



CLEVE HILL SOLAR PARK

ENVIRONMENTAL STATEMENT
VOLUME 4 - TECHNICAL APPENDIX A12.2
CONSTRUCTION CALCULATION SHEETS - HUMAN RECEPTORS

November 2018
Revision A

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APFP Regulation: 5(2)(a)

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Activity

Handstanding and Tracks

Receptor Name:	Hagden Barn
Receptor Height:	4

Activity Level	37.0
Haulage Level	52.0
TOTAL	52.2

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C2, Item 21	Tracked Excavator	2	71	10	2.5	4	100	102	50		0
Table C2, Item 24	Compactor	1	72	10	2.5	4	100	102	50		0
Table C2, Item 30	Wheel loader	1	72	10	2.5	4	100	102	50		0
Table C6, Item 36	Diesel Bowser	1	89	10	2.5	4	100	117	5		0
							Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} 1	Anti Log
70.8	70.8	63.8	K ₂ (H _s or H _r > 2.5)	3.25	-0.42	Soft Ground / No Barrier	70.4	-3.0	28.6	726
70.8	70.8	63.8	K ₂ (H _s or H _r > 2.5)	3.25	-0.42	Soft Ground / No Barrier	70.4	-3.0	33.6	2290
70.8	70.8	63.8	K ₂ (H _s or H _r > 2.5)	3.25	-0.42	Soft Ground / No Barrier	70.4	-3.0	29.6	912
70.8	70.8	63.8	K ₂ (H _s or H _r > 2.5)	3.25	-0.42	Soft Ground / No Barrier	70.4	-13.0	33.6	2290
							Total:	-	38	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	620	37	15	C.2/24	Haulage 40 T Lorry	52.0	0	0	180	0.0	52.0	158.387
							Total:				52.0	

Activity

Manoeuvring Piling Plant

Receptor Name:	Hagden Barn
Receptor Height:	4

Activity Level	54.9
Haulage Level	52.0
TOTAL	56.7

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Trencher/planer	2	79	10	2.5	4	100	110	50		0
Table C5, Item 30	Piler	4	88	1	2.5	4	100	102	50		0
Table C5, Item 36	Diesel Bowser	1	89	10	2.5	4	100	117	5		0
							Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} 1	Anti Log
53.0	53.0	49.6	K ₂ (H _s or H _r > 2.5)	3.25	-4.20	Soft Ground / No Barrier	52.8	-3.0	54.2	264498
53.0	53.0	49.6	K ₂ (H _s or H _r > 2.5)	3.25	-4.20	Soft Ground / No Barrier	52.8	-3.0	46.2	43020
70.8	70.8	63.8	K ₂ (H _s or H _r > 2.5)	3.25	-0.42	Soft Ground / No Barrier	70.4	-13.0	36.6	2290
							Total:	-	55	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	620	37	15	C.2/24	Haulage 40 T Lorry	52.0	0	0	180	0.0	52.0	158.387
							Total:				52.0	

Activity

Manoeuvring Piling Plant

Nagden House
4

Activity Level	51.8
Haulage Level	51.3
TOTAL	54.6

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

Receptor Name:

Receptor Height:

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	150	2.5	4	100	11.0	50		0
Passell 500	Piler	4	88	1	150	2.5	4	100	102	50		0
Table C4, Item 36	Diesel Brawler	1	89	10	725	2.5	4	100	117	5		0
								Total	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
56.1	56.1	52.1	Ks (H _s or H _r > 2.5)	3.25	-0.24	Soft Ground / No Barrier	55.9	-3.0	51.1	12996.4
56.1	56.1	52.1	Ks (H _s or H _r > 2.5)	3.25	-0.24	Soft Ground / No Barrier	55.9	-3.0	49.1	2590.4
72.7	72.7	65.3	Ks (H _s or H _r > 2.5)	3.25	-0.44	Soft Ground / No Barrier	72.2	-13.0	31.8	1594
							Total		52	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	725	37	15	C.2/24	Haulage 40 t Lorry	51.3	0	0	180	0.0	51.3	133605
							Total				51.3	

Activity

Active Piling

Nagden House
4

Activity Level	65.9
Haulage Level	51.3
TOTAL	66.0

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

Receptor Name:

Receptor Height:

