

APPENDIX – 6-6

Results of Construction Noise Assessment
(Mitigated Scenario)

Project : KSL EIA
 Title : Noise Assessment for Launching Shaft during **Daytime**
 Date : 17-Mar-04

NSR : N10 - FSD Kowloon South Divisional HQ

Scenario : **Mitigated**

PME	TM - Ref	SWL dB(A)	Qty	Util	Dist			Correction, dB(A)					Subtotal dB(A)	
					H m	V m	S m	Qty	Util	Dist	Barr	Sil		Fac
<i>Scenario - Mitigated</i>														
Gantry *	CNP049	95	1	100	76	12	77	0	0	-46	-5	0	3	47
Generator	CNP103	95	1	100	76	32	82	0	0	-46	0	0	3	52
Compressor	[1]	96	1	100	76	32	82	0	0	-46	0	0	3	53
Conveyor Belt *	CNP041	90	1	100	76	12	77	0	0	-46	-10	0	3	37
Ventilation Fan *	[1]	98	1	100	76	12	77	0	0	-46	0	-15	3	40
Water Pump (S/M)	CNP283	85	1	100	76	32	82	0	0	-46	0	0	3	42
Water Pump (for WWTP) *	CNP281	88	1	100	76	12	77	0	0	-46	-10	0	3	35
Diesel Train	[1]	108	1	100	76	32	82	0	0	-46	0	0	3	65
Mortar Car	[1]	108	1	100	76	32	82	0	0	-46	0	0	3	65
TBM	[1]	109	1	100	76	32	82	0	0	-46	0	0	3	66
Total Noise Level													70	
Criterion													75	
Exceedence													Nil	

Except above-ground plant marked with *, others are located at the bottom of the launching shaft.

[1] - SWLs of these plant items are extracted from CNP application ref GW-TN0374-03 dated Nov 2003 for Spur Line Construction.

[2] - H refers to horizontal distance; V refers to vertical distance; S refers to slant distance.

Project : KSL EIA
 Title : Noise Assessment for Launching Shaft during Daytime
 Date : 17-Mar-04

NSR : N12 - Lai Chak Middle School

Scenario : Mitigated

PME	TM - Ref	SWL dB(A)	Qty	Util	Dist			Correction, dB(A)					Subtotal dB(A)	
					H m	V m	S m	Qty	Util	Dist	Barr	Sil		Fac
<i>Scenario - Mitigated</i>														
Gantry *	CNP049	95	1	100	105	0	105	0	0	-48	-5	0	3	45
Generator	CNP103	95	1	100	105	20	107	0	0	-49	0	0	3	49
Compressor	[1]	96	1	100	105	20	107	0	0	-49	0	0	3	50
Conveyor Belt *	CNP041	90	1	100	105	0	105	0	0	-48	-10	0	3	35
Ventilation Fan *	[1]	98	1	100	105	0	105	0	0	-48	0	-15	3	38
Water Pump (S/M)	CNP283	85	1	100	105	20	107	0	0	-49	0	0	3	39
Water Pump (for WWTP) *	CNP281	88	1	100	105	0	105	0	0	-48	-10	0	3	33
Diesel Train	[1]	108	1	100	105	20	107	0	0	-49	-5	0	3	57
Mortar Car	[1]	108	1	100	105	20	107	0	0	-49	-5	0	3	57
TBM	[1]	109	1	100	105	20	107	0	0	-49	-5	0	3	58
												Total Noise Level	63	
												Criterion	70	
												Exceedence	Nil	

Except above-ground plant marked with *, others are located at the bottom of the launching shaft.

[1] - SWLs of these plant items are extracted from CNP application ref GW-TN0374-03 dated Nov 2003 for Spur Line Construction.

[2] - H refers to horizontal distance; V refers to vertical distance; S refers to slant distance.

Project : KSL EIA
 Title : Noise Assessment for Launching Shaft during Daytime
 Date : 17-Mar-04

NSR : N13 - Victoria Tower

Scenario : Mitigated

PME	TM - Ref	SWL dB(A)	Qty	Util	Dist			Correction, dB(A)					Subtotal dB(A)	
					H m	V m	S m	Qty	Util	Dist	Barr	Sil		Fac
<i>Scenario - Mitigated</i>														
Gantry *	CNP049	95	1	10	74	12	75	0	-10	-45	-5	0	3	38
Generator	CNP103	95	1	100	74	32	81	0	0	-46	0	0	3	52
Compressor	[1]	96	1	100	74	32	81	0	0	-46	0	0	3	53
Conveyor Belt *	CNP041	90	1	100	74	12	75	0	0	-45	-10	0	3	38
Ventilation Fan *	[1]	98	1	100	74	12	75	0	0	-45	0	-15	3	41
Water Pump (S/M)	CNP283	85	1	100	74	32	81	0	0	-46	0	0	3	42
Water Pump (for WWTP) *	CNP281	88	1	100	74	12	75	0	0	-45	-10	0	3	36
Diesel Train	[1]	108	1	50	74	32	81	0	-3	-46	0	0	3	62
Mortar Car	[1]	108	1	50	74	32	81	0	-3	-46	0	0	3	62
TBM	[1]	109	1	100	74	32	81	0	0	-46	0	0	3	66
												Total Noise Level	69	
												Criterion	75	
												Exceedence	Nil	

Except above-ground plant marked with *, others are located at the bottom of the launching shaft.

[1] - SWLs of these plant items are extracted from CNP application ref GW-TN0374-03 dated Nov 2003 for Spur Line Construction.

[2] - H refers to horizontal distance; V refers to vertical distance; S refers to slant distance.

APPENDIX – 6-7

Assessment Results for Further Specific
Noise Mitigation Measures

Project: KSL GSA-5100 EIA & Associated Services
 Title: Construction Noise Level, Leq(30 min)
 Option: Specific Mitigation Measures - Movable Barrier for Particular PMEs

NSR	Building Description	2005												2006												2007												Max		Duration	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Noise Level, Leq	TM-EIA Criteria	Exceed Criteria	
N11	Canton Road Government School	53	53	56	60	60	67	68	67	69	69	74	74	68	68	69	69	69	65	65	65	68	67	65	65	65	64	64	60	60	60	61	61	61	53	53	53	74	70	2	
N12	Lai Chack Middle School	53	53	56	60	60	67	68	67	69	69	74	74	68	68	69	69	69	65	65	65	68	67	65	65	65	64	64	60	60	60	61	61	61	53	53	53	74	70	2	
N19	Man King Building	68	68	68	76	70	75	78	78	78	72	78	78	78	80	80	80	77	76	76	69	74	65	65	76	76	65	65	65	65	65	65	65	65	63	63	63	80	75	15	
N20	Man Fai Building	72	72	72	74	72	73	74	74	74	74	75	73	75	75	75	75	75	75	75	75	73	73	75	75	73	73	73	72	72	72	72	72	72	72	72	72	75	75	0	
N30	Olympic Station Phase 3 Project and Olympian City Phase 3	0	0	0	0	65	65	73	73	73	75	75	75	74	74	72	72	73	73	71	70	70	63	64	64	61	58	57	56	0	0	0	0	0	0	63	0	0	75	75	0

