

# Appendix 17.2

## Baseline Noise Survey

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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' (CRTN) 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 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).

1.2.2 The meter and calibrator have been calibrated in an accredited National Measurement Laboratory (NPL) within the past year and the details are shown in **Table 1** below.

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

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

1.2.3 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).

1.2.4 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 Details – Short Term Measurements

Equipment	Serial Number	NPL Calibration Certificate Number	UKAS/NPL Calibration Certificate Reference	Last Calibration Date
01dB Blue Solo Sound Level Meter	0062925	0062925/61288	S6312	09/09/2014
Castle GA607 Acoustic Calibrator	035748	035748/61288	S6312/07428	09/05/2014

- 1.2.5 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.
- 1.2.6 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. Most of the measurement locations have remained the same, although a couple were relocated to reflect access or security issues. However, 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:

Table 3: Baseline Noise Measurement Locations

Location	Measurement Duration	GPS Location of Measurement
Station House, Dalnaspidal, Pitlochry	3 Hr	NN64450 BNG73353
Balsporran Cottages, Dalwhinnie	24 Hr	NN62711 BNG79196
Drumochter Lodge, Dalwhinnie	3 Hr	NN63065 BNG79591
Loch Ericht Hotel, Dalwhinnie	3 Hr	NN63812 BNG84953
2, Truim View, Dalwhinnie	24 Hr	NN63693 BNG84335
Willet Cottage, Cuaich, Dalwhinnie	24 Hr	NN65573 BNG87071
Crubenmore Lodge, Newtonmore	3 Hr	NN67513 BNG91014
Invernahavon Caravan Park, Glentruim	3 Hr	NN68851 BNG94972
Ptarmigan Lodge, West Ralia	3 Hr	NN70467 BNG97075
Upper Nuide, Newtonmore	3 Hr	NN72837 BNG98471
Ruthven Farm House, Kingussie	3 Hr	NH75924 BNG00628
The Spinney, Spey Street, Kingussie	24 Hr	NH75948 BNG00558
Craig-An-Darach, Kingussie	24 Hr	NH76415 BNG00997
Three Bridges, Kingussie	3 Hr	NH77045 BNG01207

Location	Measurement Duration	GPS Location of Measurement
Kerrow Cottage, Kingussie	3 Hr	NH76635 BNG01227
Croila Road, Kingussie	3 Hr	NH76321 BNG01156
Ard Dalle, Lynchat, Kingussie	24 Hr	NH78148 BNG01832
Mains of Balavil, Kingussie	24 Hr	NH79025 BNG02279
Balavil House, Kingussie	3 Hr	NH79087 BNG02609
Dunachton Lodge, Kingussie	3 Hr	NH82237 BNG04734
Silverwood, Dunachton Road, Kincaig	24 Hr	NH82824 BNG05536
17, Suidhe Crescent, Kincaig	3 Hr	NH83251 BNG06015
The Old Manse, Alvie Estate, Kincaig	24 Hr	NH83485 BNG06506

