were apparent, but other activities from this site, which involved the use of a helicopter, did not occur in the vicinity whilst the measurements were being taken, although they were observed as taking place during other survey periods.

- 1.5.3 This is a clear indication that noise levels can be cyclical and can vary from hour to hour or day to day. Another example is the overflight by military aircraft, which is a regular but not necessarily daily occurrence in this vicinity.
- 1.5.4 Nonetheless it is considered that the data presented in this report forms a valid report of the ambient noise levels in the vicinity of the proposed A9 works, taken at locations which are considered to be representative of a number of areas along the section of the route between Glen Garry and Kincaig.
- 1.5.5 Given the above it is considered that the data contained within this report forms a suitable basis for the consideration of potential construction noise impacts of the proposed dualling operations, and is also suitable to be used for the verification of modelled noise levels for the dual carriageway once it is constructed and operational.

## 1.6 Noise Measurement Record Sheets

- 1.6.1 This section presents the measurement record sheets for each measurement location, including photographs of each location.

Project		A9 Baseline Noise Assessment			Date	16-Sep-2014																																				
Measurement Location		MP1 - Station House, Dalnaspidal			By	IS																																				
Source(s) Description		Road Traffic on A9 and noise from passage of trains on Highland Main Line																																								
<b>Equipment</b>																																										
Sound Level Meter	Certe Pro-DX Vocis M GA131			Serial No.	0062925	Cal. Date	9-May-2014																																			
Microphone	Certe W*			Serial No.	1026	Cal. Date	9-Mar-2014																																			
Preamplifier	Certe MKDXP			Serial No.	5035	Cal. Date	9-May-2014																																			
Field Calibrator	Certe GA607			Serial No.	035748	Cal. Date	9-Mar-2014																																			
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	16-Sep-2014	Time	10:10																																		
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	16-Sep-2014	Time	13:12																																		
<b>Measurement Location(s)</b>																																										
Description	To A9 side of residential location at former station site				Height above ground	1.25 m																																				
GPS Coordinates	NN64450 BNG73353		Bearing to source	North East	Distance to source	50.00 m																																				
Vertical Refl. Surface(s)	None				Distance to surface	- m																																				
Sketch/ Photographs																																										
																																										
<b>Weather</b>																																										
<input type="checkbox"/> Measured	0 - 1 m/s			Equipment Details: Silva Windwatch																																						
<input type="checkbox"/> Estimated	<table border="1"> <thead> <tr> <th>Select:</th> <th>Force</th> <th>m/s</th> <th>Description</th> <th>Conditions</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>&lt;0.5</td> <td>Calm</td> <td>Calm. Smoke rises vertically.</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>1</td> <td>0.3-1.5</td> <td>Light air</td> <td>Wind motion visible in smoke.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>2</td> <td>1.5-3.3</td> <td>Light breeze</td> <td>Wind felt on exposed skin. Leaves rustle.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>3</td> <td>3.3-5.5</td> <td>Gentle breeze</td> <td>Leaves and smaller twigs in constant motion.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>4</td> <td>5.5-8.0</td> <td>Moderate breeze</td> <td>Dust and loose paper raised. Small branches begin to move.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>5</td> <td>8.0-10.8</td> <td>Fresh breeze</td> <td>Branches of a moderate size move. Small trees begin to sway.</td> </tr> </tbody> </table>							Select:	Force	m/s	Description	Conditions	<input type="checkbox"/>	0	<0.5	Calm	Calm. Smoke rises vertically.	<input checked="" type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.	<input type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.
Select:	Force	m/s	Description	Conditions																																						
<input type="checkbox"/>	0	<0.5	Calm	Calm. Smoke rises vertically.																																						
<input checked="" type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.																																						
<input type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.																																						
<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.																																						
<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.																																						
<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.																																						
Wind Direction	Westerly		Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud																																				
Temperature	10-16°C			<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun																																					
<b>Measured Noise Levels</b>																																										
Location	Date	Time & Duration	L <sub>10</sub>	L <sub>50</sub>	L <sub>50</sub>	L <sub>90</sub>	L <sub>90</sub>	Notes																																		
Dalnaspidal Station	16/09/2014	10:10 - 3 hours	57.5	78.2	36.6	45.8	61.3	See Below																																		
<b>General Observations</b>																																										
Road Traffic Noise on the A9, passage of passenger trains on the Highland Main Line, overflights by aircraft including low flying military aircraft and activities associated with the nearby estate.																																										



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	16-Sep-2014		
Measurement Location		MP2 - Balpouan Cottages			By	IS		
Source(s) Description		Road Traffic on A9 and noise from passage of trains on Highland Main Line						
<b>Equipment</b>								
Sound Level Meter	01dB Blue Solo	Serial No.	61046	Cal. Date	24-Jan-2014			
Microphone	01dB MCE212	Serial No.	142693	Cal. Date	24-Jan-2014			
Preamplifier	01dB Pre 21.5	Serial No.	16016	Cal. Date	24-Jan-2014			
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	9-Mar-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	16-Sep-2014	Time	09:50	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	18-Sep-2014	Time	10:00	
<b>Measurement Location(s)</b>								
Description	B&B/Residential Location Near Dunrochter Summit between A9 & Railway				Height above ground	1.25 m		
GPS Coordinates	NN62711 BNG79196	Bearing to source	East		Distance to source	130.00 m		
Vertical Refl. Surface(s)	None				Distance to surface	- m		
Sketch/ Photographs								
 								
<b>Weather</b>								
Measured	Equipment Details: Silva Windwatch							
Estimated (Beaufort Scale)	Select	Force	m/s	Description	Conditions			
	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
Based on observation of local weather reports and comments from resident	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly		Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud		
Temperature	10-16°C			<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun	Drizzle in last hour of measurement		
<b>Measured Noise Levels</b>								
Location	Date	Time & Duration	L <sub>day</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>AM0</sub>	L <sub>AM5</sub>	Notes
Balpouan B&B	16/09/2014 - 18/09/2014	Daytime 0600 - 0000	57.4	87.6	27.4	45.1	59.6	See Below
		Night-time 0000 - 0600	51.0	69.0	25.0	30.4	55.5	
<b>General Observations</b>								
Road Traffic Noise on the A9, passage of passenger and freight trains on the Highland Main Line, overflights by aircraft including low flying military aircraft and activities at the property. Last hour of measurements affected by light rain/drizzle which resulted in a damp road surface on the A9.								