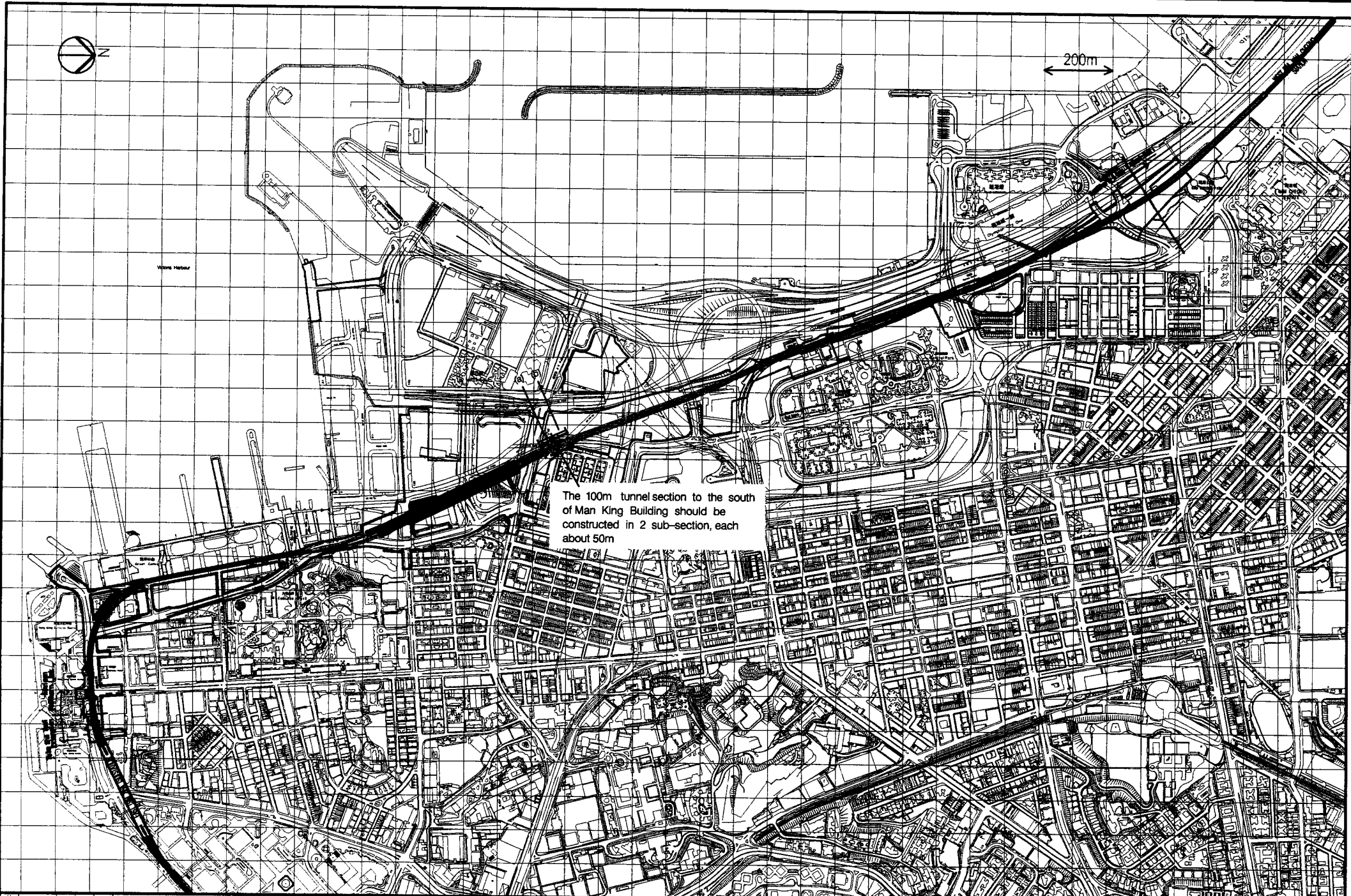
Project: KSL GSA-5100 EIA & Associated Services
 Title: Construction Noise Level, Leq(30 min)
 Option: Specific Mitigation Measures - Sequencing of Construction Activities

NSR	Building Description	2005												2006												2007												Max		Duration	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Noise Level, Leq	TM-EIA Criteria	Exceed Criteria	
N19	Man King Building	68	68	68	76	70	75	74	75	74	72	77	76	74	75	75	74	75	72	76	69	74	65	65	74	72	65	65	65	65	65	65	65	65	63	63	63	77	75	4	

Job Title : KCRC KSL 100 EIA
Heading : Plant Inventory & Construction Programme after Sequencing the Construction Activities
Section : Worksite for Construction of WKN Northern Tunnels in front of Man King Building

Description	PME	Worksite (a)		Worksite (b)	
		Period	Unit	Period	Unit
Remove Obstructions, Expose and Divert Existing Utilities	Breaker handheld	Sep-05	2	Jul 05 - Aug 05	2
	Mini Excavator		2		2
	Crane Lorry		1		1
Diaphragm wall	Hydraulic extractor	Jan 06	1	Nov 05 - Dec 05	1
	Mobile crane		1		1
	Lorry		2		2
	Concrete lorry mixer		1		1
	Concrete pump truck		1		1
Bentonite Filtering & Mixing for D-wall only	Bentonite filtering and mixing plant	Jan 06	1	Nov 05 - Dec 05	1
	Excavator		1		1
	Lorry		1		1
Excavation	*Hydraulic Excavator	Apr-06	1	Feb 06 - Mar 06	1
	*Generator, silenced		1		1
	Mobile Crane		1		1
	Dump Truck		2		2
	*Welding Machine		1		1
Construction and Waterproofing	*Generator, silenced	Jun 06	1	May 06	1
	Crane Lorry		1		1
	Mobile Crane		1		1
	*Air Compressor		1		1
	*Circular Saw		1		1
	Concrete Pump Truck		1		1
	Concrete Lorry Mixer		1		1
	*Pokers		1		1
	*Mini excavator		1		1
Backfilling and Reinstatement Works	Excavator	Jan 07	1	Dec 06	1
	Generator, silenced		1		1
	Roller		1		1
	Asphalt Paver		1		1
	Lorry		1		1

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The 100m tunnel section to the south of Man King Building should be constructed in 2 sub-section, each about 50m

REV	DATE	BY	SUB	APP	DESCRIPTION
△	DEC2003	SW	FC	ST	EIA REPORT
△	NOV2003	SW	FC	ST	EIA REPORT
△	JUNE2003	SW	FC	ST	EIA REPORT
△	MAR2003	SW	FC	ST	EIA REPORT (2ND DRAFT)
△	1OCT2002	SW	FC	ST	EIA REPORT (1ST DRAFT)

DESIGNED BY	SW
DRAWN BY	JF
CHECKED BY	FC
IN CHARGE	ST
DATE	5 DEC 2003



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EIA & ASSOCIATED SERVICES

LOCATION OF WORKSITE IN FRONT OF
MAN KING BUILDING REQUIRING SEQUENCING
OF CONSTRUCTION ACTIVITIES

DRAWN BY	SW
CHECKED BY	FC
DATE	5 DEC 2003
SCALE	1:10000 @ A3
DRAWING NUMBER	APPENDIX 6-7
SHEET NO	P
STAGE CODE	E

APPENDIX – 6-8

Calculation of Noise from Concurrent Projects

Project : KSL EIA
Title : Summary of SWLs extracted from Tuen Mun Area 54 Feasibility Study
Date : 17-May-04

