

## **APPENDIX 13.1** Construction Noise

Appendix 13.1 Construction Noise

## 1.1 Construction Noise

- 1.1.1 Table 1 below shows the results of calculations made using the methodology contained in BS 5288:2009. for the construction activities contained in the indicative construction plan included in Volume 2, Key Figures, Plans and Photographs.
- 1.1.2 Based on experience the following assumptions have been made regarding each construction phase:

*Table 1 –Plant and Machinery used in each Construction Phase*

<b>Operation</b>	<b>Plant Utilisation</b>
Site Preparation - Cut and Fill etc	1 no. tracked excavator, 1 no. dozer, 1 no. dump truck
Piling	1 no. hydraulic hammer, 1 no. tracked mobile crane, 1 no. hand held welder, 1 no. generator for welder
Foundations	1 no. truck mixer, 1 no. poker vibrator, 1 no. lorry mounted crane
Structural Steelwork	1 no. tower crane, 1 no. angle grinder, 1 no. hand held welder, 1 no. generator for welder
Precast Terracing	1 no. tower crane
Composite Flooring	1 no. truck mixer, 1 no. poker vibrator, 1 no. lorry mounted crane
Pool Construction	1 no. tracked excavator, 1 no. dumper, 1 no. cement mixer truck
Roof Steelwork	1 no. tower crane, 1 no. angle grinder,

Appendix 13.1 Construction Noise

	1 no. hand held welder, 1 no. generator for welder
Envelope	1 no. mobile telescopic crane, 1 no. diesel scissor lift

- 1.1.3 As a result of the relatively large distances involved, all noise sources are assumed to behave as point sources radiating hemispherically.
- 1.1.4 For each operation, the total noise level contribution from each of the plant associated with the operation has been calculated and assumed to be operating from the centre of each site.
- 1.1.5 Impact from haul traffic has not been considered at this stage.
- 1.1.6 Miscellaneous activities have not been considered at this stage
- 1.1.7 A worse case approach has been adopted, as each operation is assumed to operate continuously during the assessment period and each item of plant is assumed to operate continuously throughout each operation

## 1.2 Summary of Results:

- 1.2.1 The calculated noise levels vary from a minimum of 37dB to a maximum of 59dB

Table 2 - Construction Phase Calculated Noise Results

Week No	Merthyr Mawr L <sub>Aeq</sub> (dB)	Ty-Wrth-Y-Coed L <sub>Aeq</sub> (dB)	Island Close Farm L <sub>Aeq</sub> (dB)	Claypits Pottery L <sub>Aeq</sub> (dB)
5--9	50	50	53	54
10--11	51	51	55	57
12	49	46	56	59
13--14	50	48	56	58
15	50	49	56	58
16	52	51	55	58
17	51	50	55	55
18	51	51	55	56
19	51	50	55	55
20	53	52	57	58
21--22	53	52	57	58
23	55	55	58	59
24	53	53	56	59
25	52	53	55	57

26	54	55	55	54
27	55	56	57	55
28	55	56	57	58
29	55	56	57	55
30	53	54	56	55
31--32	52	52	55	54
33	52	52	55	54
34	47	47	50	51
35	47	48	50	49
36	49	49	51	50
39	49	50	51	49
40	49	50	51	49
41	47	47	49	48
42--43	45	45	47	46
44	44	44	45	45
45-50	37	37	42	44

Table 3 - Distances from assessment position to each construction site (in metres)

Construction Site	Merthyr Mawr	Ty-Wrth-Y-Coed	Island Farm Close	Claypits Pottery
Tennis Centre	675	865	345	265
Crusaders Stadium	550	570	405	500
Sports Centre	670	700	420	360
Indoor Training	735	740	500	320
Ravens Rugby	420	385	445	700
Bridgend FC	660	490	595	595

1.2.2 Distances have been taken from drawing ref 5200 SITE PLAN 01 20090710 kr

Appendix 13.1 Construction Noise

### 1.3 Calculations

Island Farm - Construction Noise

Operation Noise Levels

Notes:

All noise sources are assumed to be point sources

Where not provided, the sound power levels,  $L_w$ , are calculated using the formula  $L_w = L_p + 28$

References are to BS5228:2009 unless stated otherwise.

id	Operation	Total LwA (dB)				
1	Site Preparation - Cut and Fill etc	112				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Tracked Excavator	Table C2.3	78	100	78	106
	Dozer	Table C2.12	81	100	81	109
	Dump Truck (tipping fill)	Table C2.30	79	100	79	107

id	Operation	Total LwA (dB)				
2	Piling Operation	116				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Tubular Steel Piling - hydraulic hammer	Table C3.3	88	100	88	116
	Tracked Mobile Crane	Table C3.29	70	100	70	98
	Hand-held Welder	Table C2.31	73	100	73	101
	Generator for Welder	Table C2.32	73	100	73	101

id	Operation	Total LwA (dB)				
3	Foundations	119				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Truck Mixer	Table D6.38	88	100	88	116
	Poker Vibrator	Table D6.40	73	100	73	101
	Lorry Mounted Crane	Table D6.39	88	100	88	116

id	Operation	Total LwA (dB)				
4	Structural Steelwork	111				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Tower Crane	Table C4.49	77	100	77	105
	Angle Grinder	Table C4.93	80	100	80	108
	Hand-held Welder	Table C2.31	73	100	73	101
	Generator for Welder	Table C2.32	73	100	73	101

id	Operation	Total LwA (dB)				
5	Pre-Cast Terracing	105				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Tower Crane	Table C4.49	77	100	77	105

id	Operation	Total LwA (dB)				
6	Envelope	109				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Mobile Telescopic Crane	Table C4.39	77	100	77	105
	Diesel Scissor Lift	Table C4.59	78	100	78	106

id	Operation	Total LwA (dB)				
7	Pool Construction	109				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Tracked Excavator	Table C4.63	77	100	77	105
	Dumper	Table C4.3	76	100	76	104
	Cement mixer truck (discharging)	Table C.4.18	75	100	75	103

id	Operation	Total LwA (dB)				
8	Composite Floors	119				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Truck Mixer	Table D6.38	88	100	88	116
	Poker Vibrator	Table D6.40	73	100	73	101
	Lorry Mounted Crane	Table D6.39	88	100	88	116

id	Operation	Total LwA (dB)				
9	Roof Steelwork	111				
	<b>Breakdown</b>	<b>BS5228 Reference</b>	<b>L<sub>Aeq</sub>@10m</b>	<b>% On-time</b>	<b>On-time adjusted L<sub>Aeq</sub>@10m</b>	<b>LwA (dB)</b>
	Tower Crane	Table C4.49	77	100	77	105
	Angle Grinder	Table C4.93	80	100	80	108
	Hand-held Welder	Table C2.31	73	100	73	101
	Generator for Welder	Table C2.32	73	100	73	101

### Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week Nos 5-9

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	675	64.6	71.7	0	71.7	40.3	50
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	550	62.8	69.5	0	69.5	42.5	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	670	64.5	71.7	0	71.7	40.3	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	735	65.3	72.7	0	72.7	39.3	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	420	60.5	66.6	0	66.6	45.4	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	660	64.4	71.5	0	71.5	40.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	865	66.7	74.4	0	74.4	37.6	50
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	570	63.1	69.9	0	69.9	42.1	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	700	64.9	72.1	0	72.1	39.9	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	740	65.4	72.7	0	72.7	39.3	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	385	59.7	65.6	0	65.6	46.4	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	490	61.8	68.3	0	68.3	43.7	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	345	58.8	64.4	0	64.4	47.6	53
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	405	60.1	66.2	0	66.2	45.8	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	420	60.5	66.6	0	66.6	45.4	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	500	62.0	68.5	0	68.5	43.5	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	445	61.0	67.2	0	67.2	44.8	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	595	63.5	70.4	0	70.4	41.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	265	56.5	61.6	0	61.6	50.4	54
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	500	62.0	68.5	0	68.5	43.5	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	360	59.1	64.9	0	64.9	47.1	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	320	58.1	63.6	0	63.6	48.4	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	700	64.9	72.1	0	72.1	39.9	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	595	63.5	70.4	0	70.4	41.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week Nos 10-11

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	675	64.6	71.7	0	71.7	40.3	51
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	550	62.8	69.5	0	69.5	42.5	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	670	64.5	71.7	0	71.7	40.3	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	735	65.3	72.7	0	72.7	39.3	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	420	60.5	66.6	0	66.6	45.4	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	660	64.4	71.5	0	71.5	40.5	
Tennis Centre	2	Piling Operation	116	675	64.6	71.7	0	71.7	44.3	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	865	66.7	74.4	0	74.4	37.6	51
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	570	63.1	69.9	0	69.9	42.1	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	700	64.9	72.1	0	72.1	39.9	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	740	65.4	72.7	0	72.7	39.3	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	385	59.7	65.6	0	65.6	46.4	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	490	61.8	68.3	0	68.3	43.7	
Tennis Centre	2	Piling Operation	116	865	66.7	74.4	0	74.4	41.6	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	345	58.8	64.4	0	64.4	47.6	55
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	405	60.1	66.2	0	66.2	45.8	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	420	60.5	66.6	0	66.6	45.4	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	500	62.0	68.5	0	68.5	43.5	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	445	61.0	67.2	0	67.2	44.8	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	595	63.5	70.4	0	70.4	41.6	
Tennis Centre	2	Piling Operation	116	345	58.8	64.4	0	64.4	51.6	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	1	Site Preparation - Cut and Fill etc	112	265	56.5	61.6	0	61.6	50.4	57
Crusaders Stadium	1	Site Preparation - Cut and Fill etc	112	500	62.0	68.5	0	68.5	43.5	
Sports Centre	1	Site Preparation - Cut and Fill etc	112	360	59.1	64.9	0	64.9	47.1	
Indoor Training	1	Site Preparation - Cut and Fill etc	112	320	58.1	63.6	0	63.6	48.4	
Ravens Rugby	1	Site Preparation - Cut and Fill etc	112	700	64.9	72.1	0	72.1	39.9	
Bridgend FC	1	Site Preparation - Cut and Fill etc	112	595	63.5	70.4	0	70.4	41.6	
Tennis Centre	2	Piling Operation	116	265	56.5	61.6	0	61.6	54.4	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 12

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	2	Piling Operation	116	675	64.6	71.7	0	71.7	44.3	49
Tennis Centre	3	Foundations	119	675	64.6	71.7	0	71.7	47.3	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	2	Piling Operation	116	865	66.7	74.4	0	74.4	41.6	46
Tennis Centre	3	Foundations	119	865	66.7	74.4	0	74.4	44.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	2	Piling Operation	116	345	58.8	64.4	0	64.4	51.6	56
Tennis Centre	3	Foundations	119	345	58.8	64.4	0	64.4	54.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	2	Piling Operation	116	265	56.5	61.6	0	61.6	54.4	59
Tennis Centre	3	Foundations	119	265	56.5	61.6	0	61.6	57.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week Nos 13-14

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	675	64.6	71.7	0	71.7	47.3	50
Crusaders Stadium	2	Piling Operation	116	550	62.8	69.5	0	69.5	46.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	865	66.7	74.4	0	74.4	44.6	48
Crusaders Stadium	2	Piling Operation	116	570	63.1	69.9	0	69.9	46.1	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	345	58.8	64.4	0	64.4	54.6	56
Crusaders Stadium	2	Piling Operation	116	405	60.1	66.2	0	66.2	49.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	265	56.5	61.6	0	61.6	57.4	58
Crusaders Stadium	2	Piling Operation	116	500	62.0	68.5	0	68.5	47.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 15