Project		A9 Baseline Noise Assessment		Date	16-Sep-2014			
Measurement Location		MP3 - Drumochter Lodge		By	IS			
Source(s) Description		Road Traffic on A9 and noise from passage of trains on Highland Main Line						
<b>Equipment</b>								
Sound Level Meter	Catle Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-May-2014			
Microphone	Catle W*	Serial No.	1026	Cal. Date	9-May-2014			
Preamplifier	Catle MKDXP	Serial No.	5035	Cal. Date	9-May-2014			
Field Calibrator	Catle GA607	Serial No.	035748	Cal. Date	9-May-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	16-Sep-2014			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	16-Sep-2014			
<b>Measurement Location(s)</b>								
Description	To A9 side of building			Height above ground	1.25 m			
GPS Coordinates	NN63065 BNG79591	Bearing to source	West	Distance to source	55.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
<b>Weather</b>								
Wind Measured	0 - 1 m/s	Equipment Details: Silva Windwatch						
Wind Estimated (Beaufort Scale)		Select:	Force	m/s	Description			
		<input type="checkbox"/>	0	<0.5	Calm			
		<input checked="" type="checkbox"/>	1	0.3-1.5	Light air			
		<input type="checkbox"/>	2	1.5-3.3	Light breeze			
		<input type="checkbox"/>	3	3.3-5.5	Gentle breeze			
		<input type="checkbox"/>	4	5.5-8.0	Moderate breeze			
		<input type="checkbox"/>	5	8.0-10.8	Fresh breeze			
Wind Direction	Westerly	Conditions:		<input type="checkbox"/> Fog	<input type="checkbox"/> Frost			
Temperature	13.5-16°C			<input checked="" type="checkbox"/> Other: Cloud	<input type="checkbox"/> Sun			
<b>Measured Noise Levels</b>								
Location	Date	Time & Duration	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>Amin</sub>	L <sub>AN</sub>	L <sub>AR</sub>	Notes
Drumochter Lodge	16/09/2014	13:20 - 3 hours	58.8	81.4	37.8	44.8	63.6	See Below
<b>General Observations</b>								
Road Traffic Noise on the A9, passage of passenger and freight trains on the Highland Main Line, overflights by aircraft and activities associated with the measurement location, including the barking of dogs and the movement of vehicles within the car parking area.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	18-Sep-2014	
Measurement Location		MP4 - Car Park of Former Loch Enecht Hotel			By	IS	
Source(s) Description		Road Traffic on A9 and local road as well as noise from passage of trains on Highland Main Line					
Equipment							
Sound Level Meter	Castle Pro-DX Vocis M GA131	Serial No.	3062925		Cal. Date	9-May-2014	
Microphone	Castle M7	Serial No.	1026		Cal. Date	9-May-2014	
Preamplifier	Castle MKDXP	Serial No.	5055		Cal. Date	9-May-2014	
Field Calibrator	Castle GA607	Serial No.	335748		Cal. Date	9-May-2014	
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB		Date	18-Sep-2014	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB		Date	18-Sep-2014	
					Time	09:55	
					Time	16:20	
Measurement Location(s)							
Description	To A9 side of building on southern side of Dalwhinnie				Height above ground	1.25 m	
GPS Coordinates	NN63693 BNGB4335		Bearing to source	East		Distance to source	390.00 m
Vertical Refl. Surface(s)	None				Distance to surface	- m	
Sketch / Photographs							
Weather							
<input type="checkbox"/> Measured	0 - 2.5 m/s		Equipment Details: Silva Windwatch				
<input type="checkbox"/> Estimated	Select:		Force	m/s	Description	Conditions	
(Beaufort Scale)	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.		
	<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.		
	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.		
	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.		
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.		
	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.		
Wind Direction	Southerly		Conditions:		<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud
Temperature	13.5-16°C				<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun	Occasional Light Drizzle
Measured Noise Levels							
Location	Date	Time & Duration	L <sub>day</sub>	L <sub>even</sub>	L <sub>night</sub>	L <sub>eq</sub>	L <sub>eqT</sub>
Loch Enecht Hotel Car Park	18/09/2014	10:00 - 3 hours	50.6	75.3	43.4	45.0	52.8
Notes: See Below							
General Observations							
Road Traffic Noise on the A9 and on the A889 running through Dalwhinnie, including traffic to and from the cafe that is operating in the former hotel. In addition sources include the passage of passenger trains on the Highland Main Line, overflights by aircraft and activities associated with the construction compound associated with the Beauty-Denny power line works which has been in place for several years.							



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	18-Sep-2014		
Measurement Location		MPS - 2 Train View			By	ES		
Source(s) Description Road Traffic on A9 and local road through Dalwhinnie together with noise from passage of trains on Highland Main Line								
Equipment								
Sound Level Meter	01dB Blue Solo	Serial No.	61046		Cal. Date	24-Jan-2014		
Microphone	01dB MCE212	Serial No.	142693		Cal. Date	24-Jan-2014		
Preamplifier	01dB Pae 21 5	Serial No.	16016		Cal. Date	24-Jan-2014		
Field Calibrator	Castle GA607	Serial No.	035748		Cal. Date	9-May-2014		
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB		Date	18-Sep-2014		
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB		Date	18-Sep-2014		
Measurement Location(s)								
Description	Front garden of unoccupied holiday home with clear distant view of A9				Height above ground	1.25 m		
GPS Coordinates	NN63812 ENG84953		Bearing to source	East		Distance to source	420.00 m	
Vertical Ref. Surface(s)	None				Distance to surface	- m		
Sketch/ Photographs								
Weather								
<input type="checkbox"/> Measured	Equipment Details		Site Windwatch					
<input type="checkbox"/> Estimated	Select:	Force	m/s	Description	Conditions			
(Beaufort Scale)	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
Based on observation of local weather reports	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input type="checkbox"/>	3	3.3-5.5	Grade breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly		Conditions	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud		
Temperature	10-16°C			<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun			
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>day</sub>	L <sub>night</sub>	L <sub>1st</sub>	L <sub>2nd</sub>	L <sub>3rd</sub>	Notes
No 2, Train View, Dalwhinnie	18/09/2014 - 19/09/2014	Daytime 0600 - 0900	46.0	72.5	23.1	35.0	47.9	See Below
		Night-time 0000 - 0500	38.6	59.0	23.4	27.1	42.5	
General Observations								
Conditions damp at the time of meter set-up through low cloud base, but road surfaces dry. Noise environment affected by road traffic noise from the A9 in the distance, the local road through Dalwhinnie (A889), together with noise from trains on the Highland Main Line and hhoing.								