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	150	2.5	4	100	11.0	50		0
Passell 500	Piler	4	110	1	150	6	4	100	124	50		0
Table C4, Item 36	Diesel Brawler	1	89	10	725	2.5	4	100	117	5		0
								Total	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
56.1	56.1	52.1	Ks (H _s or H _r > 2.5)	3.25	-0.24	Soft Ground / No Barrier	55.9	-3.0	51.1	12996.4
56.1	56.1	52.1	Ks (H _s or H _r > 2.5)	5	-0.80	Soft Ground / No Barrier	55.3	-3.0	60.7	3723.15
72.7	72.7	65.3	Ks (H _s or H _r > 2.5)	3.25	-0.44	Soft Ground / No Barrier	72.2	-13.0	31.8	1594
							Total		66	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	725	37	15	C.2/24	Haulage 40 t Lorry	51.3	0	0	180	0.0	51.3	133605
							Total				51.3	

Activity

PV Panel Installation

Receptor Name:

Nagden House

Receptor Height:

Activity Level	51.2
Haulage Level	51.3
TOTAL	51.3

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	100	2.5	4	100	11.0	50		
Table C4, Item 36	Diesel Bowser	1	89	10	275	2.5	4	100	11.7	5		
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s > 2.5m	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation given ground type, K' dB (Note: Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB L _{res} ?	Anti Log
55.1	56.1	52.1	RS (H _s or H _r > 2.5)	3.25	-4.24	Soft Ground / No Barrier	55.9	-3.0	51.1	12964
72.7	72.7	65.3	RS (H _s or H _r > 2.5)	3.25	-4.44	Soft Ground / No Barrier	72.1	-1.0	71.1	1504
								Total:		31

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , 7, dB	Facade Correction, dB	Angle of View	Screening Correction, dB	Angle of View	Corrected L _{asq} , T, dB	Anti Log
1	725	37	15	C.2/24	Haulage 40 T Lorry	109	51.3	0	0	180	51.3	131605
							Total:	0.0			51.3	

Activity

Electrical Compound Installation

Receptor Name:

Nagden House

Receptor Height:

Activity Level	27.9
Haulage Level	51.3
TOTAL	51.3

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	1675	2.5	4	100	11.0	50		
Table C4, Item 36	Diesel Bowser	1	89	10	1675	2.5	4	100	11.7	5		
Table C4, Item 30	Tracked Mobile Crane	1	71	10	1675	2.5	4	100	99	50		
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s > 2.5m	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation given ground type, K' dB (Note: Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB L _{res} ?	Anti Log
81.6	81.6	72.5	RS (H _s or H _r > 2.5)	3.25	-4.55	Soft Ground / No Barrier	81.1	-3.0	78.5	393
81.6	81.6	72.5	RS (H _s or H _r > 2.5)	3.25	-4.55	Soft Ground / No Barrier	81.1	-1.0	79.9	197
81.6	81.6	72.5	RS (H _s or H _r > 2.5)	3.25	-4.55	Soft Ground / No Barrier	81.1	-3.0	78.9	31
								Total:	28	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , 7, dB	Facade Correction, dB	Angle of View	Screening Correction, dB	Angle of View	Corrected L _{asq} , T, dB	Anti Log
1	725	37	15	C.2/24	Haulage 40 T Lorry	109	51.3	0	0	180	51.3	131605
							Total:	0.0			51.3	

Activity

Handstanding and Tracks

Receptor Name:	Nagden Cottages
Receptor Height:	4

Activity Level	35.2
Haulage Level	50.9
TOTAL	50.9

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C2, Item 21	Tracked Excavator	2	71	10	800	2.5	4	100	102	50	0	0
Table C2, Item 20	Compactor	1	72	10	800	2.5	4	100	102	50	0	0
Table C2, Item 22	Wheel loader	1	72	10	800	2.5	4	100	102	50	0	0
Table C6, Item 36	Diesel Bowser	1	89	10	800	2.5	4	100	117	5	0	0
Total:									-	-		

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation given ground type, K, dB (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
73.6	73.6	66.1	Ks (Hs or Hr > 2.5)	3.25	-0.45	Soft Ground / No Barrier	73.1	-3.0	25.9	397
73.6	73.6	66.1	Ks (Hs or Hr > 2.5)	3.25	-0.45	Soft Ground / No Barrier	73.1	-3.0	30.9	1220
73.6	73.6	66.1	Ks (Hs or Hr > 2.5)	3.25	-0.45	Soft Ground / No Barrier	73.1	-3.0	26.9	486
73.6	73.6	66.1	Ks (Hs or Hr > 2.5)	3.25	-0.45	Soft Ground / No Barrier	73.1	-13.0	30.9	1220
Total:									35	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	800	37	15	C.2/24	Haulage 40 t Lorry	50.9	0	0	180	0.0	50.9	122750
Total:											50.9	