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	675	64.6	71.7	0	71.7	47.3	50
Tennis Centre	4	Structural Steelwork	111	675	64.6	71.7	0	71.7	39.3	
Crusaders Stadium	2	Piling Operation	116	550	62.8	69.5	0	69.5	46.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	865	66.7	74.4	0	74.4	44.6	49
Tennis Centre	4	Structural Steelwork	111	865	66.7	74.4	0	74.4	36.6	
Crusaders Stadium	2	Piling Operation	116	570	63.1	69.9	0	69.9	46.1	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	345	58.8	64.4	0	64.4	54.6	56
Tennis Centre	4	Structural Steelwork	111	345	58.8	64.4	0	64.4	46.6	
Crusaders Stadium	2	Piling Operation	116	405	60.1	66.2	0	66.2	49.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	265	56.5	61.6	0	61.6	57.4	58
Tennis Centre	4	Structural Steelwork	111	265	56.5	61.6	0	61.6	49.4	
Crusaders Stadium	2	Piling Operation	116	500	62.0	68.5	0	68.5	47.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 16

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	675	64.6	71.7	0	71.7	39.3	52
Crusaders Stadium	2	Piling Operation	116	550	62.8	69.5	0	69.5	46.5	
Crusaders Stadium	3	Foundations	119	550	62.8	69.5	0	69.5	49.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	865	66.7	74.4	0	74.4	36.6	51
Crusaders Stadium	2	Piling Operation	116	570	63.1	69.9	0	69.9	46.1	
Crusaders Stadium	3	Foundations	119	570	63.1	69.9	0	69.9	49.1	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	345	58.8	64.4	0	64.4	46.6	55
Crusaders Stadium	2	Piling Operation	116	405	60.1	66.2	0	66.2	49.8	
Crusaders Stadium	3	Foundations	119	405	60.1	66.2	0	66.2	52.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	3	Foundations	119	265	56.5	61.6	0	61.6	57.4	58
Tennis Centre	4	Structural Steelwork	111	265	56.5	61.6	0	61.6	49.4	
Crusaders Stadium	2	Piling Operation	116	500	62.0	68.5	0	68.5	47.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 17

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	675	64.6	71.7	0	71.7	39.3	51
Crusaders Stadium	3	Foundations	119	550	62.8	69.5	0	69.5	49.5	
Sports Centre	2	Piling Operation	116	670	64.5	71.7	0	71.7	44.3	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	865	66.7	74.4	0	74.4	36.6	50
Crusaders Stadium	3	Foundations	119	570	63.1	69.9	0	69.9	49.1	
Sports Centre	2	Piling Operation	116	700	64.9	72.1	0	72.1	43.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	345	58.8	64.4	0	64.4	46.6	55
Crusaders Stadium	3	Foundations	119	405	60.1	66.2	0	66.2	52.8	
Sports Centre	2	Piling Operation	116	420	60.5	66.6	0	66.6	49.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	265	56.5	61.6	0	61.6	49.4	55
Crusaders Stadium	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Sports Centre	2	Piling Operation	116	360	59.1	64.9	0	64.9	51.1	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 18

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	675	64.6	71.7	0	71.7	39.3	51
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	
Crusaders Stadium	3	Foundations	119	550	62.8	69.5	0	69.5	49.5	
Sports Centre	2	Piling Operation	116	670	64.5	71.7	0	71.7	44.3	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	865	66.7	74.4	0	74.4	36.6	51
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	
Crusaders Stadium	3	Foundations	119	570	63.1	69.9	0	69.9	49.1	
Sports Centre	2	Piling Operation	116	700	64.9	72.1	0	72.1	43.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	345	58.8	64.4	0	64.4	46.6	55
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	
Crusaders Stadium	3	Foundations	119	405	60.1	66.2	0	66.2	52.8	
Sports Centre	2	Piling Operation	116	420	60.5	66.6	0	66.6	49.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	4	Structural Steelwork	111	265	56.5	61.6	0	61.6	49.4	56
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	
Crusaders Stadium	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Sports Centre	2	Piling Operation	116	360	59.1	64.9	0	64.9	51.1	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 19

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	51
Crusaders Stadium	3	Foundations	119	550	62.8	69.5	0	69.5	49.5	
Sports Centre	2	Piling Operation	116	670	64.5	71.7	0	71.7	44.3	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	50
Crusaders Stadium	3	Foundations	119	570	63.1	69.9	0	69.9	49.1	
Sports Centre	2	Piling Operation	116	700	64.9	72.1	0	72.1	43.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	55
Crusaders Stadium	3	Foundations	119	405	60.1	66.2	0	66.2	52.8	
Sports Centre	2	Piling Operation	116	420	60.5	66.6	0	66.6	49.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	55
Crusaders Stadium	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Sports Centre	2	Piling Operation	116	360	59.1	64.9	0	64.9	51.1	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 20

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	53
Crusaders Stadium	3	Foundations	119	550	62.8	69.5	0	69.5	49.5	
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Sports Centre	2	Piling Operation	116	670	64.5	71.7	0	71.7	44.3	
Sports Centre	3	Foundations	119	670	64.5	71.7	0	71.7	47.3	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	52
Crusaders Stadium	3	Foundations	119	570	63.1	69.9	0	69.9	49.1	
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Sports Centre	2	Piling Operation	116	700	64.9	72.1	0	72.1	43.9	
Sports Centre	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	57
Crusaders Stadium	3	Foundations	119	405	60.1	66.2	0	66.2	52.8	
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Sports Centre	2	Piling Operation	116	420	60.5	66.6	0	66.6	49.4	
Sports Centre	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	58
Crusaders Stadium	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Sports Centre	2	Piling Operation	116	360	59.1	64.9	0	64.9	51.1	
Sports Centre	3	Foundations	119	360	59.1	64.9	0	64.9	54.1	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week Nos 21-22

