

Annex C2

Proposed Construction Plant Inventory

Construction Plant Inventory (Without Mitigation)**(Construction Method for Flyover A : Option 1 - Precast Segmental Balanced Cantilever Box Girder)**

No.	Activities	Plant	CNP/BS 5228 ref.	No. of PME	On- time %	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A) ^[3]
DESIGNATED PROJECT								
Improvement to Pok Oi Interchange								
1	Site clearance	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	113
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	[1-a]	1	100%	105	105	
2	Site formation	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	114
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	[1-a]	1	100%	105	105	
		Roller, vibratory	CNP 186	1	100%	108	108	
3	Piling	Continuous Flight Auger	CNP 167	1	100%	114	114	115
		Crane lorry, 5.5 tonne < gross vehicle weight < 38 tonne	[1-b]	1	100%	105	105	
4	Road drainage, utilities & water mains works	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	116
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	[1-a]	1	100%	105	105	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	100%	112	112	
		Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	100%	108	108	
		Air Compressor, air flow > 10m ³ /min and < 30m ³ /min	CNP 002	1	100%	102	102	
5	Construct retaining walls, abutments and embankment	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	118
		Road roller	CNP 185	1	100%	108	108	
		Generator, silenced, 75dB(A) at 7m	CNP 102	1	100%	100	100	
		Water pump (electric)	CNP 281	1	100%	88	88	
		Poker, vibratory, hand-held	CNP 170	1	100%	113	113	
		Silent Piler	[2]	1	100%	100	100	
		Concrete lorry mixer	CNP 044	1	100%	109	109	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	100%	112	112	
6	Demolish existing structures	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	114
		Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	100%	108	108	
		Air Compressor, air flow > 10m ³ /min and < 30m ³ /min	CNP 002	1	100%	102	102	
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	[1-a]	1	100%	105	105	
7	Extend subway	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	118
		Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	100%	108	108	
		Air Compressor, air flow > 10m ³ /min and < 30m ³ /min	CNP 002	1	100%	102	102	
		Poker, vibratory, hand-held	CNP 170	1	100%	113	113	
		Saw, circular, wood	CNP 201	1	100%	108	108	
		Bar bender and cutter (electric)	CNP 021	1	100%	90	90	
		Concrete lorry mixer	CNP 044	1	100%	109	109	
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	[1-a]	1	100%	105	105	
8	Construct pilecaps and piers	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	118
		Saw, circular, wood	CNP 201	1	100%	108	108	
		Bar bender and cutter (electric)	CNP 021	1	100%	90	90	
		Drill/grinder, hand-held (electric)	CNP 065	1	100%	98	98	
		Generator, silenced, 75dB(A) at 7m	CNP 102	1	100%	100	100	
		Poker, vibratory, hand-held	CNP 170	1	100%	113	113	
		Concrete lorry mixer	CNP 044	1	100%	109	109	
		Concrete pump, stationary/lorry mounted	CNP 047	1	100%	109	109	
9	Construct flyover	Crane, mobile/barge mounted (diesel)	CNP 048	1	100%	112	112	114
		Concrete pump, stationary/lorry mounted	CNP 047	1	100%	109	109	
		Lorry, 5.5 tonne < gross vehicle weight < 38 tonne	[1-d]	1	100%	105	105	

Annex C2-1

Construction Plant Inventory (Without Mitigation)**(Construction Method for Flyover A : Option 1 - Precast Segmental Balanced Cantilever Box Girder)**