Activity

Manoeuvring Piling Plant

Receptor Name:	Nagden Cottages
Receptor Height:	4

Activity Level	52.9
Haulage Level	50.9
TOTAL	55.0

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Turbidifier	2	79	10	145	2.5	4	100	110	50	0	0
Table C4, Item 50	Piler	4	86	1	145	2.5	4	100	102	50	0	0
Table C6, Item 36	Diesel Bowser	1	89	10	800	2.5	4	100	117	5	0	0
Total:									-	-		

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
55.0	55.0	51.2	Ks (Hs or Hr > 2.5)	3.25	-0.23	Soft Ground / No Barrier	54.8	-3.0	52.2	165738
55.0	55.0	51.2	Ks (Hs or Hr > 2.5)	3.25	-0.23	Soft Ground / No Barrier	54.8	-3.0	44.2	26300
73.6	73.6	66.1	Ks (Hs or Hr > 2.5)	3.25	-0.45	Soft Ground / No Barrier	73.1	-13.0	30.9	1220
Total:									53	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	800	37	15	C.2/24	Haulage 40 t Lorry	50.9	0	0	180	0.0	50.9	122750
Total:											50.9	

Activity

Active Piling

Receptor Name:	Nagden Cottages
Receptor Height:	4

Activity Level	66.0
Haulage Level	50.9
TOTAL	67.0

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Telehandler	2	79	10	145	2.5	4	100	11.0	50		0
Table C4, Item 35	Excavator	4	80	1	145	6	4	100	12.4	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	800	2.5	4	100	11.7	5		0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s ≤ 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
55.0	55.0	51.2	Ks (Hs or Hr > 2.5)	3.25	-0.33	Soft Ground / No Barrier	54.8	-3.0	52.2	165738
55.0	55.0	51.2	Ks (Hs or Hr > 2.5)	3.25	-0.36	Soft Ground / No Barrier	54.3	-3.0	46.7	4720
73.6	73.6	66.1	Ks (Hs or Hr > 2.5)	3.25	-0.45	Soft Ground / No Barrier	73.1	-13.0	30.9	1220
								Total:	67	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, Km/h	BS 5228 Reference	Plant	LWA	L _{eqn} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{eqn} T, dB	Anti Log
1	800	37	15	C.2/24	Haulage 40 t Lorry	109	50.9	0	0	180	50.9	122750
								Total:	50.9		50.9	

Activity

PV Panel Installation

Receptor Name:	Nagden Cottages
Receptor Height:	4

Activity Level	52.2
Haulage Level	50.9
TOTAL	54.6

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Telehandler	2	79	10	145	2.5	4	100	11.0	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	800	2.5	4	100	11.7	5		0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s ≤ 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
55.0	55.0	51.2	Ks (Hs or Hr > 2.5)	3.25	-0.23	Soft Ground / No Barrier	54.8	-3.0	52.2	165738
73.6	73.6	66.1	Ks (Hs or Hr > 2.5)	3.25	-0.45	Soft Ground / No Barrier	73.1	-13.0	30.9	1220
								Total:	52	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, Km/h	BS 5228 Reference	Plant	LWA	L _{eqn} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{eqn} T, dB	Anti Log
1	800	37	15	C.2/24	Haulage 40 t Lorry	109	50.9	0	0	180	50.9	122750
								Total:	50.9		50.9	

Activity

Electrical Compound Installation

Receptor Name:

Receptor Height:

Nagden Cottages
4

Activity Level	28.4
Haulage Level	50.9
TOTAL	50.9

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Telehandler	2	79	10	10.0	2.5	4	100	11.0	50		0
Table C4, Item 35	Diesel Bowser	1	89	10	10.0	2.5			11.7	5		0
Table C4, Item 39	Tracked Pallet Crane	1	71	10	10.0	2.5	4	100	9	50		0

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground, %)	Average Propagation Height if Soft Ground and H _r ≥ 2.5m and H _s ≥ 2.5m	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (time-weighted average including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{was} ?	Anti Log
81.2	81.2	72.1	Ks (Hs or Hr > 2.5)	3.25	-0.54	Soft Ground / No Barrier	80.6	-3.0	26.4	624
81.2	81.2	72.1	Ks (Hs or Hr > 2.5)	3.25	-0.54	Soft Ground / No Barrier	80.6	-13.0	23.4	317
81.2	81.2	72.1	Ks (Hs or Hr > 2.5)	3.25	-0.54	Soft Ground / No Barrier	80.6	-3.0	15.4	34
Total:									28	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, Km/h	BS 5228 Reference	Plant	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{asq} , T, dB	Anti Log
1	800	37	15	C.2/34	Haulage 40 t Lorry	109	59.9	0	0	180	59.0	122750
Total:									50.9		50.9	