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	53
Crusaders Stadium	3	Foundations	119	550	62.8	69.5	0	69.5	49.5	
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Sports Centre	3	Foundations	119	670	64.5	71.7	0	71.7	47.3	
Indoor Training	2	Piling Operation	116	735	65.3	72.7	0	72.7	43.3	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	52
Crusaders Stadium	3	Foundations	119	570	63.1	69.9	0	69.9	49.1	
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Sports Centre	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
Indoor Training	2	Piling Operation	116	740	65.4	72.7	0	72.7	43.3	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	57
Crusaders Stadium	3	Foundations	119	405	60.1	66.2	0	66.2	52.8	
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Sports Centre	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
Indoor Training	2	Piling Operation	116	500	62.0	68.5	0	68.5	47.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	58
Crusaders Stadium	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Sports Centre	3	Foundations	119	360	59.1	64.9	0	64.9	54.1	
Indoor Training	2	Piling Operation	116	320	58.1	63.6	0	63.6	52.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 23

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	55
Crusaders Stadium	3	Foundations	119	550	62.8	69.5	0	69.5	49.5	
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Sports Centre	3	Foundations	119	670	64.5	71.7	0	71.7	47.3	
Indoor Training	3	Foundations	119	735	65.3	72.7	0	72.7	46.3	
Ravens Rugby	2	Piling Operation	116	420	60.5	66.6	0	66.6	49.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	55
Crusaders Stadium	3	Foundations	119	570	63.1	69.9	0	69.9	49.1	
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Sports Centre	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
Indoor Training	3	Foundations	119	740	65.4	72.7	0	72.7	46.3	
Ravens Rugby	2	Piling Operation	116	385	59.7	65.6	0	65.6	50.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	58
Crusaders Stadium	3	Foundations	119	405	60.1	66.2	0	66.2	52.8	
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Sports Centre	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
Indoor Training	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Ravens Rugby	2	Piling Operation	116	445	61.0	67.2	0	67.2	48.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	59
Crusaders Stadium	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Sports Centre	3	Foundations	119	360	59.1	64.9	0	64.9	54.1	
Indoor Training	3	Foundations	119	320	58.1	63.6	0	63.6	55.4	
Ravens Rugby	2	Piling Operation	116	700	64.9	72.1	0	72.1	43.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 24

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	53
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Sports Centre	3	Foundations	119	670	64.5	71.7	0	71.7	47.3	
Sports Centre	7	Pool Construction	109	670	64.5	71.7	0	71.7	37.3	
Indoor Training	3	Foundations	119	735	65.3	72.7	0	72.7	46.3	
Ravens Rugby	2	Piling Operation	116	420	60.5	66.6	0	66.6	49.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	53
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Sports Centre	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
Sports Centre	7	Pool Construction	109	700	64.9	72.1	0	72.1	36.9	
Indoor Training	3	Foundations	119	740	65.4	72.7	0	72.7	46.3	
Ravens Rugby	2	Piling Operation	116	385	59.7	65.6	0	65.6	50.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	56
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Sports Centre	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
Sports Centre	7	Pool Construction	109	420	60.5	66.6	0	66.6	42.4	
Indoor Training	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Ravens Rugby	2	Piling Operation	116	445	61.0	67.2	0	67.2	48.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	59
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Sports Centre	3	Foundations	119	360	59.1	64.9	0	64.9	54.1	
Sports Centre	7	Pool Construction	109	360	59.1	64.9	0	64.9	44.1	
Indoor Training	3	Foundations	119	320	58.1	63.6	0	63.6	55.4	
Ravens Rugby	2	Piling Operation	116	700	64.9	72.1	0	72.1	43.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 25

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	52
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Sports Centre	7	Pool Construction	109	670	64.5	71.7	0	71.7	37.3	
Indoor Training	3	Foundations	119	735	65.3	72.7	0	72.7	46.3	
Indoor Training	4	Structural Steelwork	111	735	65.3	72.7	0	72.7	38.3	
Ravens Rugby	2	Piling Operation	116	420	60.5	66.6	0	66.6	49.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	53
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Sports Centre	7	Pool Construction	109	700	64.9	72.1	0	72.1	36.9	
Indoor Training	3	Foundations	119	740	65.4	72.7	0	72.7	46.3	
Indoor Training	4	Structural Steelwork	111	740	65.4	72.7	0	72.7	38.3	
Ravens Rugby	2	Piling Operation	116	385	59.7	65.6	0	65.6	50.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	55
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Sports Centre	7	Pool Construction	109	420	60.5	66.6	0	66.6	42.4	
Indoor Training	3	Foundations	119	500	62.0	68.5	0	68.5	50.5	
Indoor Training	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Ravens Rugby	2	Piling Operation	116	445	61.0	67.2	0	67.2	48.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	57
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Sports Centre	7	Pool Construction	109	360	59.1	64.9	0	64.9	44.1	
Indoor Training	3	Foundations	119	320	58.1	63.6	0	63.6	55.4	
Indoor Training	4	Structural Steelwork	111	320	58.1	63.6	0	63.6	47.4	
Ravens Rugby	2	Piling Operation	116	700	64.9	72.1	0	72.1	43.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 26

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	54
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Sports Centre	7	Pool Construction	109	670	64.5	71.7	0	71.7	37.3	
Indoor Training	4	Structural Steelwork	111	735	65.3	72.7	0	72.7	38.3	
Ravens Rugby	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
Bridgend FC	2	Piling Operation	116	660	64.4	71.5	0	71.5	44.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	55
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Sports Centre	7	Pool Construction	109	700	64.9	72.1	0	72.1	36.9	
Indoor Training	4	Structural Steelwork	111	740	65.4	72.7	0	72.7	38.3	
Ravens Rugby	3	Foundations	119	385	59.7	65.6	0	65.6	53.4	
Bridgend FC	2	Piling Operation	116	490	61.8	68.3	0	68.3	47.7	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	55
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Sports Centre	7	Pool Construction	109	420	60.5	66.6	0	66.6	42.4	
Indoor Training	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Ravens Rugby	3	Foundations	119	445	61.0	67.2	0	67.2	51.8	
Bridgend FC	2	Piling Operation	116	595	63.5	70.4	0	70.4	45.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	54
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Sports Centre	7	Pool Construction	109	360	59.1	64.9	0	64.9	44.1	
Indoor Training	4	Structural Steelwork	111	320	58.1	63.6	0	63.6	47.4	
Ravens Rugby	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
Bridgend FC	2	Piling Operation	116	595	63.5	70.4	0	70.4	45.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 27