No.	Activities	Plant	CNP /BS 5228 ref.	No. of PME	On- time %	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A) ^[3]
10	Install concrete parapets and planters	Crane, mobile/barge mounted (diesel)	CNP 048	1	100%	112	112	113
		Crane lorry, 5.5 tonne < gross vehicle weight < 38 tonne	[1-b]	1	100%	105	105	
11	Road resurfacing and remarking	Road planer or miller	CNP 184	1	100%	111	111	115
		Road roller	CNP 185	1	100%	108	108	
		Asphalt paver	CNP 004	1	100%	109	109	
		Paint line marker	CNP 161	1	100%	90	90	
		Paint line remover	[1-c]	1	100%	104	104	
12	Install noise barriers	Crane, mobile/barge mounted (diesel)	CNP 048	1	100%	112	112	113
		Crane lorry, 5.5 tonne < gross vehicle weight < 38 tonne	[1-b]	1	100%	105	105	
13	Pavement construction	Asphalt paver	CNP 004	1	100%	109	109	112
		Road roller	CNP 185	1	100%	108	108	
CONCURRENT PROJECTS								
1	Site formation	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	113
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	[1-a]	1	100%	105	105	
2	Box culvert	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	116
		Saw, circular, wood	CNP 201	1	100%	108	108	
		Bar bender and cutter (electric)	CNP 021	1	100%	90	90	
		Drill/grinder, hand-held (electric)	CNP 065	1	100%	98	98	
		Generator, silenced, 75dB(A) at 7m	CNP 102	1	100%	100	100	
		Water pump (electric)	CNP 281	1	100%	88	88	
		Poker, vibratory, hand-held	CNP 170	1	100%	113	113	
3	Retaining wall construction & associated works	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	117
		Roller, vibratory	CNP 186	1	100%	108	108	
		Generator, silenced, 75dB(A) at 7m	CNP 102	1	100%	100	100	
		Water pump (electric)	CNP 281	1	100%	88	88	
		Poker, vibratory, hand-held	CNP 170	1	100%	113	113	
		Concrete lorry mixer	CNP 044	1	100%	109	109	
		Crane lorry, 5.5 tonne < gross vehicle weight < 38 tonne	[1-b]	1	100%	105	105	
4	Road embankment	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	113
		Roller, vibratory	CNP 186	1	100%	108	108	
5	Road drainage, utilities & water mains works	Excavator/loader, wheeled/tracked	CNP 081	1	100%	112	112	114
		Crane lorry, 5.5 tonne < gross vehicle weight < 38 tonne	[1-b]	1	100%	105	105	
		Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	100%	108	108	
		Air Compressor, air flow > 10m ³ /min and < 30m ³ /min	CNP 002	1	100%	102	102	
6	Pavement construction	Asphalt paver	CNP 004	1	100%	109	109	112
		Road roller	CNP 185	1	100%	108	108	

Notes:

[1] SWLs of the following plant items refer to the document prepared by the Noise Control Authority (http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

[1-a] Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne

[1-b] Crane lorry, 5.5 tonne < gross vehicle weight < 38 tonne

[1-c] Paint line remover

[2] Reference was made to "Project Profile for Prince Edward Station Pedestrian Subway Extension and Entrance Modification Works (Register No. PP-253/2005)"

[3] The figures are rounded-up to a whole number.

Construction Plant Inventory (Without Mitigation)**(Construction Method for Flyover A : Option 2 : Cast In-situ Deck with Conventional Temporary Works)**

No.	Activities	Plant	CNP /BS 5228 ref.	No. of PME	On- time %	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A) ^[3]
DESIGNATED PROJECT								
Improvement to Pok Oi Interchange								
9	Construct flyover	Lorry, 5.5 tonne < gross vehicle weight < 38	[1-d]	1	100%	105	105	119
		Bar bender and cutter (electric)	CNP 021	1	100%	90	90	
		Drill/grinder, hand-held (electric)	CNP 065	2	100%	98	101	
		Generator, silenced, 75dB(A) at 7m	CNP 102	1	100%	100	100	
		Concrete lorry mixer	CNP 044	1	100%	109	109	
		Concrete pump, stationary/lorry mounted	CNP 047	1	100%	109	109	
		Poker, vibratory, hand-held	CNP 170	2	100%	113	116	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	100%	112	112	

Notes:

- [1] SWLs of the following plant items refer to the document prepared by the Noise Control Authority (http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)
- [1-a] Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne
- [1-b] Crane lorry, 5.5 tonne < gross vehicle weight < 38 tonne
- [1-c] Paint line remover
- [2] Reference was made to "Project Profile for Prince Edward Station Pedestrian Subway Extension and Entrance Modification Works (Register No. PP-253/2005)"
- [3] The figures are rounded-up to a whole number.