Activity

Handstanding and Tracks

Receptor Name:

Receptor Height:

Warm Hous
4

Activity Level	36.6
Haulage Level	51.5
TOTAL	51.6

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C2, Item 21	Tracked Excavator	2	71	10	700	2.5	4	100	102	50		0
Table C2, Item 30	Dump Truck	1	79	10	700	2.5		100	107	50		0
Table C2, Item 20	Vibratory Roller	1	75	10	700	2.5	4	100	103	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	700	2.5	4	100	11.7	5		0
Total:									-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground, %)	Average Propagation Height if Soft Ground and H _r ≥ 2.5m and H _s ≥ 2.5m	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (time-weighted average including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{was} ?	Anti Log
72.1	72.1	64.9	Ks (Hs or Hr > 2.5)	3.25	-4.43	Soft Ground / No Barrier	71.7	-3.0	27.3	538
72.1	72.1	64.9	Ks (Hs or Hr > 2.5)	3.25	-4.43	Soft Ground / No Barrier	71.7	-13.0	24.3	1697
72.1	72.1	64.9	Ks (Hs or Hr > 2.5)	3.25	-4.43	Soft Ground / No Barrier	71.7	-3.0	32.3	1697
Total:									37	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, Km/h	BS 5228 Reference	Plant	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{asq} , T, dB	Anti Log
1	700	37	15	C.2/34	Haulage 40 t Lorry	109	51.5	0	0	180	51.5	140385
Total:									51.5		51.5	

Activity

Manoeuvring Piling Plant

Warm House
4

Activity Level	59.2
Haulage Level	51.5
TOTAL	59.5

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

Receptor Name:

Receptor Height:

BS 5238 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	80	2.5	4	100	110	50		0
Passell 500	Piler	4	88	1	80	2.5	4	100	102	50		0
Table C4, Item 36	Diesel Brawler	1	89	10	700	2.5	4	100	117	5		0
								Total	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
48.6	48.6	46.1	Ks (H _s or H _r > 2.5)	3.25	-0.15	Soft Ground / No Barrier	48.4	-3.0	56.6	72059
48.6	48.6	46.1	Ks (H _s or H _r > 2.5)	3.25	-0.15	Soft Ground / No Barrier	48.4	-3.0	50.6	1159
72.1	72.1	64.9	Ks (H _s or H _r > 2.5)	3.25	-0.43	Soft Ground / No Barrier	71.7	-13.0	32.3	1697
								Total		59

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5238 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{asq} , T, dB	Anti Log
1	700	37	15	C.2/34	Haulage 40 t Lorry	51.5	0	0	180	51.5	140285
							Total			51.5	

Activity

Active Piling

Warm House
4

Activity Level	72.8
Haulage Level	51.5
TOTAL	72.8

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

Receptor Name:

Receptor Height:

BS 5238 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	80	2.5	4	100	110	50		0
Passell 500	Piler	4	110	1	80	2.5	4	100	124	50		0
Table C4, Item 36	Diesel Brawler	1	89	10	700	2.5	4	100	117	5		0
								Total	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
48.6	48.6	46.1	Ks (H _s or H _r > 2.5)	3.25	-0.15	Soft Ground / No Barrier	48.4	-3.0	56.6	72059
48.6	48.6	46.1	Ks (H _s or H _r > 2.5)	3.25	-0.15	Soft Ground / No Barrier	48.4	-3.0	72.5	182997
72.1	72.1	64.9	Ks (H _s or H _r > 2.5)	3.25	-0.43	Soft Ground / No Barrier	71.7	-13.0	32.3	1697
								Total		73

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5238 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{asq} , T, dB	Anti Log
1	700	37	15	C.2/34	Haulage 40 t Lorry	51.5	0	0	180	51.5	140285
							Total			51.5	

Activity

PV Panel Installation

Receptor Name:

Warm House
4

Receptor Height:

Activity Level	58.6
Haulage Level	51.5
TOTAL	59.4

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Tractor/loader	2	79	10	80	2.5	4	100	11.0	50	0	0
Table C4, Item 36	Diesel Bowser	1	89	10	700	2.5	4	100	11.7	5	0	0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s > 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K, dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
48.6	46.6	46.1	RS (H _s or H _r > 2.5)	3.25	-5.15	Soft Ground / No Barrier	48.4	-3.0	58.6	72058
72.1	72.1	69.9	RS (H _s or H _r > 2.5)	3.25	-6.9	Soft Ground / No Barrier	71.7	-12.0	35.9	2897
								Total:	59	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , 7, dB	Facade Correction, dB	Angle of View Correction, dB	Corrected L _{eq} , 7, dB	Anti Log
1	700	37	15	C.2/24	Haulage 40 T Lorry	51.5	0	0.0	51.5	140285
							Total:		51.5	