1.3.7 The location of the measurements are indicated in **Figure 1** below:

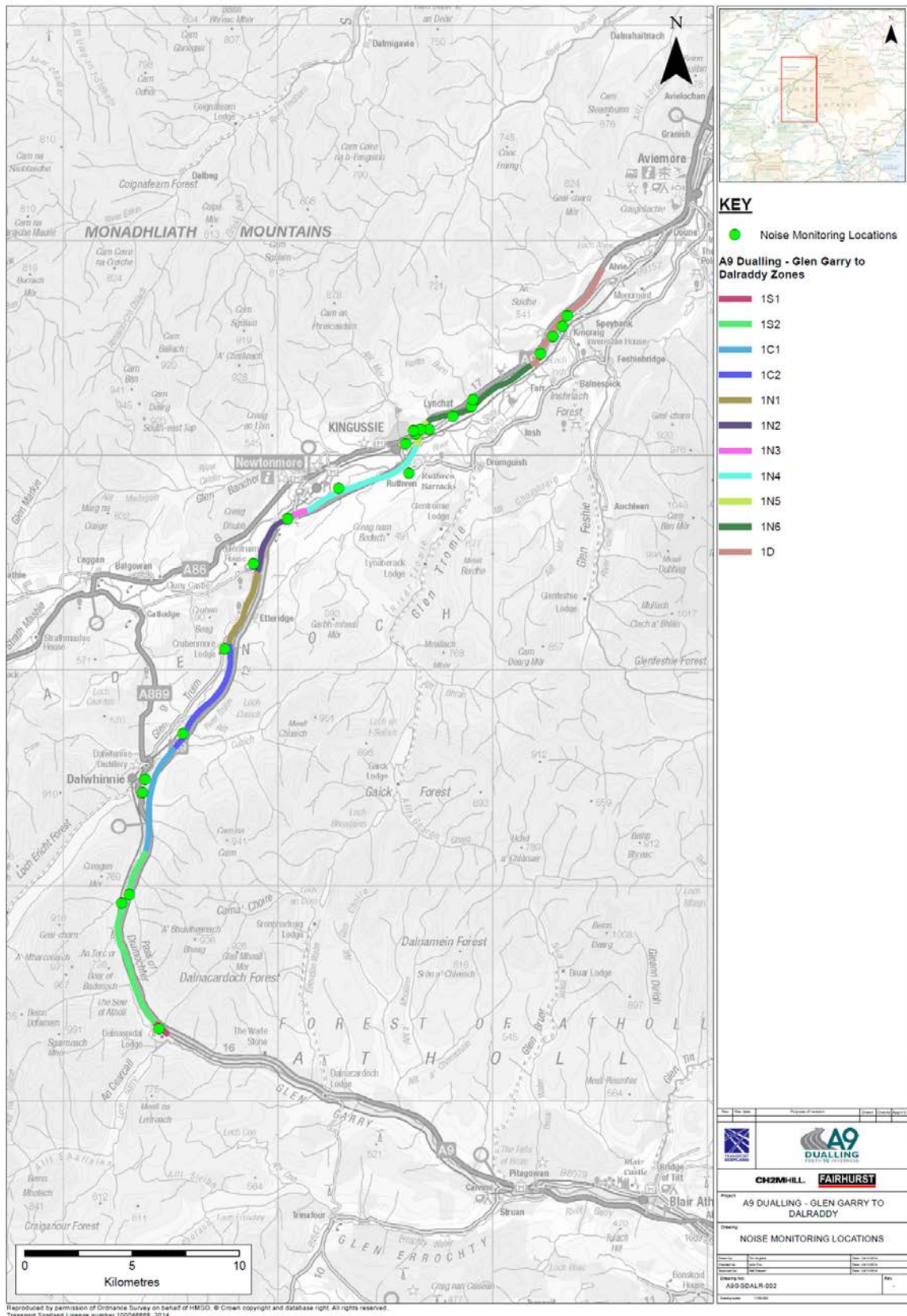


Figure 1: Noise Measurement Locations

## 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 Measurements, dB

Location	Measurement Duration	L <sub>Aeq,T</sub> dB	L <sub>A10,T</sub> dB
Station House, Dalnaspidal, Pitlochry	3 Hr	57.5	61.3
Balsporran Cottages, Dalwhinnie	06:00 – 24:00	57.4	59.6
	00:00 – 06:00	51.0	55.5
Drumochter Lodge, Dalwhinnie	3 Hr	58.8	63.6
Loch Ericht Hotel, Dalwhinnie	3 Hr	50.6	52.8
2, Truim View, Dalwhinnie	06:00 – 24:00	46.0	47.9
	00:00 – 06:00	38.6	42.3
Willet Cottage, Cuaich, Dalwhinnie	06:00 – 24:00	55.5	57.7
	00:00 – 06:00	49.2	53.3
Crubenmore Lodge, Newtonmore	3 Hr	50.3	53.4
Invernahavon Caravan Park, Glentruim	3 Hr	44.7	47.0
Ptarmigan Lodge, West Ralia	3 Hr	61.3	60.4
Upper Nuide, Newtonmore	3 Hr	49.4	54.3
Ruthven Farm House, Kingussie	3 Hr	50.9	55.3
The Spinney, Spey Street, Kingussie	06:00 – 24:00	50.3	47.8
	00:00 – 06:00	39.2	42.7
Craig-An-Darach, Kingussie	06:00 – 24:00	52.0	54.6
	00:00 – 06:00	45.9	50.2
Three Bridges, Kingussie	3 Hr	53.2	57.3
Kerrow Cottage, Kingussie	3 Hr	52.8	57.6
Croila Road, Kingussie	3 Hr	45.9	42.1
Ard Dalle, Lynchat, Kingussie	06:00 – 24:00	52.0	54.2
	00:00 – 06:00	49.7	50.2
Mains of Balavil, Kingussie	06:00 – 24:00	61.6	65.8
	00:00 – 06:00	56.7	60.0
Balavil House, Kingussie	3 Hr	54.7	59.0
Dunachton Lodge, Kingussie	3 Hr	55.1	59.4
Silverwood, Dunachton Road, Kincaig	06:00 – 24:00	55.5	58.9
	00:00 – 06:00	49.1	53.1
17, Suidhe Crescent, Kincaig	3 Hr	54.3	58.7
The Old Manse, Alvie Estate, Kincaig	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 CRTN, **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 and Calculated  $L_{A10,18h}$ , dB