Process	Sub-process	SWL Adopted in the EIA, dB(A)		
		[1] = No Measures	[2] = [1] + Quiet Plant	[3] = [2] + Barrier
Piling + Superstructure	Piling	100	100	100
	Concreting works	114	103	96
	Formwork & reinforcement	115	113	112
	Material Handling	112	107	103
	Total	119	114	113
Drainage / Utility Work	Trench excavation	115	108	106
	Preparation	114	110	110
	Pipe / Utility installation	112	106	101
	Construction of manhole	114	103	96
	Backfilling	113	107	106
	Total	121	114	113

Project : KSL EIA
Title : Calculation of Construction Noise from Concurrent Projects
Date : 17-May-04

Project	NSR	Dist ¹ m	SWL ² dB(A)	Corrections, dB(A)			SPL dB(A)
				Dist	Screening	Facade	
WKCD	N11 - Canton Road Government School	88	113	-47	0	3	69
	N12 - Lai Chack Middle School	88	113	-47	0	3	69
	N13 - Victoria Tower	120	113	-50	0	3	66
	N14 - 1-3A Austin Road, Wai On Building	164	113	-52	0	3	64
Post Secondary College	N24 - Yau Ma Tei Catholic Primary School ³	88	113	-47	-5	3	64
Girl Guide	N19 - Man King Building	110	113	-49	0	3	67
	N23 - Man Wah Building	40	113	-40	0	3	76
School	N22 - Man Cheong Building	119	113	-50	0	3	66
CLP	N24 - Yau Ma Tei Catholic Primary School ³	143	113	-51	0	3	65

- 1 - Distance between the notional source and the NSR
- 2 - Mitigated sound power level for piling and superstructure works
- 3 - The facade facing KSL is screened from the Post Secondary College

APPENDIX – 6-9

Calculation of Noise
During Restricted Hours

Project : KSL EIA
 Title : Noise Assessment for Launching Shaft during Restricted Hours
 Date : 17-Mar-04

NSR : N10 - FSD Kowloon South Divisional HQ

PME	TM - Ref	SWL dB(A)	Qty	Util	Dist ^[2]			Correction, dB(A)						Subtotal dB(A)
					H m	V m	S m	Qty	Util	Dist	Barr	Sil	Fac	
<u>Scenario - Unmitigated</u>														
Gantry *	CNP049	95	0	100	76	12	77	0	0	-46	-5	0	3	0
Generator	CNP103	95	1	100	76	32	82	0	0	-46	-22	0	3	30
Compressor	CNP002	102	1	100	76	32	82	0	0	-46	-22	0	3	37
Conveyor Belt *	CNP041	90	1	100	76	12	77	0	0	-46	-10	0	3	37
Ventilation Fan *	CNP241	108	1	100	76	12	77	0	0	-46	0	-15	3	50
Water Pump (S/M)	CNP283	85	1	100	76	32	82	0	0	-46	-22	0	3	20
Water Pump (for WWTP) *	CNP281	88	1	100	76	12	77	0	0	-46	-10	0	3	35
Diesel Train	[1]	108	1	100	76	32	82	0	0	-46	-22	0	3	43
Mortar Car	[1]	108	1	100	76	32	82	0	0	-46	-22	0	3	43
TBM	[1]	109	1	100	76	32	82	0	0	-46	-22	0	3	44
Total Noise Level													53	
Criterion													50	
Exceedence													3	
PME	TM - Ref	SWL dB(A)	Qty	Util	Dist			Correction, dB(A)						Subtotal dB(A)
<u>Scenario - Mitigated</u>														
Gantry *	CNP049	95	0	100	76	12	77	0	0	-46	-5	0	3	0
Generator	CNP103	95	1	100	76	32	82	0	0	-46	-22	0	3	30
Compressor	[1]	96	1	100	76	32	82	0	0	-46	-22	0	3	31
Conveyor Belt *	CNP041	90	1	100	76	12	77	0	0	-46	-10	0	3	37
Ventilation Fan *	[1]	98	1	100	76	12	77	0	0	-46	0	-15	3	40
Water Pump (S/M)	CNP283	85	1	100	76	32	82	0	0	-46	-22	0	3	20
Water Pump (for WWTP) *	CNP281	88	1	100	76	12	77	0	0	-46	-10	0	3	35
Diesel Train	[1]	108	1	100	76	32	82	0	0	-46	-22	0	3	43
Mortar Car	[1]	108	1	100	76	32	82	0	0	-46	-22	0	3	43
TBM	[1]	109	1	100	76	32	82	0	0	-46	-22	0	3	44
Total Noise Level													49	
Criterion													50	
Exceedence													Nil	

Except above-ground plant marked with *, others are located at the bottom of the launching shaft.

[1] - SWLs of these plant items are extracted from CNP application ref GW-TN0374-03 dated Nov 2003 for Spur Lien Construction.

[2] - H refers to horizontal distance; V refers to vertical distance; S refers to slant distance.

Project : KSL EIA
 Title : Noise Assessment for Launching Shaft during Restricted Hours
 Date : 17-Mar-04