Activity

Electrical Compound Installation

Receptor Name:

Warm House
4

Receptor Height:

Activity Level	32.7
Haulage Level	51.5
TOTAL	51.5

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Tractor/loader	2	79	10	1070	2.5	4	100	11.0	50	0	0
Table C4, Item 36	Diesel Bowser	1	89	10	1070	2.5	4	100	11.7	5	0	0
Table C4, Item 30	Tracked Mobile Crane	1	71	10	1070	2.5	4	100	99	50	0	0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s > 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K, dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
76.7	76.7	68.6	RS (H _s or H _r > 2.5)	3.25	-6.49	Soft Ground / No Barrier	76.2	-3.0	30.8	1190
76.7	76.7	68.6	RS (H _s or H _r > 2.5)	3.25	-6.49	Soft Ground / No Barrier	76.2	-13.0	27.7	595
76.7	76.7	68.6	RS (H _s or H _r > 2.5)	3.25	-6.49	Soft Ground / No Barrier	76.2	-3.0	89.7	94
								Total:	33	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , 7, dB	Facade Correction, dB	Angle of View Correction, dB	Corrected L _{eq} , 7, dB	Anti Log
1	700	37	15	C.2/24	Haulage 40 T Lorry	51.5	0	0.0	51.5	140285
							Total:		51.5	

Activity

Handstanding and Tracks

Receptor Name:
Receptor Height

Conybank
4

Activity Level	33.4
Haulage Level	50.1
TOTAL	50.2

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPT, (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C2, Item 21	Tracked Excavator	2	71	10	950	2.5	4	100	102	50	0	0
Table C2, Item 20	Compactor	1	72	10	950	2.5	4	100	102	50	0	0
Table C2, Item 22	Wheel loader	1	72	10	950	2.5	4	100	102	50	0	0
Table C6, Item 36	Diesel Bowser	1	89	10	950	2.5	4	100	117	5	0	0
Total:									-	-		

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
75.4	75.4	67.6	Ks (Hs or Hr > 2.5)	3.25	-0.47	Soft Ground / No Barrier	75.0	-3.0	24.0	253
75.4	75.4	67.6	Ks (Hs or Hr > 2.5)	3.25	-0.47	Soft Ground / No Barrier	75.0	-3.0	26.0	298
75.4	75.4	67.6	Ks (Hs or Hr > 2.5)	3.25	-0.47	Soft Ground / No Barrier	75.0	-3.0	25.0	318
75.4	75.4	67.6	Ks (Hs or Hr > 2.5)	3.25	-0.47	Soft Ground / No Barrier	75.0	-13.0	29.0	798
Total:									33	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	950	37	15	C.2/24	109	50.1	0	0	180	0.0	50.1	103368
Total:											50.1	

Activity

Manoeuvring Piling Plant

Receptor Name:
Receptor Height

Conybank
4

Activity Level	50.8
Haulage Level	50.1
TOTAL	51.5

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPT, (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Tech handler	2	79	10	175	2.5	4	100	110	50	0	0
Table C4, Item 50	Piler	4	88	1	175	2.5	4	100	102	50	0	0
Table C6, Item 36	Diesel Bowser	1	89	10	950	2.5	4	100	117	5	0	0
Total:									-	-		

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
57.1	57.1	52.9	Ks (Hs or Hr > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.8	-3.0	50.2	104159
57.1	57.1	52.9	Ks (Hs or Hr > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.8	-3.0	42.2	10597
75.4	75.4	67.6	Ks (Hs or Hr > 2.5)	3.25	-0.47	Soft Ground / No Barrier	75.0	-13.0	29.0	798
Total:									51	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	950	37	15	C.2/24	109	50.1	0	0	180	0.0	50.1	103368
Total:											50.1	

Activity

Manoeuvring Piling Plant

1 Crown Cottage
4

Activity Level	52.6
Haulage Level	60.6
TOTAL	60.6

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

Receptor Name:

Receptor Height:

BS 5238 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	2.5	4	100	11.0	50		0
Passell 500	Piler	4	88	1	2.5	4	100	102	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	2.5	4	100	117	5		0
							Total	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s ≥ 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
55.4	55.4	51.5	Ks (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	55.2	-3.0	51.8	152424
55.4	55.4	51.5	Ks (H _s or H _r > 2.5)	3.25	-0.23	Soft Ground / No Barrier	55.2	-3.0	49.8	25925
68.5	68.5	62.0	Ks (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	35.9	2895
							Total		53	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5238 Reference	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	85	37	15	C.2/34	Haulage 40 t Lorry	60.6	0	0	180	0.0	60.6	1155291
							Total				60.6	