Noise Measurement Record

Project	A9 Baseline Noise Assessment			Date	19-Sep-2014																																	
Measurement Location	MP6 - Willet Cottage			By	IS																																	
Source(s) Description	Road Traffic on A9 and local activity together with noise from passage of trains on Highland Main Line																																					
<b>Equipment</b>																																						
Sound Level Meter	01dB Blue Solo	Serial No.	61046	Cal. Date	24-Jan-2014																																	
Microphone	01dB MCE212	Serial No.	142693	Cal. Date	24-Jan-2014																																	
Preamplifier	01dB Pre 21 S	Serial No.	16016	Cal. Date	24-Jan-2014																																	
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	9-May-2014																																	
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	19-Sep-2014																																	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	20-Sep-2014																																	
				Time	10:25																																	
<b>Measurement Location(s)</b>																																						
Description	Front fence/line of estate workers cottage with clear view of elevated A9			Height above ground	1.25 m																																	
GPS Coordinates	NN65573, BNG87071	Bearing to source	East	Distance to source	98.00 m																																	
Vertical Refl. Surface(s)	None			Distance to surface	- m																																	
Sketch/ Photographs																																						
<b>Weather</b>																																						
<input type="checkbox"/> Measured	0 - 1 m/s	Equipment Details: Silva Windwatch																																				
<input type="checkbox"/> Estimated (Beaufort Scale)	Based on observation of local weather reports	<table border="1"> <thead> <tr> <th>Select:</th> <th>Force</th> <th>m/s</th> <th>Description</th> <th>Conditions</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>&lt;0.3</td> <td>Calm</td> <td>Calm. Smoke rises vertically.</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>1</td> <td>0.3-1.5</td> <td>Light air</td> <td>Wind motion visible in smoke.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>2</td> <td>1.5-3.3</td> <td>Light breeze</td> <td>Wind felt on exposed skin. Leaves rustle.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>3</td> <td>3.3-5.5</td> <td>Gentle breeze</td> <td>Leaves and smaller twigs in constant motion.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>4</td> <td>5.5-8.0</td> <td>Moderate breeze</td> <td>Dust and loose paper raised. Small branches begin to move.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>5</td> <td>8.0-10.8</td> <td>Fresh breeze</td> <td>Branches of a moderate size move. Small trees begin to sway.</td> </tr> </tbody> </table>	Select:	Force	m/s	Description	Conditions	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.	<input checked="" type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.	<input type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.	
Select:	Force	m/s	Description	Conditions																																		
<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.																																		
<input checked="" type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.																																		
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<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.																																		
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<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.																																		
Wind Direction	Westerly	Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud																																	
Temperature	10-16°C		<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun																																		
<b>Measured Noise Levels</b>																																						
Location	Date	Time & Duration	L <sub>day</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>90</sub>	L <sub>10</sub>	Notes																														
Willet Cottage, Caisich, Dalwhinnie	19/09/2014	Daytime 0600 - 0000	55.5	97.0	22.0	40.1	57.7	See Below																														
	20/09/2014	Night-time 0000 - 0600	49.2	68.8	20.0	25.8	53.3																															
<b>General Observations</b>																																						
Location affected by activities around residential location which are all tied to the local estate, including the keeping of working dogs and the dealing with game shot on estate, but A9 remains the dominant noise source at this location.																																						



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	18-Sep-2014		
Measurement Location		MF7 - Crubenmore Lodge			By	IS		
Source(s) Description		Road Traffic on A9 and General Wade's Military Road as well as noise from passage of trains on Highland Main Line						
Equipment								
Sound Level Meter	Cantle Pro-DX Vocis M GA131			Serial No.	0062925	Cal. Date	9-May-2014	
Microphone	Cantle 1/2"			Serial No.	1026	Cal. Date	9-May-2014	
Preamplifier	Cantle MKDXP			Serial No.	5035	Cal. Date	9-May-2014	
Field Calibrator	Cantle GA607			Serial No.	035748	Cal. Date	9-May-2014	
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	18-Sep-2014	Time	09:55	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	18-Sep-2014	Time	16:20	
Measurement Location(s)								
Description	To A9 side of building on opposite side of Trunim Valley				Height above ground	1.25 m		
GPS Coordinates	NN67513 EING91014	Bearing to source	East		Distance to source	245.00 m		
Vertical Refl. Surface(s)	None				Distance to surface	- m		
Sketch/ Photographs:								
Weather								
<input type="checkbox"/> Measured	0 - 1.6 m/s		Equipment Details: Silva Windwatch					
<input type="checkbox"/> Estimated	(Beaufort Scale)		Select:	Force	m/s	Description	Conditions	
			<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.	
			<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.	
			<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.	
			<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.	
			<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.	
			<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.	
Wind Direction	Westerly		Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud		
Temperature	13.5-16°C			<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun			
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>day</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>NOE</sub>	L <sub>A10</sub>	Notes
Crubenmore Lodge	18/09/2014	13:15 - 3 hours	50.3	68.7	37.0	43.7	53.4	See Below
General Observations								
Road Traffic Noise on the A9 and on General Wade's Military Road which runs past the measurement location. In addition sources include the passage of passenger and freight trains on the Highland Main Line, overflights by helicopters; and activities associated occasional traffic movements to and from the measurement location.								



