

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Works Area
(New Clear Water Bay Road/Shun Lee Tsuen Road RIW) = 22600 m²

1. General

1.1 Site Clearance

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Lorry	50%	2.4	10	2	48	24
Total:						81.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.4%</i>

2. SLTR Slip Road

2.1 Cut Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	3	76.8	49.92
Total:						73.92
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

2.2 Slope Drainage

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Total:						12
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2.3 Retaining Walls

2.3.1 Foundation for Retaining Wall

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Piling Rig	50%	2.3	6	2	27.6	13.8
Air Compressor	50%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Generator, Silenced	100%	-	-	2	-	-
Water Pump (electric)	100%	-	-	4	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						53.4
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

2.3.2 Retaining Wall Structure

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	1	25.6	16.64
Generator, Silenced	100%	-	-	1	-	-
Bar bender and cutter (electric)	50%	-	-	1	-	-
Saw, Circular, Wood	50%	-	-	1	-	-
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Crane Mobile	30%	2.6	10	1	26	7.8
Total:						72.44
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Works Area
(New Clear Water Bay Road/Shun Lee Tsuen Road RIW) = 22600 m²

2.4 Backfilling of Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						49.12
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

2.5 Landscape Works for Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	2	51.2	33.28
Lorry	50%	2.4	10	2	48	24
Total:						57.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

2.6 Demolition Works of Existing Carriageway / Verge

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Breaker, Excavator Mounted	65%	3.2	8	2	51.2	33.28
Total:						90.56
<i>Percentage of Usage Area to Works Area:</i>						<i>0.4%</i>

2.7 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	2	51.2	33.28
Compactor, Vibratory	50%	2.4	10	2	48	24
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Total:						57.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

2.8 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						56.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Works Area
(New Clear Water Bay Road/Shun Lee Tsuen Road RIW) = 22600 m²

2.9 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint Line Marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						90.26
<i>Percentage of Usage Area to Works Area:</i>						<i>0.4%</i>

3. Widening of NCWBR

3.1 Demolition of Existing Subway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Breaker, Excavator Mounted	65%	3.2	8	2	51.2	33.28
Loader	50%	4.5	8	1	36	18
Total:						108.56
<i>Percentage of Usage Area to Works Area:</i>						<i>0.5%</i>

3.2 Reprovisioning of Existing Subway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Generator, Silenced	100%	-	-	1	-	-
Bar bender and cutter (electric)	50%	-	-	1	-	-
Saw, Circular, Wood	50%	-	-	1	-	-
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Total:						52.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Works Area
(New Clear Water Bay Road/Shun Lee Tsuen Road RIW) = 22600 m²

3.3 Demolition Works of Existing Carriageway / Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Breaker, Excavator Mounted	65%	3.2	8	2	51.2	33.28
Total:						90.56
<i>Percentage of Usage Area to Works Area:</i>						<i>0.4%</i>

3.4 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Total:						28.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

3.5 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						56.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

3.6 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						90.26
<i>Percentage of Usage Area to Works Area:</i>						<i>0.4%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Works Area
(New Clear Water Bay Road/Shun Lee Tsuen Road RIW) = 22600 m²

4. NE and NB of NCWBR Kowloon Bound

4.1 Pile Foundation at Verge

Piling Rig	50%	2.3	6	2	27.6	13.8
Air Compressor	50%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Generator, Silenced	100%	-	-	2	-	-
Water Pump (electric)	100%	-	-	2	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						53.4
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

4.2 Pile Cap at Verge

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Generator, Silenced	100%	-	-	1	-	-
Bar Bender and Cutter (electric)	50%	-	-	1	-	-
Saw, Circular, Wood	65%	-	-	1	-	-
Crane Mobile	30%	2.6	10	1	26	7.8
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	30%	-	-	1	-	-
Total:						48.44
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

4.3 NE Column Post at Verge

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Lorry	50%	2.4	10	1	24	12
Total:						19.8
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

4.4 Pile Foundation at Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Piling Rig	50%	2.3	6	2	27.6	13.8
Air Compressor	50%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Generator, Silenced	100%	-	-	2	-	-
Water Pump (electric)	100%	-	-	4	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						53.4
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Works Area
(New Clear Water Bay Road/Shun Lee Tsuen Road RIW) = 22600 m²