Activity

Active Piling

1 Crown Cottage
4

Activity Level	66.5
Haulage Level	60.6
TOTAL	67.5

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

Receptor Name:

Receptor Height:

BS 5238 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	2.5	4	100	11.0	50		0
Passell 500	Piler	4	110	1	6	4	100	124	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	2.5	4	100	117	5		0
							Total	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s ≥ 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
55.4	55.4	51.5	Ks (H _s or H _r > 2.5)	3.25	-0.23	Soft Ground / No Barrier	55.2	-3.0	51.8	152424
55.4	55.4	51.5	Ks (H _s or H _r > 2.5)	5	-0.78	Soft Ground / No Barrier	54.6	-3.0	60.4	459216
68.5	68.5	62.0	Ks (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	28.9	2895
							Total		67	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5238 Reference	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	85	37	15	C.2/34	Haulage 40 t Lorry	60.6	0	0	180	0.0	60.6	1155291
							Total				60.6	

Activity

PV Panel Installation

Receptor Name:

1 Crown Cottage
4

Activity Level	51.0
Haulage Level	60.6
TOTAL	61.2

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Telehandler	2	79	10	250	2.5	4	100	11.0	50	0	0
Table C4, Item 36	Diesel Bowser	1	89	10	200	2.5	4	100	11.7	5	0	0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5m	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K, dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} , ¹	Anti Log
55.4	55.4	51.5	K _s (H _s or H _r > 2.5)	3.25	-4.31	Soft Ground / No Barrier	55.2	-3.0	51.8	152624
60.5	60.5	62.0	K _s (H _s or H _r > 2.5)	3.25	-4.39	Soft Ground / No Barrier	60.1	-12.0	35.9	3895
								Total:	52	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , 7, dB	Facade Correction, dB	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	85	37	15	C.2/24	Haulage 40 T Lorry	60.6	0	0.0	60.6	1155291
							Total:		60.6	

Activity

Electrical Compound Installation

Receptor Name:

1 Crown Cottage
4

Activity Level	45.9
Haulage Level	60.6
TOTAL	60.8

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Telehandler	2	79	10	280	2.5	4	100	11.0	50	0	0
Table C4, Item 36	Diesel Bowser	1	89	10	500	2.5	4	100	11.7	5	0	0
Table C4, Item 30	Tracked Mobile Crane	1	71	10	280	2.5	4	100	99	50	0	0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5m	Soft Ground Adjustment for Source or Receptor Height $\geq 2.5m$	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K, dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} , ¹	Anti Log
62.2	62.2	56.9	K _s (H _s or H _r > 2.5)	3.25	-4.31	Soft Ground / No Barrier	61.9	-3.0	45.1	32623
65.5	65.5	62.0	K _s (H _s or H _r > 2.5)	3.25	-4.39	Soft Ground / No Barrier	60.1	-13.0	35.9	3895
62.2	62.2	56.9	K _s (H _s or H _r > 2.5)	3.25	-4.31	Soft Ground / No Barrier	61.9	-3.0	34.1	2585
								Total:	46	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , 7, dB	Facade Correction, dB	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	85	37	15	C.2/24	Haulage 40 T Lorry	60.6	0	0.0	60.6	1155291
							Total:		60.6	

Activity

Handstanding and Tracks

Receptor Name:	4 Crown Cottage
Receptor Height:	4

Activity Level	57.0
Haulage Level	60.9
TOTAL	62.7

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C2, Item 21	Tracked Excavator	2	71	10	80	2.5	4	100	102	50	0	0
Table C2, Item 20	Compactor	1	72	10	80	2.5	4	100	102	50	0	0
Table C2, Item 22	Wheel loader	1	72	10	80	2.5	4	100	102	50	0	0
Table C6, Item 36	Diesel Bowser	1	89	10	500	2.5	4	100	117	5	0	0
Total:										-		

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
48.6	48.6	46.1	K ₂ (H _s or H _r > 2.5)	3.25	-0.15	Soft Ground / No Barrier	48.4	-3.0	50.6	114122
48.6	48.6	46.1	K ₂ (H _s or H _r > 2.5)	3.25	-0.15	Soft Ground / No Barrier	48.4	-3.0	55.6	360029
48.6	48.6	46.1	K ₂ (H _s or H _r > 2.5)	3.25	-0.15	Soft Ground / No Barrier	48.4	-3.0	51.6	143320
68.5	68.5	62.0	K ₂ (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	35.9	3895