NSR : N13 - Victoria Tower

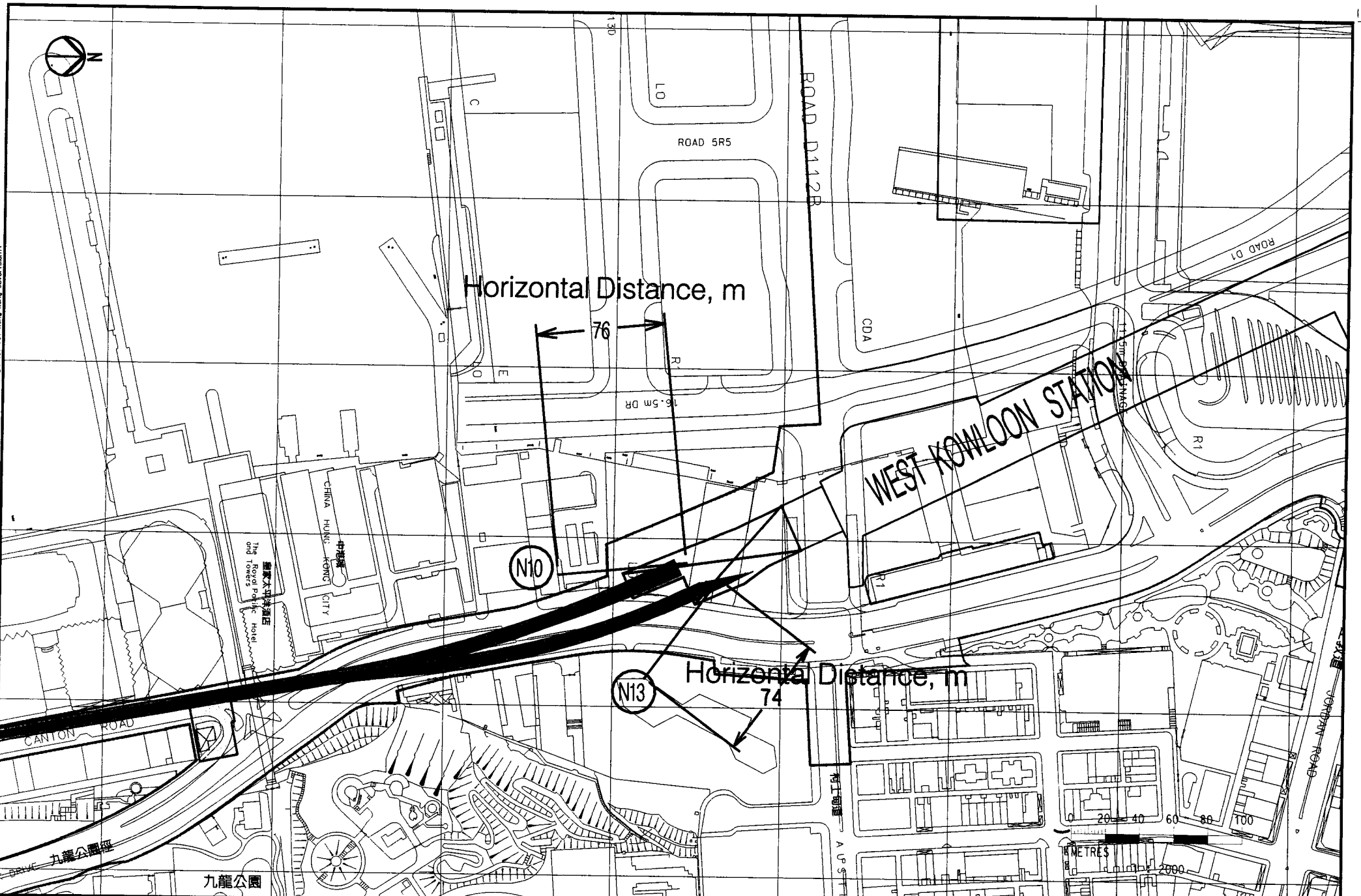
PME	TM - Ref	SWL dB(A)	Qty	Util	Dist ^[2]			Correction, dB(A)						Subtotal dB(A)
					H m	V m	S m	Qty	Util	Dist	Barr	Sil	Fac	
<i>Scenario - Unmitigated</i>														
Gantry *	CNP049	95	0	100	74	12	75	0	0	-45	-5	0	3	0
Generator	CNP103	95	1	100	74	32	81	0	0	-46	-22	0	3	30
Compressor	CNP002	102	1	100	74	32	81	0	0	-46	-22	0	3	37
Conveyor Belt *	CNP041	90	1	100	74	12	75	0	0	-45	-10	0	3	38
Ventilation Fan *	CNP241	108	1	100	74	12	75	0	0	-45	0	-15	3	51
Water Pump (S/M)	CNP283	85	1	100	74	32	81	0	0	-46	-22	0	3	20
Water Pump (for WWTP) *	CNP281	88	1	100	74	12	75	0	0	-45	-10	0	3	36
Diesel Train	[1]	108	1	100	74	32	81	0	0	-46	-22	0	3	43
Mortar Car	[1]	108	1	100	74	32	81	0	0	-46	-22	0	3	43
TBM	[1]	109	1	100	74	32	81	0	0	-46	-22	0	3	44
Total Noise Level													53	
Criterion													50	
Exceedence													3	
PME	TM - Ref	SWL dB(A)	Qty	Util	Dist			Correction, dB(A)						Subtotal dB(A)
					H m	V m	S m	Qty	Util	Dist	Barr	Sil	Fac	
<i>Scenario - Mitigated</i>														
Gantry *	CNP049	95	0	100	74	12	75	0	0	-45	-5	0	3	0
Generator	CNP103	95	1	100	74	32	81	0	0	-46	-22	0	3	30
Compressor	[1]	96	1	100	74	32	81	0	0	-46	-22	0	3	31
Conveyor Belt *	CNP041	90	1	100	74	12	75	0	0	-45	-10	0	3	38
Ventilation Fan *	[1]	98	1	100	74	12	75	0	0	-45	0	-15	3	41
Water Pump (S/M)	CNP283	85	1	100	74	32	81	0	0	-46	-22	0	3	20
Water Pump (for WWTP) *	CNP281	88	1	100	74	12	75	0	0	-45	-10	0	3	36
Diesel Train	[1]	108	1	100	74	32	81	0	0	-46	-22	0	3	43
Mortar Car	[1]	108	1	100	74	32	81	0	0	-46	-22	0	3	43
TBM	[1]	109	1	100	74	32	81	0	0	-46	-22	0	3	44
Total Noise Level													49	
Criterion													50	
Exceedence													Nil	

Except above-ground plant marked with *, others are located at the bottom of the launching shaft.

[1] - SWLs of these plant items are extracted from CNP application ref GW-TN0374-03 dated Nov 2003 for Spur Line Construction

[2] - H refers to horizontal distance; V refers to vertical distance; S refers to slant distance.

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REV	DATE	BY	SUB	APP	DESCRIPTION
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2	NOV 2003	SW	FC	ST	EIA REPORT
3	30 MAY 2003	SW	FC	ST	EIA REPORT
4	7 MAR 2003	SW	FC	ST	EIA REPORT (2ND DRAFT)
5	11 OCT 2002	SW	FC	ST	EIA REPORT (1ST DRAFT)