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	675	64.6	71.7	0	71.7	37.3	55
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Crusaders Stadium	8	Composite Floors	119	550	62.8	69.5	0	69.5	49.5	
Sports Centre	7	Pool Construction	109	670	64.5	71.7	0	71.7	37.3	
Indoor Training	4	Structural Steelwork	111	735	65.3	72.7	0	72.7	38.3	
Ravens Rugby	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
Bridgend FC	2	Piling Operation	116	660	64.4	71.5	0	71.5	44.5	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	865	66.7	74.4	0	74.4	34.6	56
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Crusaders Stadium	8	Composite Floors	119	570	63.1	69.9	0	69.9	49.1	
Sports Centre	7	Pool Construction	109	700	64.9	72.1	0	72.1	36.9	
Indoor Training	4	Structural Steelwork	111	740	65.4	72.7	0	72.7	38.3	
Ravens Rugby	3	Foundations	119	385	59.7	65.6	0	65.6	53.4	
Bridgend FC	2	Piling Operation	116	490	61.8	68.3	0	68.3	47.7	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	345	58.8	64.4	0	64.4	44.6	57
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Crusaders Stadium	8	Composite Floors	119	405	60.1	66.2	0	66.2	52.8	
Sports Centre	7	Pool Construction	109	420	60.5	66.6	0	66.6	42.4	
Indoor Training	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Ravens Rugby	3	Foundations	119	445	61.0	67.2	0	67.2	51.8	
Bridgend FC	2	Piling Operation	116	595	63.5	70.4	0	70.4	45.6	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Tennis Centre	6	Envelope	109	265	56.5	61.6	0	61.6	47.4	55
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Crusaders Stadium	8	Composite Floors	119	500	62.0	68.5	0	68.5	50.5	
Sports Centre	7	Pool Construction	109	360	59.1	64.9	0	64.9	44.1	
Indoor Training	4	Structural Steelwork	111	320	58.1	63.6	0	63.6	47.4	
Ravens Rugby	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
Bridgend FC	2	Piling Operation	116	595	63.5	70.4	0	70.4	45.6	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 28

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	55
Crusaders Stadium	8	Composite Floors	119	550	62.8	69.5	0	69.5	49.5	
Sports Centre	7	Pool Construction	109	670	64.5	71.7	0	71.7	37.3	
Indoor Training	8	Composite Floors	119	735	65.3	72.7	0	72.7	46.3	
Ravens Rugby	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
Bridgend FC	2	Piling Operation	116	660	64.4	71.5	0	71.5	44.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	56
Crusaders Stadium	8	Composite Floors	119	570	63.1	69.9	0	69.9	49.1	
Sports Centre	7	Pool Construction	109	700	64.9	72.1	0	72.1	36.9	
Indoor Training	8	Composite Floors	119	740	65.4	72.7	0	72.7	46.3	
Ravens Rugby	3	Foundations	119	385	59.7	65.6	0	65.6	53.4	
Bridgend FC	2	Piling Operation	116	490	61.8	68.3	0	68.3	47.7	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	57
Crusaders Stadium	8	Composite Floors	119	405	60.1	66.2	0	66.2	52.8	
Sports Centre	7	Pool Construction	109	420	60.5	66.6	0	66.6	42.4	
Indoor Training	8	Composite Floors	119	500	62.0	68.5	0	68.5	50.5	
Ravens Rugby	3	Foundations	119	445	61.0	67.2	0	67.2	51.8	
Bridgend FC	2	Piling Operation	116	595	63.5	70.4	0	70.4	45.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	58
Crusaders Stadium	8	Composite Floors	119	500	62.0	68.5	0	68.5	50.5	
Sports Centre	7	Pool Construction	109	360	59.1	64.9	0	64.9	44.1	
Indoor Training	8	Composite Floors	119	320	58.1	63.6	0	63.6	55.4	
Ravens Rugby	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
Bridgend FC	2	Piling Operation	116	595	63.5	70.4	0	70.4	45.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 29

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	55
Crusaders Stadium	8	Composite Floors	119	550	62.8	69.5	0	69.5	49.5	
Sports Centre	7	Pool Construction	109	670	64.5	71.7	0	71.7	37.3	
Indoor Training	6	Envelope	109	735	65.3	72.7	0	72.7	36.3	
Ravens Rugby	3	Foundations	119	420	60.5	66.6	0	66.6	52.4	
Bridgend FC	3	Foundations	119	660	64.4	71.5	0	71.5	47.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	56
Crusaders Stadium	8	Composite Floors	119	570	63.1	69.9	0	69.9	49.1	
Sports Centre	7	Pool Construction	109	700	64.9	72.1	0	72.1	36.9	
Indoor Training	6	Envelope	109	740	65.4	72.7	0	72.7	36.3	
Ravens Rugby	3	Foundations	119	385	59.7	65.6	0	65.6	53.4	
Bridgend FC	3	Foundations	119	490	61.8	68.3	0	68.3	50.7	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	57
Crusaders Stadium	8	Composite Floors	119	405	60.1	66.2	0	66.2	52.8	
Sports Centre	7	Pool Construction	109	420	60.5	66.6	0	66.6	42.4	
Indoor Training	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Ravens Rugby	3	Foundations	119	445	61.0	67.2	0	67.2	51.8	
Bridgend FC	3	Foundations	119	595	63.5	70.4	0	70.4	48.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	55
Crusaders Stadium	8	Composite Floors	119	500	62.0	68.5	0	68.5	50.5	
Sports Centre	7	Pool Construction	109	360	59.1	64.9	0	64.9	44.1	
Indoor Training	6	Envelope	109	320	58.1	63.6	0	63.6	45.4	
Ravens Rugby	3	Foundations	119	700	64.9	72.1	0	72.1	46.9	
Bridgend FC	3	Foundations	119	595	63.5	70.4	0	70.4	48.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

## Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 30

### Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	53
Crusaders Stadium	8	Composite Floors	119	550	62.8	69.5	0	69.5	49.5	
Sports Centre	4	Structural Steelwork	111	670	64.5	71.7	0	71.7	39.3	
Indoor Training	6	Envelope	109	735	65.3	72.7	0	72.7	36.3	
Ravens Rugby	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Bridgend FC	3	Foundations	119	660	64.4	71.5	0	71.5	47.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

### Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	54
Crusaders Stadium	8	Composite Floors	119	570	63.1	69.9	0	69.9	49.1	
Sports Centre	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Indoor Training	6	Envelope	109	740	65.4	72.7	0	72.7	36.3	
Ravens Rugby	4	Structural Steelwork	111	385	59.7	65.6	0	65.6	45.4	
Bridgend FC	3	Foundations	119	490	61.8	68.3	0	68.3	50.7	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

### Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	56
Crusaders Stadium	8	Composite Floors	119	405	60.1	66.2	0	66.2	52.8	
Sports Centre	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Indoor Training	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Ravens Rugby	4	Structural Steelwork	111	445	61.0	67.2	0	67.2	43.8	
Bridgend FC	3	Foundations	119	595	63.5	70.4	0	70.4	48.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

### Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	55
Crusaders Stadium	8	Composite Floors	119	500	62.0	68.5	0	68.5	50.5	
Sports Centre	4	Structural Steelwork	111	360	59.1	64.9	0	64.9	46.1	
Indoor Training	6	Envelope	109	320	58.1	63.6	0	63.6	45.4	
Ravens Rugby	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Bridgend FC	3	Foundations	119	595	63.5	70.4	0	70.4	48.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

**Notes:**

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week Nos 31-32

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	52
Crusaders Stadium	8	Composite Floors	119	550	62.8	69.5	0	69.5	49.5	
Crusaders Stadium	5	Pre-Cast Terracing	105	550	62.8	69.5	0	69.5	35.5	
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	4	Structural Steelwork	111	670	64.5	71.7	0	71.7	39.3	
Indoor Training	6	Envelope	109	735	65.3	72.7	0	72.7	36.3	
Ravens Rugby	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Bridgend FC	4	Structural Steelwork	111	660	64.4	71.5	0	71.5	39.5	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	52
Crusaders Stadium	8	Composite Floors	119	570	63.1	69.9	0	69.9	49.1	
Crusaders Stadium	5	Pre-Cast Terracing	105	570	63.1	69.9	0	69.9	35.1	
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Indoor Training	6	Envelope	109	740	65.4	72.7	0	72.7	36.3	
Ravens Rugby	4	Structural Steelwork	111	385	59.7	65.6	0	65.6	45.4	
Bridgend FC	4	Structural Steelwork	111	490	61.8	68.3	0	68.3	42.7	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	55
Crusaders Stadium	8	Composite Floors	119	405	60.1	66.2	0	66.2	52.8	
Crusaders Stadium	5	Pre-Cast Terracing	105	405	60.1	66.2	0	66.2	38.8	
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Indoor Training	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Ravens Rugby	4	Structural Steelwork	111	445	61.0	67.2	0	67.2	43.8	
Bridgend FC	4	Structural Steelwork	111	595	63.5	70.4	0	70.4	40.6	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	54
Crusaders Stadium	8	Composite Floors	119	500	62.0	68.5	0	68.5	50.5	
Crusaders Stadium	5	Pre-Cast Terracing	105	500	62.0	68.5	0	68.5	36.5	
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	4	Structural Steelwork	111	360	59.1	64.9	0	64.9	46.1	
Indoor Training	6	Envelope	109	320	58.1	63.6	0	63.6	45.4	
Ravens Rugby	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Bridgend FC	4	Structural Steelwork	111	595	63.5	70.4	0	70.4	40.6	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 33

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	550	62.8	69.5	0	69.5	41.5	52
Crusaders Stadium	8	Composite Floors	119	550	62.8	69.5	0	69.5	49.5	
Crusaders Stadium	5	Pre-Cast Terracing	105	550	62.8	69.5	0	69.5	35.5	
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	4	Structural Steelwork	111	670	64.5	71.7	0	71.7	39.3	
Indoor Training	6	Envelope	109	735	65.3	72.7	0	72.7	36.3	
Ravens Rugby	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Bridgend FC	5	Pre-Cast Terracing	105	660	64.4	71.5	0	71.5	33.5	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	570	63.1	69.9	0	69.9	41.1	52
Crusaders Stadium	8	Composite Floors	119	570	63.1	69.9	0	69.9	49.1	
Crusaders Stadium	5	Pre-Cast Terracing	105	570	63.1	69.9	0	69.9	35.1	
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Indoor Training	6	Envelope	109	740	65.4	72.7	0	72.7	36.3	
Ravens Rugby	4	Structural Steelwork	111	385	59.7	65.6	0	65.6	45.4	
Bridgend FC	5	Pre-Cast Terracing	105	490	61.8	68.3	0	68.3	36.7	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	405	60.1	66.2	0	66.2	44.8	55
Crusaders Stadium	8	Composite Floors	119	405	60.1	66.2	0	66.2	52.8	
Crusaders Stadium	5	Pre-Cast Terracing	105	405	60.1	66.2	0	66.2	38.8	
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Indoor Training	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Ravens Rugby	4	Structural Steelwork	111	445	61.0	67.2	0	67.2	43.8	
Bridgend FC	5	Pre-Cast Terracing	105	595	63.5	70.4	0	70.4	34.6	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	4	Structural Steelwork	111	500	62.0	68.5	0	68.5	42.5	54
Crusaders Stadium	8	Composite Floors	119	500	62.0	68.5	0	68.5	50.5	
Crusaders Stadium	5	Pre-Cast Terracing	105	500	62.0	68.5	0	68.5	36.5	
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	4	Structural Steelwork	111	360	59.1	64.9	0	64.9	46.1	
Indoor Training	6	Envelope	109	320	58.1	63.6	0	63.6	45.4	
Ravens Rugby	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Bridgend FC	5	Pre-Cast Terracing	105	595	63.5	70.4	0	70.4	34.6	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 34