Noise Measurement Record

Project	A9 Baseline Noise Assessment			Date	19-Sep-2014			
Measurement Location	MP8 - Invernahavon Caravan Park			By	IS			
Source(s) Description	Local Road traffic and activities on site - very little noise from A9 audible							
<b>Equipment</b>								
Sound Level Meter	Castle Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-May-2014			
Microphone	Castle 1/8"	Serial No.	1026	Cal. Date	9-May-2014			
Preamplifier	Castle MKDXP	Serial No.	5035	Cal. Date	9-May-2014			
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	9-May-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	19-Sep-2014			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	19-Sep-2014			
<b>Measurement Location(s)</b>								
Description	Adjacent to Caravan Park Site Office			Height above ground	1.25 m			
GPS Coordinates	NN68851 ENG94972	Bearing to source	East	Distance to source	310.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs:								
<b>Weather</b>								
<input type="checkbox"/> Measured	0 - 1 m/s	Equipment Details: Silva Windwatch						
<input type="checkbox"/> Estimated (Beaufort Scale)	Select:	Force	m/s	Description	Conditions			
	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input checked="" type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
	<input type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly	Conditions: <input type="checkbox"/> Fog <input type="checkbox"/> Frost <input checked="" type="checkbox"/> Other: Cloud						
Temperature	14-16°C	<input type="checkbox"/> Rain / Snow <input checked="" type="checkbox"/> Sun						
<b>Measured Noise Levels</b>								
Location	Date	Time & Duration	L <sub>Max</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>A90</sub>	L <sub>A10</sub>	Notes
Invernahavon Caravan Park	19/09/2014	10:00 - 3 hours	44.7	78.5	39.3	40.5	47.0	See Below
<b>General Observations</b>								
Very Little noise from the A9 as the site is somewhat distant, and most of the major sources noted during the survey emanated from site activity such as the movement of cars and caravans on and off site, waste collection and grounds maintenance contractors. Other sources include the passage of trains on the Highland Main Line and overflying aircraft.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment - Lot 1		Date	23-Sep-2014
Measurement Location		MP9 - Frannigan Lodge		By	IS
Source(s) Description		Road traffic on A9 and local road, movements on the Highland Main Line and overflight of military aircraft			
Equipment					
Sound Level Meter	Cardle Pro-DX Voice M GA131	Serial No.	0062925	Cal. Date	9-May-2014
Microphone	Cardle 1/2"	Serial No.	1026	Cal. Date	9-May-2014
Preamplifier	Cardle MKD3P	Serial No.	5035	Cal. Date	9-May-2014
Field Calibrator	Cardle GA507	Serial No.	035748	Cal. Date	9-May-2014
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014
				Time	09:55
				Time	16:25
Measurement Location(s)					
Description	In parking area of residential lodge at Ralin/ Newtonmore junction			Height above ground	1.25 m
GPS Coordinates	NN70467 ENG97075	Bearing to source	South	Distance to source	20.00 m
Vertical Refl. Surface(s)	None			Distance to surface	- m
Sketch/ Photographs					
 					
Weather					
<input type="checkbox"/> Measured	0 - 2 m/s	Equipment Details: Silva Windwatch			
<input type="checkbox"/> Estimated	(Beaufort Scale)	Select:	Force	m/s	Description
		<input type="checkbox"/>	0	<0.3	Calm. Smoke rises vertically.
		<input type="checkbox"/>	1	0.3-1.5	Light air. Wind motion visible in smoke.
		<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze. Wind felt on exposed skin. Leaves rustle.
		<input type="checkbox"/>	3	3.3-5.5	Gentle breeze. Leaves and smaller twigs in constant motion.
		<input type="checkbox"/>	4	5.5-8.0	Moderate breeze. Dust and loose paper raised. Small branches begin to move.
		<input type="checkbox"/>	5	8.0-10.8	Fresh breeze. Branches of a moderate size move. Small trees begin to sway.
Wind Direction	Westerly	Condition:		<input type="checkbox"/> Fog	<input type="checkbox"/> Frost
Temperature	9-12°C			<input checked="" type="checkbox"/> Other: Cloud	
				<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun
Measured Noise Levels					
Location	Date	Time & Duration	L <sub>90</sub>	L <sub>AMAX</sub>	L <sub>AMIN</sub>
Frannigan Lodge	23/09/2014	10:00 - 3 hours	61.3	99.3	32.4
					L <sub>95</sub>
					39.8
					L <sub>10</sub>
					60.4
Notes					
See Below					
General Observations					
Noise from the A9 and the Newtonmore Road (B9150) junction predominates at this location, together with the passage of trains on the Highland Main Line, the overflight of aircraft at the location, collection of waste from the measurement location and some limited residential activity.					



Noise Measurement Record

Project		A9 Baseline Noise Assessment		Date	22-Sep-2014
Measurement Location		MP11 - Rutliven Farmhouse		By	IS
Source(s) Description		Road traffic on A9 and local road, agricultural activity and overflight of military aircraft			
Equipment					
Sound Level Meter	Cardé Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-May-2014
Microphone	Cardé 1/2"	Serial No.	1026	Cal. Date	9-May-2014
Preamplifier	Cardé MKDXP	Serial No.	5035	Cal. Date	9-May-2014
Field Calibrator	Cardé GA607	Serial No.	035748	Cal. Date	9-May-2014
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	22-Sep-2014
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	22-Sep-2014
				Time	09:55
				Time	13:05
Measurement Location(s)					
Description	In garden of residential property representative of group to South of A9			Height above ground	1.25 m
GPS Coordinates	NH75924 ENG00628	Bearing to source	North	Distance to source	240.00 m
Vertical Ref. Surface(s)	None			Distance to surface	- m
Sketch/ Photographs					
Weather					
<input type="checkbox"/> Measured	0 - 1.9 m/s	Equipment Details: Silva Windwatch			
<input type="checkbox"/> Estimated		Select:	Force	m/s	Description
(Beaufort Scale)		<input type="checkbox"/>	0	<0.3	Calm
		<input type="checkbox"/>	1	0.3-1.5	Light air
		<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze
		<input type="checkbox"/>	3	3.3-5.5	Gentle breeze
		<input type="checkbox"/>	4	5.5-8.0	Moderate breeze
		<input type="checkbox"/>	5	8.0-10.8	Fresh breeze
Conditions:	<input type="checkbox"/> Fog <input type="checkbox"/> Frost <input checked="" type="checkbox"/> Other: Cloud <input type="checkbox"/> Rain / Snow <input type="checkbox"/> Sun                      Clearing to Sunshine				
Wind Direction	Westerly				
Temperature	7-15°C				
Measured Noise Levels					
Location	Date	Time & Duration	L <sub>90</sub>	L <sub>AMAX</sub>	L <sub>AMG</sub>
Rutliven Farmhouse	22/09/2014	10:00 - 3 hours	50.9	75.1	36.1
					L <sub>50</sub>
					L <sub>10</sub>
					Notes
					See Below
General Observations					
Noise from the A9 which is at grade or in a slight cutting at this location together with occasional traffic on the local roads (B970 and an unclassified road with no name) and some agricultural activity including the use of bird-scissors or shotguns. Measurement also affected by overflight of military aircraft, which is a common occurrence.					