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 has 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. 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.



- 1.5.2 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.
- 1.5.3 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 Kinncraig.
- 1.5.4 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	Castle Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-May-2014			
Microphone	Castle 35*	Serial No.	1026	Cal. Date	9-May-2014			
Preamplifier	Castle MKD0CP	Serial No.	5055	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	16-Sep-2014			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	16-Sep-2014			
Time	10:10							
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	NN64490 RNG73553	Bearing to source	North East	Distance to source	50.00 m			
Vertical Ref. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
<b>Weather</b>								
Measured	0 - 1 m/s	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 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 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	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>90%</sub>	L <sub>max</sub>	L <sub>min</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 - Baispoman 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	94dB Ehas Solo	Serial No.	61046	Cal. Date	24-Jan-2014			
Microphone	94dB MCE212	Serial No.	142693	Cal. Date	24-Jan-2014			
Preamplifier	94dB Pse 21.5	Serial No.	16016	Cal. Date	24-Jan-2014			
Field Calibrator	Casle GA607	Serial No.	035748	Cal. Date	3-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	18-Sep-2014			
<b>Measurement Location(s)</b>								
Description		B&B/ Residential Location Near Dinnochter Summit between A9 & Railway		Height above ground	1.25 m			
GPS Coordinates		NN62711 BNG79196		Bearing to source	East			
Vertical Ref. Surface(s)		None		Distance to source	130.00 m			
Distance to surface		-		Distance to surface	- m			
Sketch/ Photographs								
<b>Weather</b>								
<input type="checkbox"/> Measured <input type="checkbox"/> Estimated (Beaufort Scale) Based on observation of local weather reports and comments from resident		Equipment Details: Silva Windwatch 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 <input type="checkbox"/> Rain / Snow <input type="checkbox"/> Sun Drizzle in last hour of measurement				
Temperature		10-16°C						
<b>Measured Noise Levels</b>								
Location	Date	Time & Duration	L <sub>95%</sub>	L <sub>50%</sub>	L <sub>5%</sub>	L <sub>1%</sub>	L <sub>0.1%</sub>	Notes
Baispoman B&B	16/09/2014 -	Daytime 0600 - 0600	57.4	87.6	27.4	43.1	59.6	See Below
	18/09/2014	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 - Deamochter 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	Castle Pro-DX Vocis M GA131	Serial No.	0062925	Cal. Date	9-Mar-2014				
Microphone	Castle 94*	Serial No.	1026	Cal. Date	9-Mar-2014				
Preamplifier	Castle MKDXP	Serial No.	5035	Cal. Date	9-Mar-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				
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	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 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	Westerly		Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost				
Temperature	13.5-16°C			<input checked="" type="checkbox"/> Other: Cloud	<input type="checkbox"/> Rain / Snow				
<b>Measured Noise Levels</b>									
Location	Date	Time & Duration	L <sub>10m</sub>	L <sub>50m</sub>	L <sub>10m</sub>	L <sub>50m</sub>	L <sub>10m</sub>	L <sub>50m</sub>	Notes
Deamochter 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 Eicht Hotel			By	15	
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.	9062925		Cal. Date	9-May-2014	
Microphone	Castle 347	Serial No.	0026		Cal. Date	9-May-2014	
Preamplifier	Castle MKDXP	Serial No.	5035		Cal. Date	9-May-2014	
Field Calibrator	Castle GA607	Serial No.	935748		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	To A9 side of building on southern side of Dalwhinnie			Height above ground	1.25 m		
GPS Coordinates	NN63693 BNG84335	Bearing to source	East		Distance to source	380.00 m	
Vertical Refl. Surface(s)	None			Distance to surface	- m		
Sketch / Photographs							
Weather							
<input checked="" type="checkbox"/> Measured	0 - 2.5 m/s		Equipment Details: Silva Windhutch				
<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	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>1eq</sub>	L <sub>10%</sub>	L <sub>50%</sub>	L <sub>90%</sub>	L <sub>95%</sub> Notes
Loch Eicht Hotel Car Park	18/09/2014	10:00 - 3 hours	50.6	73.3	43.4	45.0	52.8 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 Beaulieu-Dunrobin 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		MP5 - 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				
Pre-amplifier	01dB Pae 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	18-Sep-2014				
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	19-Sep-2014				
Time	10:10	Time	10:15						
Measurement Location(s)									
Description				Height above ground	1.25 m				
GPS Coordinates		Heading to source	East	Distance to source	420.00 m				
Vertical Ref. Surface(s)				Distance to surface	m				
Sketch/ Photographs									
Weather									
<input type="checkbox"/> Measured	Equipment Details: 52m Windwatch								
<input type="checkbox"/> Estimated	Select:	Force	m/s	Description	Conditions				
(Beaufort Scale)	<input type="checkbox"/>	0	<0.5	Calm	Calm. Smoke rises vertically.				
	<input type="checkbox"/>	1	0.5-1.5	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	3.5-5.5	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	Westward	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>10,10</sub>	L <sub>50,10</sub>	L <sub>90,10</sub>	L <sub>10,15</sub>	L <sub>50,15</sub>	L <sub>90,15</sub>	Notes
No 2, Train View, Dalwhinnie	18/09/2014 -	Daytime 0600 - 0900	46.0	72.3	23.1	35.0	47.9	See Below	
	19/09/2014	Night-time 0000 - 0600	38.6	59.0	23.4	27.1	42.3		
General Observations									
Conditions damp at the time of meter set-up though 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 hindsong.									