DESIGNED BY	SW
DRAWN BY	RL
CHECKED BY	FC
IN CHARGE	ST
DATE	5 DEC 2003



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KOWLOON SOUTHERN LINK KSL 65A-5100
EIA & ASSOCIATED SERVICES

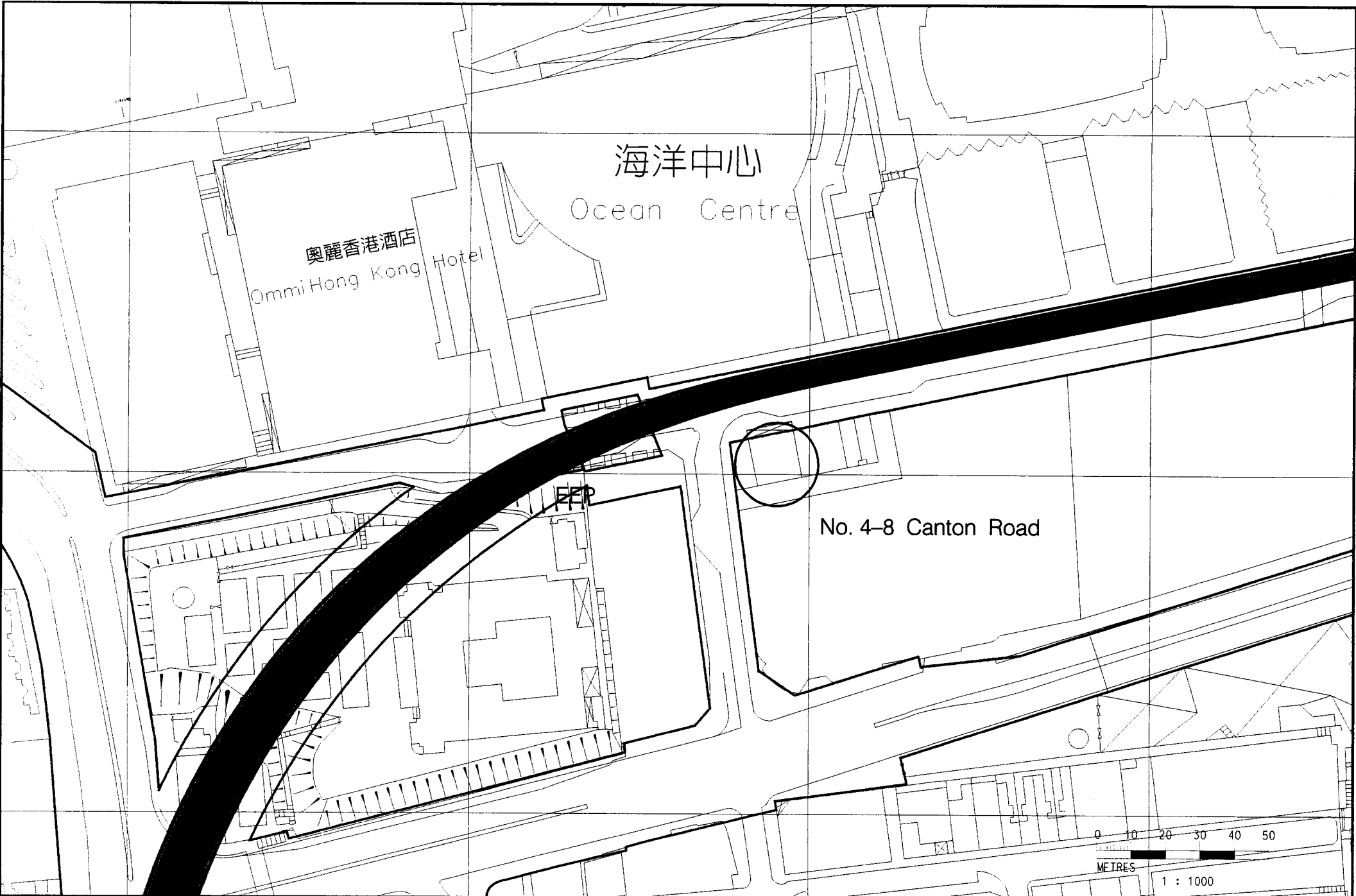
LOCATION OF LAUNCHING SHAFT AND NSR DURING RESTRICTED HOURS

JOB NUMBER	5 DEC 2003
SCALE	1 : 2000 @ A3
DRAWING NUMBER	APPENDIX E-9
SHEET NO	P E

APPENDIX – 6-10

Calculation of Maximum Allowable
Sound Power Levels

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△	DEC2003	SW	FC	ST	EIA REPORT
△	NOV2003	SW	FC	ST	EIA REPORT
△	JUNE2003	SW	FC	ST	EIA REPORT
△	7MAR2003	SW	FC	ST	EIA REPORT (2ND DRAFT)
△	11OCT2002	SW	FC	ST	EIA REPORT (1ST DRAFT)

DESIGNED BY	SW
DRAWN BY	JF
CHECKED BY	FC
IN CHARGE	ST
DATE	5 DEC 2003

KCR New Railway Projects
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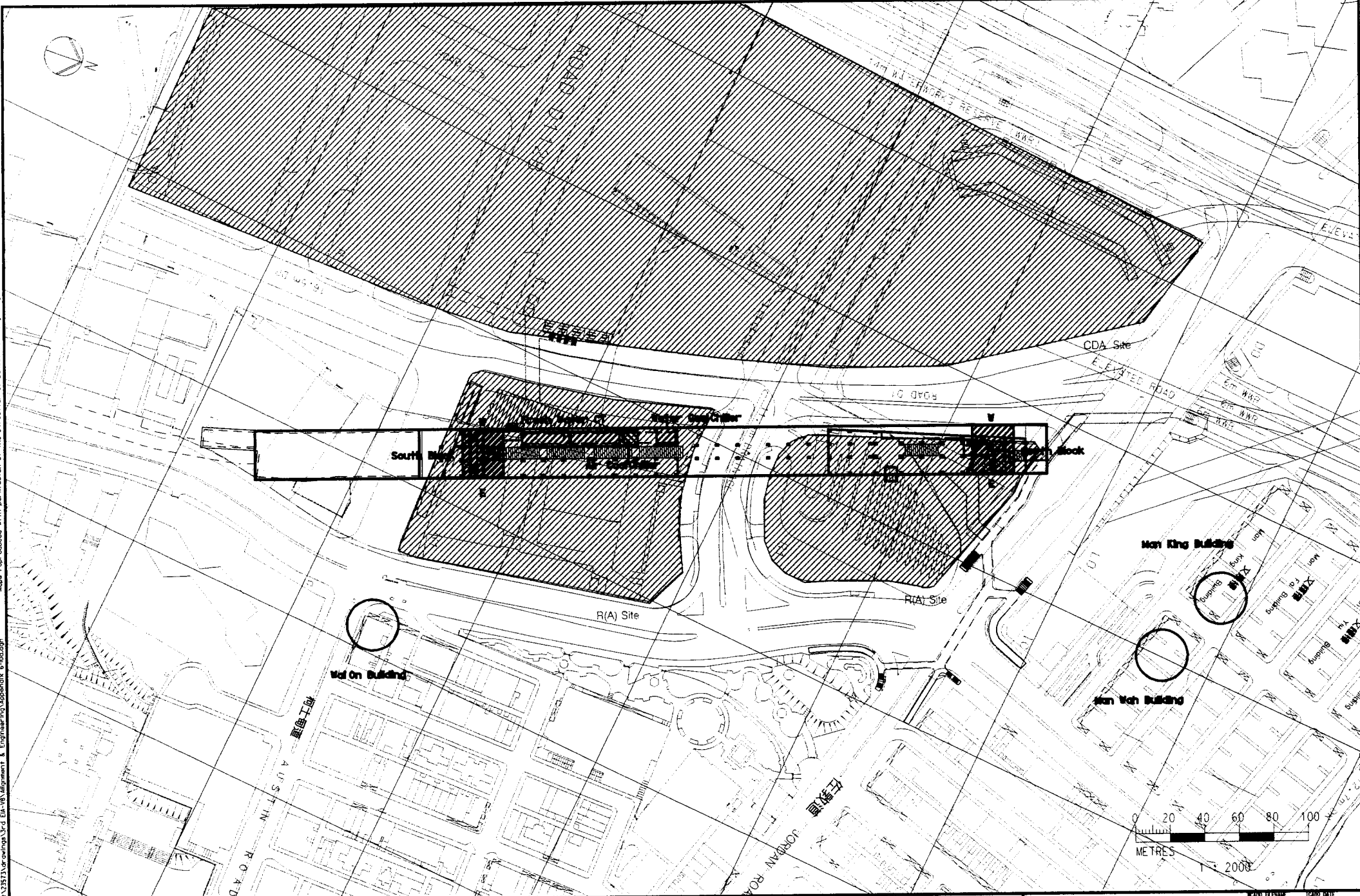
Ove Arup & Partners Hong Kong Limited **ARUP**

KOWLOON SOUTHERN LINK KSL 6SA-5100
EIA & ASSOCIATED SERVICES

OPERATIONAL NOISE SOURCE AND RECEIVER

PROJECT FILENAME	KSL00	DATE	5 DEC 2003
SCALE	1:1000 @ A3	DRAWING NUMBER	APPENDIX 6-10
SHEET NO	P	STAGE CODE	E

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REV	DATE	BY	SUB	APP	DESCRIPTION