Noise Measurement Record

Project	A9 Baseline Noise Assessment				Date	22-Sep-2014		
Measurement Location	MP12 - The Spinney				By	IS		
Source(s) Description	Road Traffic on A9 and local activity and noise from passage of trains on Highland Main Line at the end of the garden							
<b>Equipment</b>								
Sound Level Meter	01dB Blue Solo	Serial No.	61046	Cal. Date	24-Jan-2014			
Microphone	01dB MCE212	Serial No.	142693	Cal. Date	24-Jan-2014			
Preamplifier	01dB Pre 21 S	Serial No.	16016	Cal. Date	24-Jan-2014			
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	9-May-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	22-Sep-2014	Time 09:50		
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014	Time 09:25		
<b>Measurement Location(s)</b>								
Description	Residential garden facing A9 with Highland Main Line at end of garden			Height above ground	1.25 m			
GPS Coordinates	NH75948, BNG00558	Bearing to source	South	Distance to source	500.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
 								
<b>Weather</b>								
<input type="checkbox"/> Measured	Equipment Details: Silva Windwatch							
<input type="checkbox"/> Estimated (Beaufort Scale)	Select:	Force	m/s	Description	Conditions			
		[ ] 0	<0.3	Calm	Calm. Smoke rises vertically.			
		[ ] 1	0.3-1.5	Light air	Wind motion visible in smoke.			
Based on observation of local weather reports		[X] 2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
		[ ] 3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
		[ ] 4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
		[ ] 5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly	Conditions:	[ ] Fog	[ ] Frost	[X] Other: Cloud			
Temperature	10-16°C		[ ] Rain / Snow	[ ] Sun	Some light drizzle overnight			
<b>Measured Noise Levels</b>								
Location	Date	Time & Duration	L <sub>day</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>AD0</sub>	L <sub>AD10</sub>	Notes
The Spinney, Spey Street, Kingussie	22/09/2014	Daytime 0600 - 0000	50.3	82.0	24.9	36.8	47.8	See Below
	23/09/2014	Night-time 0000 - 0600	39.2	61.4	23.3	28.1	42.7	
<b>General Observations</b>								
Misty/hazy at the start of the measurement and light overnight rain - main sources appear to be from local traffic in Kingussie together with railway traffic on the Highland Main Line, which adjoins the garden to the South. Some noise from the A9 was however apparent.								

ch2m FAIRHURST		Noise Measurement Record						
Project	A9 Baseline Noise Assessment			Date	23-Sep-2014			
Measurement Location	MP13 - Craig-An-Darach			By	I Starworth			
Source(s) Description	Road Traffic on A9 and local traffic on A86 Kingussie to Spean Bridge road, together with noise from domestic activity							
<b>Equipment</b>								
Sound Level Meter	01dB Blue Solo		Serial No.	61046	Cal. Date	24-Jan-2014		
Microphone	01dB MCE212		Serial No.	142693	Cal. Date	24-Jan-2014		
Preamplifier	01dB Pre 21 S		Serial No.	16016	Cal. Date	24-Jan-2014		
Field Calibrator	Castle GA607		Serial No.	035748	Cal. Date	9-May-2014		
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014	Time	09:45	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	24-Sep-2014	Time	09:45	
<b>Measurement Location(s)</b>								
Description	Residential garden overlooking A9/A86 junction			Height above ground	1.25 m			
GPS Coordinates	NH76415, BNG00997		Bearing to source	South East	Distance to source	180.00 m		
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
<b>Weather</b>								
<input type="checkbox"/> Measured	Equipment Details: Silva Windwatch							
<input type="checkbox"/> Estimated (Beaufort Scale)	<b>Select:</b>	<b>Force</b>	<b>m/s</b>	<b>Description</b>	<b>Conditions</b>			
Based on observation of local weather reports	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.				
Wind Direction	Westerly	Conditions:		<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud		
Temperature	10-16°C			<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun	Some light drizzle overnight		
<b>Measured Noise Levels</b>								
<b>Location</b>	<b>Date</b>	<b>Time &amp; Duration</b>	<b>L<sub>Aeq</sub></b>	<b>L<sub>Amax</sub></b>	<b>L<sub>Amin</sub></b>	<b>L<sub>A90</sub></b>	<b>L<sub>A50</sub></b>	<b>Notes</b>
Craig-An-Darach, Kingussie	23/09/2014 - 24/09/2014	Daytime 0600 - 0000	52.0	79.3	18.7	40.4	54.6	See Below
		Night-time 0000 - 0600	45.9	64.4	18.7	25.9	50.2	
<b>General Observations</b>								
Location close to junction of A86 and A9 and road traffic dominates at this location, together with residential activity including chickens within smallholding and some DIY activity in shed building to rear of house and movements of residents car in and out of location. Some overnight rain but location largely dry throughout measurements.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	30-Sep-2014		
Measurement Location		MP14 - Three Bridges			By	IS		
Source(s) Description		Road traffic on A9, movements on the Highland Main Line and activity around estate						
Equipment								
Sound Level Meter	Cantle Pro-DX Vocis M GA131			Serial No.	0062925	Cal. Date	9-May-2014	
Microphone	Cantle 1/2"			Serial No.	1026	Cal. Date	9-May-2014	
Preamplifier	Cantle MBDXP			Serial No.	5035	Cal. Date	9-May-2014	
Field Calibrator	Cantle GA607			Serial No.	035748	Cal. Date	9-May-2014	
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	30-Sep-2014	Time	09:55
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	30-Sep-2014	Time	16:25
Measurement Location(s)								
Description	In garden between residential property and A9				Height above ground	1.25 m		
GPS Coordinates	NH77045 EBG01207		Bearing to source	North West		Distance to source	320.00 m	
Vertical Ref. Surface(s)	None				Distance to surface	- m		
Sketch / Photographs								
Weather								
<input type="checkbox"/> Measured	0 - 3 m/s		Equipment Details: Silva Windwatch					
<input type="checkbox"/> Estimated	(Beaufort Scale)		Select:	Force	m/s	Description	Conditions	
			<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.	
			<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.	
			<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.	
			<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.	
			<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.	
			<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.	
Wind Direction	Westerly		Conditions:		<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud	
Temperature	12-14°C				<input type="checkbox"/> Rain / Snow	<input checked="" type="checkbox"/> Sun		
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>Max</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>A90</sub>	L <sub>A10</sub>	Notes
Three Bridges	30/09/2014	10:00 - 3 hours	53.2	76.3	41.7	47.5	57.3	See Below
General Observations								
Location elevated close to A9 junction at east end of Kingussie and affected by noise from elevated section that road together with local traffic on the B9152 Kingussie to Kineraig road. Also affected by passage of trains on Highland Main Line and overflight of aircraft in the area, together with residential activity at the beginning and end of the measurement period.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment		Date	30-Sep-2014			
Measurement Location		MP13 - Kenow Cottage		By	IS			
Source(s) Description		Road traffic on A9						
Equipment								
Sound Level Meter	Castle Pro-DX Vocis M GA131		Serial No.	0062925	Cal. Date	9-May-2014		
Microphone	Castle 1/2"		Serial No.	1026	Cal. Date	9-May-2014		
Preamplifier	Castle MFDMP		Serial No.	5035	Cal. Date	9-May-2014		
Field Calibrator	Castle GA607		Serial No.	035748	Cal. Date	9-May-2014		
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	30-Sep-2014		
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	30-Sep-2014		
					Time	09:55		
					Time	16:25		
Measurement Location(s)								
Description	In open area between residential property and A9				Height above ground	1.25 m		
GPS Coordinates	NH76635 ENG01227		Bearing to source	East	Distance to source	55.00 m		
Vertical Ref. Surface(s)	None				Distance to surface	- m		
Sketch / Photographs:								
Weather								
<input type="checkbox"/> Measured	0 - 3 m/s		Equipment Details: Siltu Windwatch					
<input type="checkbox"/> Estimated	Select: Force m/s Description Conditions							
(Beaufort Scale)	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly		Conditions: <input type="checkbox"/> Fog <input type="checkbox"/> Frost <input checked="" type="checkbox"/> Other: Cloud					
Temperature	12-14°C		<input type="checkbox"/> Rain / Snow <input checked="" type="checkbox"/> Sun					
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>max</sub>	L <sub>max</sub>	L <sub>max</sub>	L <sub>AD</sub>	L <sub>AD</sub>	Notes
Kenow Cottage	30/09/2014	13:15 - 3 hours	52.8	69.7	40.1	44.5	57.6	See Below
General Observations								
Isolated location on the eastern side of Kingsisle. The main source was the A9, with occasional vehicle movements on the access road and in the immediate area, together with barking of working dogs in nearby pen.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	23-Sep-2014																																				
Measurement Location		MF16 - Croila Road			By	IS																																				
Source(s) Description		Road traffic on local road and A9 in distance, movements on the Highland Main Line and overflight of military aircraft																																								
Equipment																																										
Sound Level Meter	Cardie Pro-DX Vocis M GA131			Serial No.	0062925	Cal. Date	9-May-2014																																			
Microphone	Cardie 1/2"			Serial No.	1026	Cal. Date	9-May-2014																																			
Preamplifier	Cardie MKDXP			Serial No.	5035	Cal. Date	9-May-2014																																			
Field Calibrator	Cardie GA607			Serial No.	035748	Cal. Date	9-May-2014																																			
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	23-Sep-2014	Time	09:55																																		
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	23-Sep-2014	Time	16:25																																		
Measurement Location(s)																																										
Description	In parkland area at the end of Croila Road overlooking A9				Height above ground	1.25 m																																				
GPS Coordinates	NH76321 BNG01156		Bearing to source	East	Distance to source	330.00 m																																				
Vertical Refl. Surface(s)	None				Distance to surface	- m																																				
Sketch/ Photographs																																										
Weather																																										
<input type="checkbox"/> Measured	0 - 2 m/s		Equipment Details: Silva Windwatch																																							
<input type="checkbox"/> Estimated	<table border="1"> <thead> <tr> <th>Select:</th> <th>Force</th> <th>m/s</th> <th>Description</th> <th>Conditions</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>&lt;0.3</td> <td>Calm</td> <td>Calm. Smoke rises vertically.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>1</td> <td>0.3-1.5</td> <td>Light air</td> <td>Wind motion visible in smoke.</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>2</td> <td>1.5-3.3</td> <td>Light breeze</td> <td>Wind felt on exposed skin. Leaves rustle.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>3</td> <td>3.3-5.5</td> <td>Gentle breeze</td> <td>Leaves and smaller twigs in constant motion.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>4</td> <td>5.5-8.0</td> <td>Moderate breeze</td> <td>Dust and loose paper raised. Small branches begin to move.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>5</td> <td>8.0-10.8</td> <td>Fresh breeze</td> <td>Branches of a moderate size move. Small trees begin to sway.</td> </tr> </tbody> </table>							Select:	Force	m/s	Description	Conditions	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.	<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.
Select:	Force	m/s	Description	Conditions																																						
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Wind Direction	Westedy		Conditions: <input type="checkbox"/> Fog <input type="checkbox"/> Frost <input checked="" type="checkbox"/> Other: Cloud																																							
Temperature	12-13°C		<input type="checkbox"/> Rain / Snow <input type="checkbox"/> Sun <input type="checkbox"/> Occasional light drizzle																																							
Measured Noise Levels																																										
Location	Date	Time & Duration	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>Amin</sub>	L <sub>A90</sub>	L <sub>A95</sub>	Notes																																		
Croila Road	23/09/2014	13:20 - 3 hours	45.9	80.9	33.6	35.7	42.1	See Below																																		
General Observations																																										
Location representative of a large number of properties on the Eastern side of Kingussie, elevated from the A9. Sources noted included local road traffic in the vicinity and distance traffic on the A9, together with the overflight of aircraft together with local residents using the open area used for the measurement to exercise their dogs.																																										