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	550	62.8	69.5	0	69.5	35.5	47
Crusaders Stadium	9	Roof Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	4	Structural Steelwork	111	670	64.5	71.7	0	71.7	39.3	
Indoor Training	6	Envelope	109	735	65.3	72.7	0	72.7	36.3	
Ravens Rugby	5	Pre-Cast Terracing	105	420	60.5	66.6	0	66.6	38.4	
Bridgend FC	5	Pre-Cast Terracing	105	660	64.4	71.5	0	71.5	33.5	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	570	63.1	69.9	0	69.9	35.1	47
Crusaders Stadium	9	Roof Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Indoor Training	6	Envelope	109	740	65.4	72.7	0	72.7	36.3	
Ravens Rugby	5	Pre-Cast Terracing	105	385	59.7	65.6	0	65.6	39.4	
Bridgend FC	5	Pre-Cast Terracing	105	490	61.8	68.3	0	68.3	36.7	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	405	60.1	66.2	0	66.2	38.8	50
Crusaders Stadium	9	Roof Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Indoor Training	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Ravens Rugby	5	Pre-Cast Terracing	105	445	61.0	67.2	0	67.2	37.8	
Bridgend FC	5	Pre-Cast Terracing	105	595	63.5	70.4	0	70.4	34.6	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	500	62.0	68.5	0	68.5	36.5	51
Crusaders Stadium	9	Roof Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	4	Structural Steelwork	111	360	59.1	64.9	0	64.9	46.1	
Indoor Training	6	Envelope	109	320	58.1	63.6	0	63.6	45.4	
Ravens Rugby	5	Pre-Cast Terracing	105	700	64.9	72.1	0	72.1	32.9	
Bridgend FC	5	Pre-Cast Terracing	105	595	63.5	70.4	0	70.4	34.6	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 35

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	550	62.8	69.5	0	69.5	35.5	47
Crusaders Stadium	9	Roof Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	4	Structural Steelwork	111	670	64.5	71.7	0	71.7	39.3	
Ravens Rugby	5	Pre-Cast Terracing	105	420	60.5	66.6	0	66.6	38.4	
Bridgend FC	9	Roof Steelwork	111	660	64.4	71.5	0	71.5	39.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	570	63.1	69.9	0	69.9	35.1	48
Crusaders Stadium	9	Roof Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Ravens Rugby	5	Pre-Cast Terracing	105	385	59.7	65.6	0	65.6	39.4	
Bridgend FC	9	Roof Steelwork	111	490	61.8	68.3	0	68.3	42.7	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	405	60.1	66.2	0	66.2	38.8	50
Crusaders Stadium	9	Roof Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Ravens Rugby	5	Pre-Cast Terracing	105	445	61.0	67.2	0	67.2	37.8	
Bridgend FC	9	Roof Steelwork	111	595	63.5	70.4	0	70.4	40.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	500	62.0	68.5	0	68.5	36.5	49
Crusaders Stadium	9	Roof Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	4	Structural Steelwork	111	360	59.1	64.9	0	64.9	46.1	
Ravens Rugby	5	Pre-Cast Terracing	105	700	64.9	72.1	0	72.1	32.9	
Bridgend FC	9	Roof Steelwork	111	595	63.5	70.4	0	70.4	40.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 36

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	550	62.8	69.5	0	69.5	35.5	49
Crusaders Stadium	9	Roof Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	4	Structural Steelwork	111	670	64.5	71.7	0	71.7	39.3	
Ravens Rugby	5	Pre-Cast Terracing	105	420	60.5	66.6	0	66.6	38.4	
Ravens Rugby	9	Roof Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Bridgend FC	6	Envelope	109	660	64.4	71.5	0	71.5	37.5	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	570	63.1	69.9	0	69.9	35.1	49
Crusaders Stadium	9	Roof Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	4	Structural Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Ravens Rugby	5	Pre-Cast Terracing	105	385	59.7	65.6	0	65.6	39.4	
Ravens Rugby	9	Roof Steelwork	111	385	59.7	65.6	0	65.6	45.4	
Bridgend FC	6	Envelope	109	490	61.8	68.3	0	68.3	40.7	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	405	60.1	66.2	0	66.2	38.8	51
Crusaders Stadium	9	Roof Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	4	Structural Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Ravens Rugby	5	Pre-Cast Terracing	105	445	61.0	67.2	0	67.2	37.8	
Ravens Rugby	9	Roof Steelwork	111	445	61.0	67.2	0	67.2	43.8	
Bridgend FC	6	Envelope	109	595	63.5	70.4	0	70.4	38.6	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	500	62.0	68.5	0	68.5	36.5	50
Crusaders Stadium	9	Roof Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	4	Structural Steelwork	111	360	59.1	64.9	0	64.9	46.1	
Ravens Rugby	5	Pre-Cast Terracing	105	700	64.9	72.1	0	72.1	32.9	
Ravens Rugby	9	Roof Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Bridgend FC	6	Envelope	109	595	63.5	70.4	0	70.4	38.6	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 39