REV	DATE	BY	SUB	APP	DESCRIPTION
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△	NOV2003	SW	FC	ST	E1A REPORT
△	JUNE2003	SW	FC	ST	E1A REPORT
△	7MAR2003	SW	FC	ST	E1A REPORT (2ND DRAFT)
△	11OCT2002	SW	FC	ST	E1A REPORT (1ST DRAFT)

DESIGNED BY SW
 DRAWN BY JF
 CHECKED BY FC
 IN CHARGE ST
 DATE 5 DEC 2003

New Railway Projects

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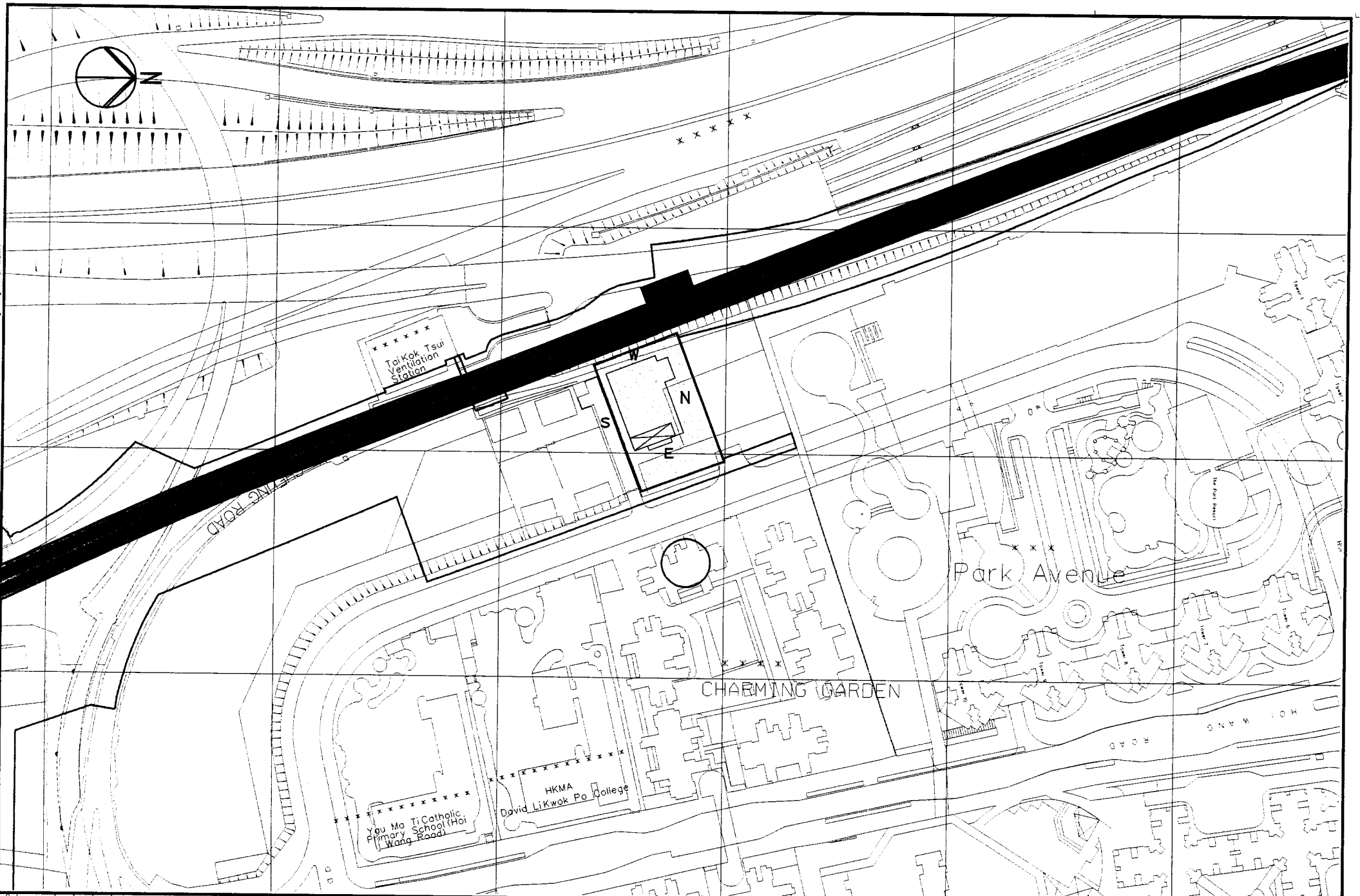
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KOWLOON SOUTHERN LINK KSL GSA-5100
EIA & ASSOCIATED SERVICES

OPERATIONAL NOISE SOURCE AND RECEIVER

PLAN NUMBER	ISSUE DATE
SCALE	5 DEC 2003
DRAWING NUMBER	1:2000 @ A5
APPENDIX 6-10	
SHEET NO	STAGE CODE (REV)
P	E

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REV	DATE	BY	SUB	APP	DESCRIPTION

REV	DATE	BY	SUB	APP	DESCRIPTION
▲	DEC2003	SW	FC	ST	EIA REPORT
▲	NOV2003	SW	FC	ST	EIA REPORT
▲	JUNE2003	SW	FC	ST	EIA REPORT
▲	MAR2003	SW	FC	ST	EIA REPORT (2ND DRAFT)
▲	11OCT2002	SW	FC	ST	EIA REPORT (1ST DRAFT)