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 MCF212	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	10:20			
				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)	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.			
Based on observation of local weather reports	<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			
Temperature	10-16°C			<input type="checkbox"/> Rain / Snow	<input checked="" type="checkbox"/> Other: Cloud			
				<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>AM</sub>	L <sub>AID</sub>	Notes
Willet Cottage, Cuaich, Dalwhinnie	19/09/2014 - 20/09/2014	Daytime 0600 - 0000	55.5	97.0	22.0	40.1	57.7	See Below
		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 - Cribbenmore 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							
<b>Equipment</b>								
Sound Level Meter	Cardle Pro-DXL 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 MKDMP	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	18-Sep-2014			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	18-Sep-2014			
Time	09:55							
Time	16:20							
<b>Measurement Location(s)</b>								
Description	To A9 side of building on opposite side of Truim Valley			Height above ground	1.25 m			
GPS Coordinates	NN67513 ENG91014	Bearing to source	East	Distance to source	245.00 m			
Vertical Ref. Surface(s)	Noise			Distance to surface	- m			
Sketch/ Photographs:								
<b>Weather</b>								
<input type="checkbox"/> Measured	0 - 1.8 m/s	<b>Equipment Details:</b> 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	Westedy	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				
<b>Measured Noise Levels</b>								
Location	Date	Time & Duration	L <sub>90</sub>	L <sub>AMAX</sub>	L <sub>AMIN</sub>	L <sub>90</sub>	L <sub>10</sub>	Notes
Cribbenmore Lodge	18/09/2014	13:15 - 3 hours	50.3	68.7	37.0	43.7	53.4	See Below
<b>General Observations</b>								
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.								