4.5 Pile Cap at Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	100%	-	-	2	-	-
Bar Bender and Cutter (electric)	50%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Breaker, Hand-held	30%	-	-	2	-	-
Total:						96.88
<i>Percentage of Usage Area to Works Area:</i>						<i>0.4%</i>

4.6 NE Column Post at Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Lorry	50%	2.4	10	1	24	12
Total:						19.8
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

4.7 NE Roof Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Cherry Picker	30%	3.2	8	2	51.2	15.36
Lorry	50%	2.4	10	2	48	24
Total:						54.96
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

4.8 NB Column Post at Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Lorry	50%	2.4	10	1	24	12
Total:						19.8
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Works Area
(New Clear Water Bay Road/Shun Lee Tsuen Road RIW) = 22600 m²

4.9 Panel Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Cherry Picker	30%	3.2	8	2	51.2	15.36
Lorry	50%	2.4	10	2	48	24
Total:						54.96
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

5. NB of NCWBR SK Bound

5.1 Pile Foundation at Verge

Piling Rig	50%	2.3	6	2	27.6	13.8
Air Compressor	50%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Generator, Silenced	100%	-	-	2	-	-
Water Pump (electric)	100%	-	-	4	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						53.4
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

5.2 Pile Cap at Verge

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Generator, Silenced	100%	-	-	1	-	-
Bar Bender and Cutter (electric)	50%	-	-	1	-	-
Saw, Circular, Wood	50%	-	-	1	-	-
Crane Mobile	30%	2.6	10	1	26	7.8
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Total:						48.44
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

5.3 NB Column Post at Verge

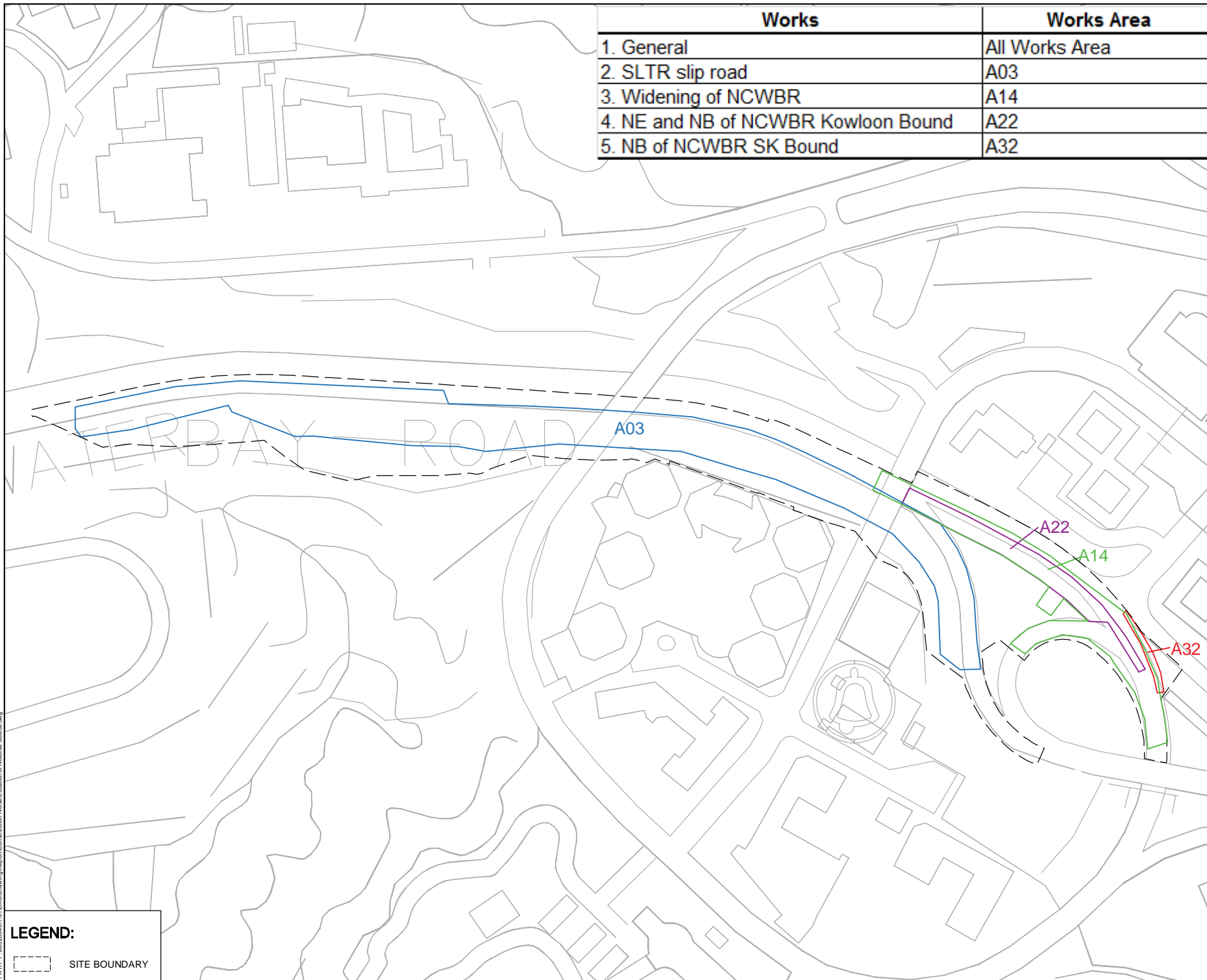
PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Lorry	50%	2.4	10	1	24	12
Total:						19.8
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