DESIGNED BY	SW
DRAWN BY	JF
CHECKED BY	FC
IN CHARGE	ST
DATE	5 DEC 2003

New Railway Projects
新鐵路策劃

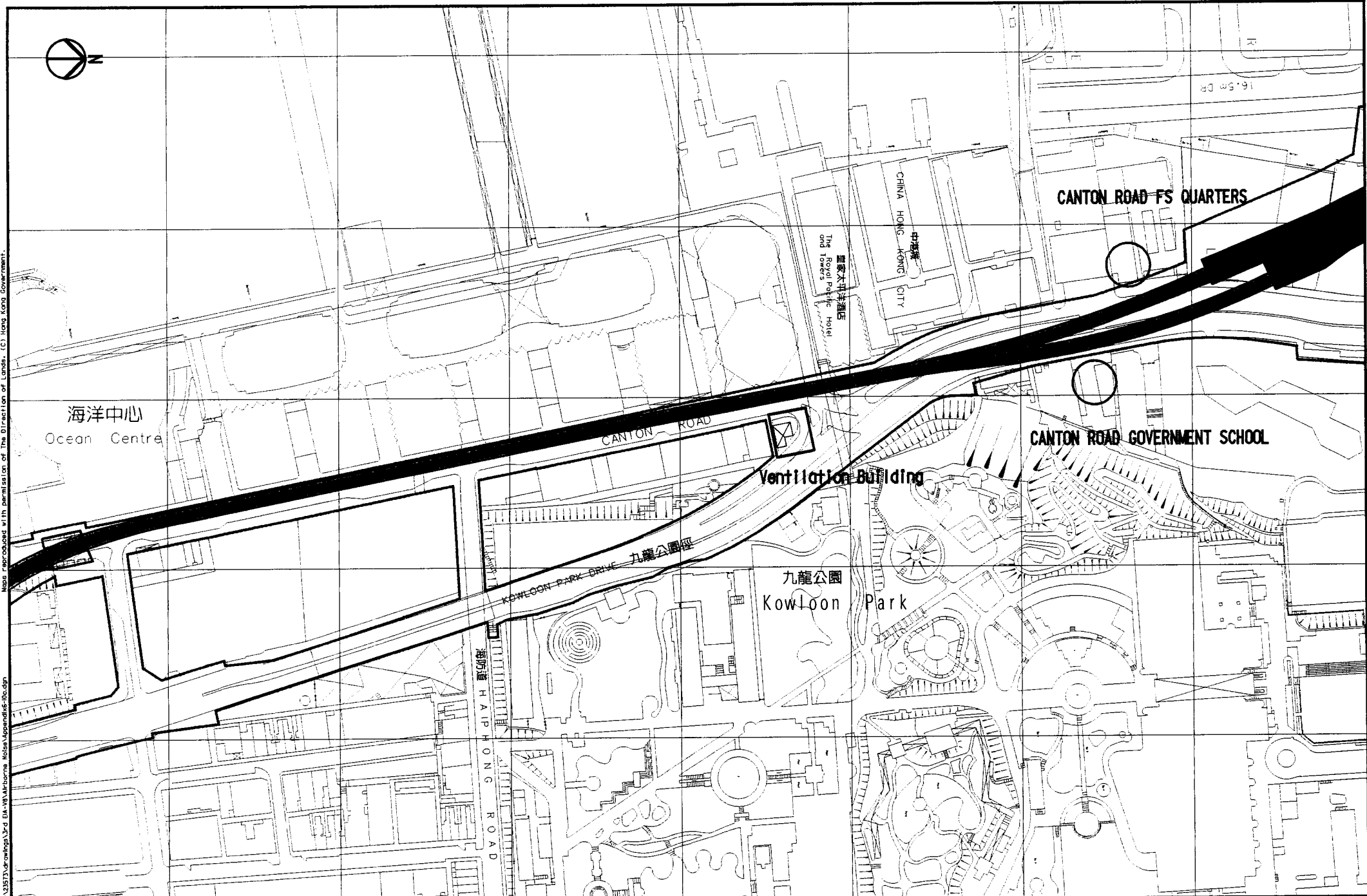
Ove Arup & Partners Hong Kong Limited **ARUP**

KOWLOON SOUTHERN LINK KSL 6SA-5100
EIA & ASSOCIATED SERVICES
OPERATIONAL NOISE SOURCE AND RECEIVER

ADD PERSON	ADD DATE
SCALE	5 DEC 2003
SCALE	1:1500 @ A3
DRAWING NUMBER	APPENDIX 6-10
SHEET NO	STAGE CODE REV
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REV	DATE	BY	SUB	APP	DESCRIPTION
▲	DEC2003	SW	FC	ST	EIA REPORT
▲	NOV2003	SW	FC	ST	EIA REPORT
▲	30MAY2003	SW	FC	ST	EIA REPORT
▲	7MAR2003	SW	FC	ST	EIA REPORT (2ND DRAFT)
▲	11OCT2003	SW	FC	ST	EIA REPORT (1ST DRAFT)

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 DATE 5 DEC 2003



New Railway Projects
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 Ove Arup & Partners Hong Kong Limited **ARUP**

KOWLOON SOUTHERN LINK KSL GSA-5100
EIA & ASSOCIATED SERVICES
OPERATIONAL NOISE SOURCE AND RECEIVERS

DRAWING NUMBER APPENDIX 6-10	SHEET NO P E
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Project: GSA 5100 KSL EIA and Associated Facilities
 Title: Canton Road Plant Building
 Date: 15-May-04

Receiver	Affected by IF (Y/N)	ASR (1)	Noise Levels / Criteria			Contributing Noise Sources	Apportioned Criteria (d) adds up to (c)	Propagation		Corrections, dB(A)				Permissible SWL, dB(A)	
			ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Dist, m	Dir, deg	Facade	Dist	Dir	Ton		Int
Canton Road Government School															
Daytime	N	B	60	66	60	Canton Road Plant Bldg									
						East Elevation	53	170	90	3	-53	-5	3	0	105
						South Elevation	53	170	180	3	-53	-10	3	0	110
						West Elevation	53	170	90	3	-53	-5	3	0	105
						North Elevation	57	170	0	3	-53	0	3	0	104
							60								
Canton Road FS Quarters															
Night-time	N	B	50	63	50	Canton Road Plant Bldg									
						East Elevation	42	210	90	3	-54	-5	3	0	95
						South Elevation	42	210	180	3	-54	-10	3	0	100
						West Elevation	42	210	90	3	-54	-5	3	0	95
						North Elevation	48	210	0	3	-54	0	3	0	96
							50								

[1] Area Sensitivity Rating

Project: GSA 5100 KSL EIA and Associated Facilities
 Title: Ventilation Shaft for Emergency Egress Point
 Date: 15-May-04

Receiver	Affected by IF (Y/N)	ASR ^[1]	Noise Levels / Criteria			Contributing Noise Sources	Apportioned Criteria (d) adds up to (c)	Propagation		Corrections, dB(A)					Permissible SWL, dB(A)		
			ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Dist, m	Dir, deg	Facade	Dist	Dir	Ton	Int			
No 8-4 Canton Road	Daytime	N	B	60	68	60	East Elevation	56	60	90	3	-44	-5	3	0	99	
							South Elevation	50	60	180	3	-44	-10	3	0	98	
							West Elevation	50	60	90	3	-44	-5	3	0	93	
							North Elevation	56	60	0	3	-44	0	3	0	94	
	Night-time	N	B	50	68	50		60									
							East Elevation	46	60	90	3	-44	-5	3	0	89	
							South Elevation	40	60	180	3	-44	-10	3	0	88	
							West Elevation	40	60	90	3	-44	-5	3	0	83	
							46	60	0	3	-44	0	3	0	84		
							50										

[1] Area Sensitivity Rating

Project: GSA 5100 KSL EIA and Associated Facilities
 Title: Maximum allowable SWL at WKN Station South Block
 Date: 15-May-04