Project	A9 Baseline Noise Assessment			Date	19-Sep-2014
Measurement Location	MP6 - Invernahavaon Caravan Park			By	IS
Source(s) Description	Local Road traffic and activities on site - very little noise from A9 audible				
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 MKDXP	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	19-Sep-2014
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	19-Sep-2014
Time	10:00	Time	16:20		
Measurement Location(s)					
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					
Weather					
Measured	0 - 1 m/s	Equipment Details: Silva Windwatch			
Estimated (Beaufort Scale)		Select:	Force	m/s	Description
		<input type="checkbox"/>	0	<0.3	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
Conditions:		<input type="checkbox"/>	Fog	<input type="checkbox"/>	Frost
		<input type="checkbox"/>	Rain / Snow	<input checked="" type="checkbox"/>	Sun
Wind Direction	Westerly	Conditions: <input type="checkbox"/> Fog <input type="checkbox"/> Frost <input checked="" type="checkbox"/> Other: Cloud			
Temperature	14-16°C				
Measured Noise Levels					
Location	Date	Time & Duration	L <sub>95%</sub>	L <sub>50%</sub>	L <sub>5%</sub>
Invernahavaon Caravan Park	19/09/2014	10:00 - 3 hours	44.7	78.5	39.3
			40.5	47.0	
Notes: See Below					
General Observations					
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.					

Project	A9 Baseline Noise Assessment - Lot 1				Date	23-Sep-2014		
Measurement Location	MP9 - Ffarmigan 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	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 MFCDXP	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	Time	09:55	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014	Time	16:25	
Measurement Location(s)								
Description	In parking area of residential lodge at Ralis/ Newtonmore junction			Height above ground	1.25 m			
GPS Coordinates	NN70467 EBG97075	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	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	9-12°C		<input type="checkbox"/> Rain / Snow	<input type="checkbox"/> Sun				
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>95%</sub>	L <sub>50%</sub>	L <sub>5%</sub>	L <sub>10%</sub>	Notes	
Ffarmigan Lodge	23/09/2014	10:00 - 3 hours	61.3	99.3	32.4	39.8	60.4	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 - Ruthven Farmhouse			By	IS		
Source(s) Description		Road traffic on A9 and local road, agricultural activity and overflight of military aircraft						
Equipment								
Sound Level Meter	Cardie Pro-DX Voice 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	22-Sep-2014	Time	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB		Date	22-Sep-2014	Time	
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 Refl. Surface(s)	None				Distance to surface	- m		
Sketch/ Photographs								
Weather								
<input type="checkbox"/> Measured 0 - 1.9 m/s <input type="checkbox"/> Estimated (Beaufort Scale)		Equipment Detail: Silva Windwatch 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. [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:	<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				
Temperature	7-15°C							
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>90</sub>	L <sub>AM,10</sub>	L <sub>AM,5</sub>	L <sub>50</sub>	L <sub>10</sub>	Notes
Ruthven Farmhouse	22/09/2014	10:00 - 3 hours	50.9	75.1	36.1	41.8	55.3	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-scanners 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			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014			
<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)	<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 <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>day</sub></b>	<b>L<sub>AMG</sub></b>	<b>L<sub>AMG</sub></b>	<b>L<sub>AD</sub></b>	<b>L<sub>AD</sub></b>	<b>Notes</b>
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)	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 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>								
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
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.								



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							
<b>Equipment</b>								
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 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	30-Sep-2014			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	30-Sep-2014			
				Time	09:55			
				Time	16:25			
<b>Measurement Location(s)</b>								
Description	In garden between residential property and A9			Height above ground	1.25 m			
GPS Coordinates	NH77045 BNG01207	Bearing to source	North West	Distance to source	320.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch/ Photographs								
<b>Weather</b>								
Measured	0 - 3 m/s	Equipment Details: Silva Windwatch						
Estimated		Select:	Force	m/s	Description			
(Beaufort Scale)					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						
<b>Measured Noise Levels</b>								
Location	Date	Time & Duration	L <sub>Max</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>90</sub>	L <sub>50</sub>	Notes
Three Bridges	30/09/2014	10:00 - 3 hours	53.2	76.3	41.7	47.5	57.3	See Below
<b>General Observations</b>								
Location elevated close to A9 junction at east end of Kingslie and affected by noise from elevated section that road together with local traffic on the B9152 Kingslie to Kinross 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.								