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	550	62.8	69.5	0	69.5	35.5	49
Crusaders Stadium	9	Roof Steelwork	111	550	62.8	69.5	0	69.5	41.5	
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	6	Envelope	109	670	64.5	71.7	0	71.7	37.3	
Ravens Rugby	9	Roof Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Ravens Rugby	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
Bridgend FC	6	Envelope	109	660	64.4	71.5	0	71.5	37.5	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	570	63.1	69.9	0	69.9	35.1	50
Crusaders Stadium	9	Roof Steelwork	111	570	63.1	69.9	0	69.9	41.1	
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
Ravens Rugby	9	Roof Steelwork	111	385	59.7	65.6	0	65.6	45.4	
Ravens Rugby	6	Envelope	109	385	59.7	65.6	0	65.6	43.4	
Bridgend FC	6	Envelope	109	490	61.8	68.3	0	68.3	40.7	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	405	60.1	66.2	0	66.2	38.8	51
Crusaders Stadium	9	Roof Steelwork	111	405	60.1	66.2	0	66.2	44.8	
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
Ravens Rugby	9	Roof Steelwork	111	445	61.0	67.2	0	67.2	43.8	
Ravens Rugby	6	Envelope	109	445	61.0	67.2	0	67.2	41.8	
Bridgend FC	6	Envelope	109	595	63.5	70.4	0	70.4	38.6	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	5	Pre-Cast Terracing	105	500	62.0	68.5	0	68.5	36.5	49
Crusaders Stadium	9	Roof Steelwork	111	500	62.0	68.5	0	68.5	42.5	
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	6	Envelope	109	360	59.1	64.9	0	64.9	44.1	
Ravens Rugby	9	Roof Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Ravens Rugby	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
Bridgend FC	6	Envelope	109	595	63.5	70.4	0	70.4	38.6	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 40

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	550	62.8	69.5	0	69.5	41.5	49
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	6	Envelope	109	670	64.5	71.7	0	71.7	37.3	
Ravens Rugby	9	Roof Steelwork	111	420	60.5	66.6	0	66.6	44.4	
Ravens Rugby	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
Bridgend FC	6	Envelope	109	660	64.4	71.5	0	71.5	37.5	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	570	63.1	69.9	0	69.9	41.1	50
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
Ravens Rugby	9	Roof Steelwork	111	385	59.7	65.6	0	65.6	45.4	
Ravens Rugby	6	Envelope	109	385	59.7	65.6	0	65.6	43.4	
Bridgend FC	6	Envelope	109	490	61.8	68.3	0	68.3	40.7	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	405	60.1	66.2	0	66.2	44.8	51
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
Ravens Rugby	9	Roof Steelwork	111	445	61.0	67.2	0	67.2	43.8	
Ravens Rugby	6	Envelope	109	445	61.0	67.2	0	67.2	41.8	
Bridgend FC	6	Envelope	109	595	63.5	70.4	0	70.4	38.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	500	62.0	68.5	0	68.5	42.5	49
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	6	Envelope	109	360	59.1	64.9	0	64.9	44.1	
Ravens Rugby	9	Roof Steelwork	111	700	64.9	72.1	0	72.1	38.9	
Ravens Rugby	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
Bridgend FC	6	Envelope	109	595	63.5	70.4	0	70.4	38.6	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 41

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	550	62.8	69.5	0	69.5	41.5	47
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	
Sports Centre	6	Envelope	109	670	64.5	71.7	0	71.7	37.3	
Ravens Rugby	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	570	63.1	69.9	0	69.9	41.1	47
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	
Sports Centre	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
Ravens Rugby	6	Envelope	109	385	59.7	65.6	0	65.6	43.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	405	60.1	66.2	0	66.2	44.8	49
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	
Sports Centre	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
Ravens Rugby	6	Envelope	109	445	61.0	67.2	0	67.2	41.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	9	Roof Steelwork	111	500	62.0	68.5	0	68.5	42.5	48
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	
Sports Centre	6	Envelope	109	360	59.1	64.9	0	64.9	44.1	
Ravens Rugby	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week Nos 42-43

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	6	Envelope	109	550	62.8	69.5	0	69.5	39.5	45
Sports Centre	6	Envelope	109	670	64.5	71.7	0	71.7	37.3	
Ravens Rugby	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	6	Envelope	109	570	63.1	69.9	0	69.9	39.1	45
Sports Centre	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
Ravens Rugby	6	Envelope	109	385	59.7	65.6	0	65.6	43.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	6	Envelope	109	405	60.1	66.2	0	66.2	42.8	47
Sports Centre	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
Ravens Rugby	6	Envelope	109	445	61.0	67.2	0	67.2	41.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Crusaders Stadium	6	Envelope	109	500	62.0	68.5	0	68.5	40.5	46
Sports Centre	6	Envelope	109	360	59.1	64.9	0	64.9	44.1	
Ravens Rugby	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week No 44

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	670	64.5	71.7	0	71.7	37.3	44
Ravens Rugby	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	44
Ravens Rugby	6	Envelope	109	385	59.7	65.6	0	65.6	43.4	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	45
Ravens Rugby	6	Envelope	109	445	61.0	67.2	0	67.2	41.8	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	360	59.1	64.9	0	64.9	44.1	45
Ravens Rugby	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)

It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source

Distances are to centre of proposed site

ISLAND FARM SPORTS VILLAGE, BRIDGEND, WALES  
Environmental Statement

Appendix 13.1 Construction Noise

Island Farm Construction Noise  
BS5228 Method for plant sound power level (F.2.3)

Island Farm - Construction Phase  
Week Nos 45-50

Assessment Location 1: Merthyr Mawr

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	670	64.5	71.7	0	71.7	37.3	37
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 2: Ty-Wrth-Y-Coed

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	700	64.9	72.1	0	72.1	36.9	37
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 3: Island Farm Close

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	420	60.5	66.6	0	66.6	42.4	42
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Assessment Location 4: Claypits Pottery

Location		Construction Activity	LWA (dB)	Distance from property (m)	Distance Attenuation (Hard Ground) (dB)	Distance Attenuation (Soft Ground) (dB)	Barrier Attenuation (dB)	Total Attenuation (dB)	Predicted LAeq at Property (dB)	Total LAeq at Property (dB)
	id									
Sports Centre	6	Envelope	109	360	59.1	64.9	0	64.9	44.1	44
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	
			0	0	0.0	0.0	0	0.0	0.0	

Notes:

Total attenuation is either due to soft ground only or from screening and hard ground - whichever is the greater (D3.2.2.2)  
It is assumed that due to the distances involved and the small area over which the plant operates, the noise sources behave as a static point source  
Distances are to centre of proposed site