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	30-Sep-2014		
Measurement Location		MP17 - Ard Dalle			By	IS		
Source(s) Description		Road Traffic on A9 and local traffic (B9152) through Lyuchat, together with noise from domestic activity						
Equipment								
Sound Level Meter	01dB Blue Solo	Serial No.	61046	Cal. Date	24-Jan-2014			
Microphone	01dB MCE212	Serial No.	142693	Cal. Date	24-Jan-2014			
Preamplifier	01dB Pre 21 5	Serial No.	16016	Cal. Date	24-Jan-2014			
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	9-May-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	30-Sep-2014	Time	09:45	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	1-Oct-2014	Time	09:55	
Measurement Location(s)								
Description	Bare development plot adjacent to 2 new properties close to A9			Height above ground	1.25 m			
GPS Coordinates	NH82237, BNG04734	Bearing to source	North	Distance to source	90.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
Weather								
<input type="checkbox"/> Measured	Equipment Details: Silva Windwatch							
<input type="checkbox"/> Estimated	Select:	Force	m/s	Description	Conditions			
(Beaufort Scale)	[ ]	0	<0.3	Calm	Calm. Smoke rises vertically.			
	[X]	1	0.3-1.5	Light air	Wind motion visible in smoke.			
Based on observation of local weather reports	[X]	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	[ ]	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	[ ]	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
	[ ]	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly		Conditions:		[ ] Fog	[ ] Frost	[X] Other: Cloud	
Temperature	6-16°C				[ ] Rain / Snow	[ ] Sun		
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>AMin</sub>	L <sub>AW</sub>	L <sub>AID</sub>	Notes
Ard Dalle, Lyuchat, Kingsisle	30/09/2014 - 01/10/2014	Daytime 0600 - 0000	52.0	76.9	30.2	45.2	54.2	See Below
		Night-time 0000 - 0600	49.7	63.9	27.4	38.0	50.2	
General Observations								
Location close to A9 at new residential development area on the Western side of Lyuchat. Road traffic dominates at this location, together with limited residential activity particularly from children after school periods.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	1-Oct-2014		
Measurement Location		MP18 - Mains of Balavil			By	IS		
Source(s) Description		Road Traffic on A9 together with noise from Highland Main Line in distance and B9152						
Equipment								
Sound Level Meter	01dB Elme Solo	Serial No.	61046	Cal. Date	24-Jan-2014			
Microphone	01dB MCE212	Serial No.	142693	Cal. Date	24-Jan-2014			
Preamplifier	01dB Fre 21 5	Serial No.	16016	Cal. Date	24-Jan-2014			
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	9-May-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	1-Oct-2014	Time	10:05	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	2-Oct-2014	Time	10:35	
Measurement Location(s)								
Description	Residential Property in old estate standing on Balavil Estate - close to A9			Height above ground	1.25 m			
GPS Coordinates	NH79025, BNG02279	Bearing to source	South	Distance to source	50.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch / Photographs								
Weather								
<input type="checkbox"/> Measured	Equipment Details: Silva Windwatch							
<input type="checkbox"/> Estimated (Beaufort Scale)	Select:	Force	m/s	Description	Conditions			
	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input checked="" type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
Based on observation of local weather reports:	<input type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly		Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other:	Cloud	
Temperature	10-14°C			<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun			
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>Amin</sub>	L <sub>A90</sub>	L <sub>A10</sub>	Notes
Mains of Balavil, Kingussie	02/10/2014 - 03/10/2014	Daytime 0600 - 0000	61.6	83.5	29.8	45.3	65.8	See Below
		Night-time 0000 - 0600	56.7	73.3	29.4	33.4	60.0	
General Observations								
Location close to A9 at old but occupied residential location in the estate standing for the Balavil Estate. This location is predominantly affected by road traffic noise on the A9, together with some contribution from the Highland Main Line and the B9152 Kingussie to Kincairn road.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	1-Oct-2014		
Measurement Location		MP19 - Balavil House			By	IS		
Source(s) Description		Road traffic on A9						
Equipment								
Sound Level Meter	Cardie Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-May-2014			
Microphone	Cardie 1/2"	Serial No.	1026	Cal. Date	9-May-2014			
Preamplifier	Cardie MFDXP	Serial No.	5035	Cal. Date	9-May-2014			
Field Calibrator	Cardie GA607	Serial No.	035748	Cal. Date	9-May-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	1-Oct-2014	Time	11:00	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	1-Oct-2014	Time	14:15	
Measurement Location(s)								
Description	In garden on large estate house with direct line of sight to A9			Height above ground	1.25 m			
GPS Coordinates	NH79087 ENG02609	Bearing to source	South	Distance to source	260.00 m			
Vertical Ref. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
Weather								
<input type="checkbox"/> Measured	0 - 3 m/s	Equipment Details: Silva Windwatch						
<input type="checkbox"/> Estimated	(Beaufort Scale)	Select:	Force	m/s	Description	Conditions		
		<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.		
		<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.		
		<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rattle.		
		<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.		
		<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.		
		<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.		
Wind Direction	West-south	Conditions: <input type="checkbox"/> Fog <input type="checkbox"/> Frost <input checked="" type="checkbox"/> Other: Cloud						
Temperature	12-14°C	<input type="checkbox"/> Rain / Snow <input type="checkbox"/> Sun Occasional light rain						
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>Meq</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>10</sub>	L <sub>50</sub>	Notes
Balavil House	01/10/2014	11:00 - 3 hours	54.7	70.8	37.4	46.5	59.0	See Below
General Observations								
Isolated large estate house elevated above the A9 and with a clear view of the road. Sources included traffic on the A9, wind in the trees (although the measurement location was sheltered by those trees), cars on gravel drive and dogs from the house barking.								