5.4 Panel Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Cherry Picker	30%	3.2	8	2	51.2	15.36
Lorry	50%	2.4	10	1	24	12
Total:						35.16
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

ISO A1 (594mm x 841mm) Approved: Checked: Designer: Project Management Initials:

Works	Works Area
1. General	All Works Area
2. SLTR slip road	A03
3. Widening of NCWBR	A14
4. NE and NB of NCWBR Kowloon Bound	A22
5. NB of NCWBR SK Bound	A32



AECOM

PROJECT
 DEVELOPMENT OF
 ANDERSON ROAD
 QUARRY SITE -
 INVESTIGATION, DESIGN
 AND CONSTRUCTION

CLIENT

 土木工程發展署
 Civil Engineering and
 Development Department

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ISSUE/REVISION

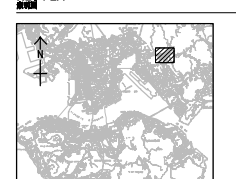
NO.	DATE	DESCRIPTION	CHK.

STATUS

SCALE

A3 1:2000

KEY PLA



PROJECT NO. 60328348 **CONTRACT NO.** CE 10/2014 (CE)

SHEET TITLE
 Worksite Location (J/O
 NCWBR/SLTR RIW)

SHEET NUMBER
 Appendix 4.3

LEGEND:
 SITE BOUNDARY

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Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

1. General

1.1 Site Clearance

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Lorry	50%	2.4	10	2	48	24
Total:						81.28
Percentage of Usage Area to Works Area:						0.4%

2. U-turn Facility at CWBR

2.1 Cut Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Total:						57.28
Percentage of Usage Area to Works Area:						0.3%

2.2 Slope Drainage

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Total:						12
Percentage of Usage Area to Works Area:						0.1%

2.3 Retaining Walls

2.3.1 Foundation for Retaining Wall

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Piling Rig	50%	2.3	6	1	13.8	6.9
Air Compressor	50%	-	-	1	-	-
Crane Mobile	30%	2.6	10	1	26	7.8
Generator, Silenced	100%	-	-	1	-	-
Water Pump (electric)	100%	-	-	2	-	-
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Total:						26.7
Percentage of Usage Area to Works Area:						0.1%

2.3.2 Retaining Wall Structure

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Generator, Silenced	100%	-	-	1	-	-
Bar bender and cutter (electric)	50%	-	-	1	-	-
Saw, Circular, Wood	50%	-	-	1	-	-
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Crane Mobile	30%	2.6	10	1	26	7.8
Total:						48.44
Percentage of Usage Area to Works Area:						0.2%