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	80	37	15	C.2/34	109	60.9	0	0	180	0.0	60.9	1227497
Total:										60.9	60.9	1227497

Activity

Manoeuvring Piling Plant

Receptor Name:	4 Crown Cottage
Receptor Height:	4

Activity Level	51.3
Haulage Level	60.9
TOTAL	61.3

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Tidehandler	2	79	10	170	2.5	4	100	110	50	0	0
Table C4, Item 50	Piler	4	88	1	170	2.5	4	100	102	50	0	0
Table C6, Item 36	Diesel Bowser	1	89	10	500	2.5	4	100	117	5	0	0
Total:										-		

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
54.8	56.8	52.6	K ₂ (H _s or H _r > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.5	-3.0	50.5	111890
54.8	56.8	52.6	K ₂ (H _s or H _r > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.5	-3.0	42.5	17775
68.5	68.5	62.0	K ₂ (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	35.9	3895
Total:									51	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq} , T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	80	37	15	C.2/34	109	60.9	0	0	180	0.0	60.9	1227497
Total:										60.9	60.9	1227497

Activity

Active Piling

Receptor Name:
Receptor Height

4 Crown Cottage
4

Activity Level	65.2
Haulage Level	60.9
TOTAL	66.5

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Telehandler	2	79	10	170	2.5	4	100	110	50		0
Table C4, Item 35	Excavator	4	80	1	170	6	4	100	124	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	500	2.5	4	100	117	5		0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s ≤ 2.5	Soft Ground Adjustment for Source or Receptor Height ± 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res,T}	Anti Log
56.8	56.8	52.6	Ks (H _s or H _r > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.5	-3.0	50.5	11890
56.8	56.8	52.6	Ks (H _s or H _r > 2.5)	3.25	-0.83	Soft Ground / No Barrier	55.9	-3.0	48.1	3797
68.5	68.5	62.0	Ks (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	35.9	3895
								Total:	65	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, Km/h	BS 5228 Reference	Plant	LWA	L _{eqn} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{eqn} , T, dB	Anti Log
1	80	37	15	C-2/34	Haulage 40 t Lorry	109	60.9	0	0	180	60.9	1227497
								Total:	60.9		60.9	

Activity

PV Panel Installation

Receptor Name:
Receptor Height

4 Crown Cottage
4

Activity Level	50.6
Haulage Level	60.9
TOTAL	61.3

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 34	Telehandler	2	79	10	170	2.5	4	100	110	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	500	2.5	4	100	117	5		0
								Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s ≤ 2.5	Soft Ground Adjustment for Source or Receptor Height ± 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (including Screening Correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res,T}	Anti Log
56.8	56.8	52.6	Ks (H _s or H _r > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.5	-3.0	50.5	11890
68.5	68.5	62.0	Ks (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	35.9	3895
								Total:	51	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, Km/h	BS 5228 Reference	Plant	LWA	L _{eqn} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Corrected L _{eqn} , T, dB	Anti Log
1	80	37	15	C-2/34	Haulage 40 t Lorry	109	60.9	0	0	180	60.9	1227497
								Total:	60.9		60.9	

Activity

Manoeuvring Piling Plant

Receptor Name:

Receptor Height:

Crew Team
4

Activity Level	51.0
Haulage Level	60.1
TOTAL	60.5

Facade Correction Options	Screening Correction Options
0	0
3	0
	10

BS 5238 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	2.5	4	100	11.0	50		0
Passell 500	Piler	4	88	1	2.5	4	100	102	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	2.5	4	100	117	5		0
							Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5m	Soft Ground Adjustment for Source or Receptor Height $\pm$ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (Note: no screening correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
57.1	57.1	52.9	Ks (H _s or H _r > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.8	-3.0	59.2	104159
57.1	57.1	52.9	Ks (H _s or H _r > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.8	-3.0	42.2	104159
68.5	68.5	62.0	Ks (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	35.9	3995
							Total:		51	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5238 Reference	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	95	37	15	C-234	Haulage-40 t Lorry	60.1	0	0	180	0.0	60.1	103582
							Total:				60.1	

Activity

Active Piling

Receptor Name:

Receptor Height:

Crew Team
4

Activity Level	64.9
Haulage Level	60.1
TOTAL	66.2

Facade Correction Options	Screening Correction Options
0	0
3	5
	10

BS 5238 Reference	Plant	Quantity	Sound Pressure Level, L _{eq} , dB	Distance to SPL (m)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	2.5	4	100	11.0	50		0
Passell 500	Piler	4	110	1	6	4	100	124	50		0
Table C4, Item 36	Diesel Bowser	1	89	10	2.5	4	100	117	5		0
							Total:	-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r > 2.5m	Soft Ground Adjustment for Source or Receptor Height $\pm$ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation (given ground type, K' dB (Note: no screening correction))	On-time correction, dB	Resulting Pressure Level, dB, L _{res} ?	Anti Log
57.1	57.1	52.9	Ks (H _s or H _r > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.8	-3.0	50.2	104159
57.1	57.1	52.9	Ks (H _s or H _r > 2.5)	5	-0.84	Soft Ground / No Barrier	56.2	-3.0	64.8	300488
68.5	68.5	62.0	Ks (H _s or H _r > 2.5)	3.25	-0.39	Soft Ground / No Barrier	68.1	-13.0	20.9	3995
							Total:		65	

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5238 Reference	LWA	L _{Aeq} T, dB	Facade Correction, dB	Screening Correction, dB	Angle of View	Angle of View Correction, dB	Corrected L _{eq} , T, dB	Anti Log
1	95	37	15	C-234	Haulage-40 t Lorry	60.1	0	0	180	0.0	60.1	103582
							Total:				60.1	

Activity

PV Panel Installation

Receptor Name:

Receptor Height:

Crew Team
4

Activity Level
Haulage Level
TOTAL
50.3
60.1
60.5

Facade Correction Options
0
3
10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	175	2.5	4	100	11.0	50		
Table C4, Item 36	Diesel Bowser	1	89	10	500	2.5	4	100	11.7	5		
Total:									-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s > 2.5	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation given ground type, K' dB (including Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{w,eq,T}	Anti Log
57.1	57.1	52.9	Ks (Hs or Hr > 2.5)	3.25	-0.25	Soft Ground / No Barrier	56.6	-3.0	50.2	104159
60.5	60.5	62.0	Ks (Hs or Hr > 2.5)	3.25	-0.39	Soft Ground / No Barrier	60.1	-1.0	58.9	3895

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq,T} dB	Facade Correction, dB	Angle of View	Screening Correction, dB	Angle of View	Corrected L _{asq,T} dB	Anti Log
1	95	37	15	C.2/24	Haulage 40 T Lorry	109	60.1	0	0	180	60.1	103562
Total:									0.0		60.1	

Activity

Electrical Compound Installation

Receptor Name:

Receptor Height:

Crew Team
4

Activity Level
Haulage Level
TOTAL
44.7
60.1
60.3

Facade Correction Options
0
3
10

BS 5228 Reference	Plant	Quantity	Sound Pressure Level, L _{asq} , dB	Distance to SPL (m)	Distance to Receptor (time-weighted average for mobile plant)	Source Height (H _s)	Receptor Height (H _r)	% Soft Ground	Sound Power Level	% On-time	Facade Correction, dB	Screening Correction, dB
Table C4, Item 54	Telehandler	2	79	10	320	2.5	4	100	11.0	50		
Table C4, Item 36	Diesel Bowser	1	89	10	500	2.5	4	100	11.7	5		
Table C4, Item 30	Tracked Mobile Crane	1	71	10	320	2.5	4	100	99	50		
Total:									-			

K's	K'm	K'h	Distance Adjustment Assumed (based on distance to receptor, and source receiver heights and soft ground %)	Average Propagation Height if Soft Ground and H _r and H _s > 2.5m	Soft Ground Adjustment for Source or Receptor Height ≥ 2.5m	Ground Type / Barriers Assumed (based on distance adjustment assumed and screening correction)	Distance Attenuation given ground type, K' dB (Note: Screening Correction)	On-time correction, dB	Resulting Pressure Level, dB, L _{w,eq,T}	Anti Log	
63.6	63.6	58.1	Ks (Hs or Hr > 2.5)	3.25	-0.33	Soft Ground / No Barrier	63.3	-3.0	43.7	2946.7	
60.5	60.5	62.0	Ks (Hs or Hr > 2.5)	3.25	-0.39	Soft Ground / No Barrier	60.1	-1.0	35.9	3695	
63.6	63.6	58.1	Ks (Hs or Hr > 2.5)	3.25	-0.33	Soft Ground / No Barrier	63.3	-3.0	32.7	1859	
Total:									45		

Haul Road

Segment	Distance to Haulage, m	Movements per hour	Average Speed, km/h	BS 5228 Reference	LWA	L _{Aeq,T} dB	Facade Correction, dB	Angle of View	Screening Correction, dB	Angle of View	Corrected L _{asq,T} dB	Anti Log
1	95	37	15	C.2/24	Haulage 40 T Lorry	109	60.1	0	0	180	60.1	103562
Total:									0.0		60.1	