Project		A9 Baseline Noise Assessment		Date	29-Sep-2014
Measurement Location		MP20 - Dunachton Lodge		By	IS
Source(s) Description		Road traffic on A9, movements on the Highland Main Line and activity around estate			
Equipment					
Sound Level Meter	Cardle Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-May-2014
Microphone	Cardle 1/2"	Serial No.	1026	Cal. Date	9-May-2014
Preamplifier	Cardle MFDXP	Serial No.	5035	Cal. Date	9-May-2014
Field Calibrator	Cardle GA607	Serial No.	035748	Cal. Date	9-May-2014
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	29-Sep-2014
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	29-Sep-2014
Measurement Location(s)					
Description	On large garden between Dunachton Lodge house and A9			Height above ground	1.25 m
GPS Coordinates	NH82237 ENG04734	Bearing to source	South East	Distance to source	110.00 m
Vertical Refl. Surface(s)	None			Distance to surface	- m
Sketch/ Photographs					
Weather					
<input type="checkbox"/> Measured	0 - 3 m/s	Equipment Details: Silva Windwatch			
<input type="checkbox"/> Estimated	(Beaufort Scale)	Select:	Force	m/s	Description
		<input type="checkbox"/>	0	<0.3	Calm
		<input type="checkbox"/>	1	0.3-1.5	Light air
		<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze
		<input type="checkbox"/>	3	3.3-5.5	Gentle breeze
		<input type="checkbox"/>	4	5.5-8.0	Moderate breeze
		<input type="checkbox"/>	5	8.0-10.8	Fresh breeze
Wind Direction	Westedy	Conditions: <input type="checkbox"/> Fog <input type="checkbox"/> Frost <input type="checkbox"/> Other:			
Temperature	15-18°C	<input type="checkbox"/> Rain / Snow <input checked="" type="checkbox"/> Sun			
Measured Noise Levels					
Location	Date	Time & Duration	L <sub>95%</sub>	L <sub>50%</sub>	L <sub>5%</sub>
Dunachton Lodge	29/09/2014	13:15 - 3 hours	55.1	67.2	37.1
					45.5
					59.4
Notes					
See Below					
General Observations					
Isolated location elevated from the A9 and with a clear line of sight to the road. The major noise source is the A9 throughout the measurement, with some activities around the measurement location including residents taking phone calls and the movement of vehicles on the gravel drive. In addition noise could be heard from the Highland Main Line and overflying aircraft.					