Project		A9 Baseline Noise Assessment		Date	30-Sep-2014			
Measurement Location		MP15 - Kenzow 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 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	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 open area between residential property and A9			Height above ground	1.25 m			
GPS Coordinates	NH76635 BNG01227	Bearing to source	East	Distance to source	55.00 m			
Vertical Refl. Surface(s)	None			Distance to surface	- m			
Sketch / Photographs								
Weather								
<input type="checkbox"/> Measured	0 - 3 m/s	Equipment Details: <i>Silva Windwatch</i>						
<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	Condition:	<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>Aeq</sub>	L <sub>Amax</sub>	L <sub>Amin</sub>	L <sub>A90</sub>	L <sub>A10</sub>	Notes
Kenzow 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 Kingussie. 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		MP16 - 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	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 MFDXP	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	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	(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.		
		[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	12-13°C		[ ] Rain / Snow	[ ] Sun	Occasional light drizzle			
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>req</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>A90</sub>	L <sub>A10</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 Lynchat, 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	NHS2237, BNG04734	Bearing to source	North	Distance to source	90.00 m			
Vertical Ref. 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 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	Westerly		Conditions:	<input type="checkbox"/> Fog	<input type="checkbox"/> Frost	<input checked="" type="checkbox"/> Other: Cloud		
Temperature	6-16°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
Ard Dalle, Lynchat, Kingussie	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 Lynchat. Road traffic dominates at this location, together with limited residential activity particularly from children after school periods.								



Project		A9 Baseline Noise Assessment				Date	1-Oct-2014	
Measurement Location		MF18 - 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 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	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	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 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	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 BNG02609		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 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 type="checkbox"/> Sun	Occasional light rain		
Measured Noise Levels								
Location	Date	Time & Duration	L <sub>eq</sub>	L <sub>AMax</sub>	L <sub>AMin</sub>	L <sub>A(90)</sub>	L <sub>A(10)</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						
<b>Equipment</b>								
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 MKDXP			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	Time	09:55
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	29-Sep-2014	Time	16:25
<b>Measurement Location(s)</b>								
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:								
<b>Weather</b>								
<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 type="checkbox"/> Other:	
Temperature	15-18°C				<input type="checkbox"/> Rain / Snow	<input checked="" 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>A90</sub>	L <sub>A10</sub>	Notes
Dunachton Lodge	29/09/2014	13:15 - 3 hours	55.1	67.2	37.1	45.5	59.4	See Below
<b>General Observations</b>								
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 (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	5-16°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>AD</sub>	Notes		
Silverwood, Dunachton Road, Kineraig	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 Voicis M GA131	Serial No.	0062925	Cal. Date	9-May-2014			
Microphone	Castle 1/2"	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	23-Sep-2014			
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	23-Sep-2014			
Measurement Location(s)								
Description	In parkland area adjacent to property on Suidhe Crescent, Kinrossig			Height above ground	1.25 m			
GPS Coordinates	NH83251 BNG06015	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	Conditions		
			[ ] 0	<0.3	Calm	Calm. Smoke rises vertically.		
			[ ] 1	0.3-1.5	Light air	Wind motion visible in smoke.		
			[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	[ ] Other:			
Temperature	8-15°C		[ ] Rain / Snow	[X] 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
Suidhe Crescent	29/09/2014	10:00 - 3 hours	54.3	75.0	38.8	46.4	58.7	See Below
General Observations								
Location representative of a large number of properties in the centre of Kinrossig 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.								

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	9-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			
				Time	09:55			
				Time	10:30			
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			
		[ ] 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.			
		[X] 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	Westedy	Conditions: [ ] Fog [ ] Frost [X] Other: Cloud						
Temperature	10-16°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>A90</sub>	L <sub>A10</sub>	Notes
The Old Manse, Kinross	24/09/2014 - 26/09/2014	Daytime 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.								