Receiver	Affected by IF (Y/N)	ASR ^M	Noise Levels / Criteria			Contributing Noise Sources	Apportioned Criteria (d) adds up to ©	Propagation		Corrections, dB(A)				Permissible SWL, dB(A)		
			ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Dist, m	Dir, deg	Facade	Dist	Dir	Ten		Int	
Wai On Building	Daytime	N	B	60	62	60	Freshwater Cooling Towers	52	138	180	3	-51	-10	3	0	107
							Air Cooled Chillers	54	167	180	3	-52	-10	3	0	110
							Water Cooled Chillers	52	191	180	3	-54	-10	3	0	110
							South Block - East Elevation	52	90	0	3	-47	0	3	0	93
							South Block - South Elevation	52	90	0	3	-47	0	3	0	93
							South Block - West Elevation	50	117	180	3	-49	-10	3	0	103
							South Block - North Elevation	50	117	180	3	-49	-10	3	0	103
	Night-time	N	B	50	63	50	Freshwater Cooling Towers	42	138	180	3	-51	-10	3	0	97
							Air Cooled Chillers	44	167	180	3	-52	-10	3	0	100
							Water Cooled Chillers	42	191	180	3	-54	-10	3	0	100
							South Block - East Elevation	42	90	0	3	-47	0	3	0	83
							South Block - South Elevation	42	90	0	3	-47	0	3	0	83
							South Block - West Elevation	40	117	180	3	-49	-10	3	0	93
							South Block - North Elevation	40	117	180	3	-49	-10	3	0	93
CDA Site	Daytime	N	B	60	62	60	Freshwater Cooling Towers	52	55	0	3	-43	0	3	0	89
							Air Cooled Chillers	54	55	0	3	-43	0	3	0	91
							Water Cooled Chillers	52	50	0	3	-42	0	3	0	88
							South Block - East Elevation	52	100	180	3	-48	-10	3	0	104
							South Block - South Elevation	52	80	90	3	-46	-5	3	0	97
							South Block - West Elevation	50	65	0	3	-44	0	3	0	88
							South Block - North Elevation	50	80	90	3	-46	-5	3	0	95
	Night-time	N	B	50	63	50	Freshwater Cooling Towers	42	55	0	3	-43	0	3	0	79
							Air Cooled Chillers	44	55	0	3	-43	0	3	0	81
							Water Cooled Chillers	42	50	0	3	-42	0	3	0	78
							South Block - East Elevation	42	100	180	3	-48	-10	3	0	94
							South Block - South Elevation	42	80	90	3	-46	-5	3	0	87
							South Block - West Elevation	40	65	0	3	-44	0	3	0	78
							South Block - North Elevation	40	80	90	3	-46	-5	3	0	85

Project: GSA 5100 KSL EIA and Associated Facilities
 Title: Maximum allowable SWL at WKN Station South Block
 Date: 15-May-04

Receiver	Affected by IF (Y/N)	ASR ⁽¹⁾	Noise Levels / Criteria			Contributing Noise Sources	Apportioned Criteria (d) add up to 6	Propagation		Corrections, dB(A)					Permissible SWL, dB(A)	
			ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Dist, m	Dir, deg	Facade	Dist	Dir	Ton	Int		
R(A) Site	Daytime	N	B	60	62	60	Freshwater Cooling Towers	52	5	90	3	-22	-5	3	0	73
							Air Cooled Chillers	52	5	90	3	-22	-5	3	0	73
							Water Cooled Chillers	52	5	90	3	-22	-5	3	0	73
							South Block - East Elevation	53	5	0	3	-22	0	3	0	69
							South Block - South Elevation	50	5	180	3	-22	-10	3	0	76
							South Block - West Elevation	50	5	180	3	-22	-10	3	0	76
							South Block - North Elevation	53	5	0	3	-22	0	3	0	69
	Night-time	N	B	50	63	50	Freshwater Cooling Towers	42	5	90	3	-22	-5	3	0	63
							Air Cooled Chillers	42	5	90	3	-22	-5	3	0	63
							Water Cooled Chillers	42	5	90	3	-22	-5	3	0	63
							South Block - East Elevation	43	5	0	3	-22	0	3	0	59
							South Block - South Elevation	40	5	180	3	-22	-10	3	0	66
							South Block - West Elevation	40	5	180	3	-22	-10	3	0	66
							South Block - North Elevation	43	5	0	3	-22	0	3	0	59

[1] Area Sensitivity Rating

Period	Plant	Max SWL, dB(A)
Daytime	Freshwater Cooling Towers	73
	Air Cooled Chillers	73
	Water Cooled Chillers	73
	South Block - East Elevation	69
	South Block - South Elevation	76
	South Block - West Elevation	76
	South Block - North Elevation	69
Night-time	Freshwater Cooling Towers	63
	Air Cooled Chillers	63
	Water Cooled Chillers	63
	South Block - East Elevation	59
	South Block - South Elevation	66
	South Block - West Elevation	66
	South Block - North Elevation	59

Project: GSA 5100 KSL EIA and Associated Facilities
Title: Maximum allowable SWL at WKN Station North Block
Date: 15-May-04

Receiver	Affected by IF (Y/N)	ASR ⁽¹⁾	Noise Levels / Criteria			Contributing Noise Sources	Apportioned Criteria (d: adds up to ©)	Propagation		Corrections, dB(A)				Permissible SWL, dB(A)		
			ANL-5 (e)	Prevailing (b)	Design (c) = min of (a) & (b)			Dist, m	Dir, deg	Facade	Dist	Dir	Ton		Int	
CDA Site	Daytime	N	B	60	62	60	East Elevation	56	80	180	3	-46	-10	3	0	106
							South Elevation	52	60	90	3	-44	-5	3	0	95
							West Elevation	56	40	0	3	-40	0	3	0	90
							North Elevation	52	60	90	3	-44	-5	3	0	95
	Night-time	N	B	50	63	50	East Elevation	46	127	0	3	-50	0	3	0	90
							South Elevation	42	150	180	3	-52	-10	3	0	98
							West Elevation	46	150	180	3	-52	-10	3	0	102
							North Elevation	42	127	0	3	-50	0	3	0	86
R(A) Site	Daytime	N	B	60	62	60	East Elevation	56	5	0	3	-22	0	3	0	72
							South Elevation	56	5	0	3	-22	0	3	0	72
							West Elevation	52	5	180	3	-22	-10	3	0	78
							North Elevation	52	5	180	3	-22	-10	3	0	78
	Night-time	N	B	50	63	50	East Elevation	46	5	0	3	-22	0	3	0	62
							South Elevation	46	5	0	3	-22	0	3	0	62
							West Elevation	42	5	180	3	-22	-10	3	0	68
							North Elevation	42	5	180	3	-22	-10	3	0	68

[1] Area Sensitivity Rating

Period	Plant	Max SWL, dB(A)
Daytime	North Block - East Elevation	72
	North Block - South Elevation	72
	North Block - West Elevation	78
	North Block - North Elevation	78
Night-time	North Block - East Elevation	62
	North Block - South Elevation	62
	North Block - West Elevation	68
	North Block - North Elevation	68

Project: GSA 5100 KSL EIA and Associated Facilities
Title: Maximum allowable SWL at Yau Ma Tei Vent Building
Date: 15-May-04

Receiver	Affected by IF (Y/N)	ASR ^[1]	Noise Levels / Criteria			Contributing Noise Sources	Apportioned Criteria (d) adds up to ©	Propagation		Corrections, dB(A)				Permissible SWL, dB(A)	Remarks				
			ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Dist. m	Dir. deg	Facade	Dist	Dir	Ton			Int			
Charming Garden	Daytime	Y [2]	C	65	68	65	East Elevation	64	40	0	3	-40	0	3	0	98			
							South Elevation	57	50	90	3	-42	-5	3	0	98			
							West Elevation	55	60	180	3	-44	-10	3	0	103			
							North Elevation	53	60	180	3	-44	-10	3	0	101			
								65											
	Night-time	Y [2]	C	55	67	55	East Elevation	54	40	0	3	-40	0	3	0	88			
							South Elevation	47	50	90	3	-42	-5	3	0	88			
							West Elevation	45	60	180	3	-44	-10	3	0	93			
North Elevation - N3							43	60	180	3	-44	-10	3	0	91				
							55												

[1] Area Sensitivity Rating

[2] Affected by West Kowloon Highway located within 150m