Noise Measurement Record

Project		A9 Baseline Noise Assessment			Date	29-Sep-2014		
Measurement Location		MP21 - Silverwood			By	IS		
Source(s) Description		Road Traffic on local road (B9152) and A9 which is more distant						
Equipment								
Sound Level Meter	01dB Blue Solo		Serial No.	61046	Cal. Date	24-Jan-2014		
Microphone	01dB MCE212		Serial No.	142693	Cal. Date	24-Jan-2014		
Preamplifier	01dB Pre 21 5		Serial No.	16016	Cal. Date	24-Jan-2014		
Field Calibrator	Castle GA607		Serial No.	035748	Cal. Date	9-May-2014		
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	29-Sep-2014	Time	08:55
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	30-Sep-2014	Time	09:35
Measurement Location(s)								
Description	Residential garden overlooking B9152 and A9 which is somewhat more distant				Height above ground	1.25 m		
GPS Coordinates	NH82824, ENG05536		Bearing to source	North West	Distance to source	155.00 m		
Vertical Refl. Surface(s)	None				Distance to surface	- m		
Sketch / Photographs								
Weather								
<input type="checkbox"/> Measured	Equipment Details: Silva Windwatch							
<input type="checkbox"/> Estimated	Select:	Force	m/s	Description	Conditions			
(Beaufort Scale)	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
Based on observation of local weather reports	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
	<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.			
Wind Direction	Westerly		Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud		
Temperature	5-16°C			<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun			
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>Aeq</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>A90</sub>	L <sub>A10</sub>	Notes
Silverwood, Dunachton Road, Kinross	29/09/2014 - 30/09/2014	Daytime 0600 - 0000	55.5	78.0	21.7	42.8	58.9	See Below
		Night-time 0000 - 0600	49.1	68.2	21.1	25.3	53.1	
General Observations								
Location close to B9152 and road traffic dominates at this location, together with noise from a slightly more distant A9 which is slightly sheltered from the residential location by the intervening topography.								



Noise Measurement Record

Project		A9 Baseline Noise Assessment		Date	23-Sep-2014
Measurement Location		MP22 - Adjacent to 17 Suidhe Crescent		By	IS
Source(s) Description		Road traffic on local road and A9 in distance, movements on the Highland Main Line and grounds maintenance work			
Equipment					
Sound Level Meter	Castle Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-May-2014
Microphone	Castle 1/2"	Serial No.	1026	Cal. Date	9-May-2014
Preamplifier	Castle MKDMP	Serial No.	5035	Cal. Date	9-May-2014
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	9-May-2014
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014
				Time	16:25
Measurement Location(s)					
Description	In parkland area adjacent to property on Suidhe Crescent, Kineraig			Height above ground	1.25 m
GPS Coordinates	NH83251 ENG06015	Bearing to source	North West	Distance to source	235.00 m
Vertical Refl. Surface(s)	None			Distance to surface	- m
Sketch/ Photographs					
Weather					
<input type="checkbox"/> Measured	0 - 2 m/s	Equipment Details: Silva Windwatch			
<input type="checkbox"/> Estimated	(Beaufort Scale)	Select:	Force	m/s	Description
		<input type="checkbox"/>	0	<0.3	Calm
		<input type="checkbox"/>	1	0.3-1.5	Light air
		<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze
		<input type="checkbox"/>	3	3.3-5.5	Gentle breeze
		<input type="checkbox"/>	4	5.5-8.0	Moderate breeze
		<input type="checkbox"/>	5	8.0-10.8	Fresh breeze
Wind Direction	Westerly	Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input type="checkbox"/> Other:
Temperature	8-15°C		<input type="checkbox"/> Rain / Snow	<input checked="" type="checkbox"/> Sun	
Measured Noise Levels					
Location	Date	Time & Duration	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>Amin</sub>
Suidhe Crescent	29/09/2014	10:00 - 3 hours	54.3	75.0	38.8
					L <sub>A(9)</sub>
					L <sub>A(10)</sub>
					Notes
					See Below
General Observations					
Location representative of a large number of properties in the centre of Kineraig somewhat set down from the A9 and partially protected from it by intervening topography. Sources noted included local road traffic in the vicinity and distance traffic on the A9, together with the overflight of aircraft, passage of trains on the Highland Main Line and some grounds maintenance works on residential locations in the vicinity.					



Noise Measurement Record

Project		A9 Baseline Noise Assessment		Date	24-Sep-2014			
Measurement Location		MP23 - The Old Manse		By	IS			
Source(s) Description		Road Traffic on A9 and local traffic (B9152), together with noise from domestic activity						
Equipment								
Sound Level Meter	01dB Elme Solo	Serial No.	61046	Cal. Date	24-Jan-2014			
Microphone	01dB MCE212	Serial No.	142693	Cal. Date	24-Jan-2014			
Preamplifier	01dB Pre 21 5	Serial No.	16016	Cal. Date	24-Jan-2014			
Field Calibrator	Castle GA607	Serial No.	035748	Cal. Date	8-May-2014			
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	24-Sep-2014			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	26-Sep-2014			
Measurement Location(s)								
Description	Residential garden overlooking A9 and sheltered from local road (B9152)			Height above ground	1.25 m			
GPS Coordinates	NH82237, BNG04734	Bearing to source	South East	Distance to source	90.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
Weather								
<input type="checkbox"/> Measured	Equipment Details: Silva Windwatch							
<input type="checkbox"/> Estimated (Beaufort Scale)	Select	Force	m/s	Description	Conditions			
Based on observation of local weather reports	<input type="checkbox"/>	0	<0.3	Calm	Calm. Smoke rises vertically.			
	<input checked="" type="checkbox"/>	1	0.3-1.5	Light air	Wind motion visible in smoke.			
	<input checked="" type="checkbox"/>	2	1.5-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.			
	<input checked="" type="checkbox"/>	3	3.3-5.5	Gentle breeze	Leaves and smaller twigs in constant motion.			
	<input type="checkbox"/>	4	5.5-8.0	Moderate breeze	Dust and loose paper raised. Small branches begin to move.			
<input type="checkbox"/>	5	8.0-10.8	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.				
Wind Direction	Westerly	Conditions: <input type="checkbox"/> Fog <input type="checkbox"/> Frost <input checked="" type="checkbox"/> Other: Cloud						
Temperature	10-16°C	<input type="checkbox"/> Rain / Snow <input type="checkbox"/> Sun						
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>Aeq</sub>	L <sub>AMax</sub>	L <sub>ANMax</sub>	L <sub>A90</sub>	L <sub>A10</sub>	Notes
The Old Manse, Kinerig	24/09/2014 - 26/09/2014	Drytime 0600 - 0000	55.3	85.4	26.2	47.2	57.4	See Below
		Night-time 0000 - 0600	52.5	69.5	27.7	40.3	54.6	
General Observations								
Location close to A9 and road traffic dominates at this location, together with limited residential activity as part of the location is an unoccupied holiday home. A9 is in a slight cutting at this location, and there are some impacts from a nearby Primary School at various times of the day.								