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

2.4 Backfilling of Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Road Roller	80%	3.2	8	2	51.2	40.96
Total:						98.24
<i>Percentage of Usage Area to Works Area:</i>						<i>0.5%</i>

2.5 Landscape Works for Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	2	51.2	33.28
Lorry	50%	2.4	10	2	48	24
Total:						57.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

2.6 Demolition Works of Existing Carriageway / Verge

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	1	25.6	16.64
Breaker, Excavator Mounted	65%	3.2	8	1	25.6	16.64
Total:						57.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

2.7 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Total:						28.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2.8 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	3	72	36
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						68.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

2.9 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	3	72	36
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						102.26
<i>Percentage of Usage Area to Works Area:</i>						<i>0.5%</i>

3. Slopeworks at CWBR SK Bound

3.1 Cut Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	1	25.6	16.64
Total:						40.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

3.2 Retaining Wall Structure

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	1	25.6	16.64
Generator, Silenced	100%	-	-	1	-	-
Bar bender and cutter (electric)	50%	-	-	1	-	-
Saw, Circular, Wood	50%	-	-	1	-	-
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Crane Mobile	30%	2.6	10	1	26	7.8
Total:						72.44
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

3.3 Backfilling of Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						49.12
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

3.4 Slope Drainage

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Total:						12
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

3.5 Landscape Works for Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	2	51.2	33.28
Lorry	50%	2.4	10	2	48	24
Total:						57.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

4. CWBR SK Bound

4.1 Demolition Works of Existing Carriageway / Footpath / Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	6	144	72
Excavator	65%	3.2	8	2	51.2	33.28
Breaker, Excavator Mounted	65%	3.2	8	2	51.2	33.28
Total:						138.56
<i>Percentage of Usage Area to Works Area:</i>						<i>0.7%</i>

4.2 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Total:						28.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

4.3 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	3	72	36
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						68.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

4.4 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	3	72	36
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						102.26
<i>Percentage of Usage Area to Works Area:</i>						<i>0.5%</i>

4.5 Roadside Landscape

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Lorry	50%	2.4	10	1	24	12
Total:						28.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

5. CWBR Kowloon Bound & OSR

5.1 Cut Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	3	72	36
Excavator	65%	3.2	8	1	25.6	16.64
Total:						52.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

5.2 Demolition Works of Existing Carriageway / Footpath / Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Breaker, Excavator Mounted	65%	3.2	8	2	51.2	33.28
Total:						90.56
<i>Percentage of Usage Area to Works Area:</i>						<i>0.4%</i>

5.3 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	40%	-	-	1	-	-
Total:						28.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

5.4 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						56.48
Percentage of Usage Area to Works Area:						0.3%

5.5 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	3	72	36
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						102.26
Percentage of Usage Area to Works Area:						0.5%

5.6 Roadside Landscape

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Lorry	50%	2.4	10	1	24	12
Total:						28.64
Percentage of Usage Area to Works Area:						0.1%

6. Semi-NE Column Post at Verge

6.1 Pile Foundation at Verge

Piling Rig	50%	2.3	6	3	41.4	20.7
Air Compressor	50%	-	-	3	-	-
Crane Mobile	30%	2.6	10	3	78	23.4
Generator, Silenced	100%	-	-	3	-	-
Water Pump (electric)	100%	-	-	6	-	-
Concrete Lorry Mixer	50%	2.4	10	3	72	36
Total:						80.1
Percentage of Usage Area to Works Area:						0.4%

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

6.2 Pile Cap at Verge

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	100%	-	-	2	-	-
Bar Bender and Cutter (electric)	50%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Air Compressor	50%	-	-	1	-	-
Breaker, Hand-held	30%	-	-	2	-	-
Total:						96.88
Percentage of Usage Area to Works Area:						0.5%

6.3 Semi-NE Column Post at Verge

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Lorry	50%	2.4	10	2	48	24
Total:						39.6
Percentage of Usage Area to Works Area:						0.2%

6.4 Pile Foundation at Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Piling Rig	50%	2.3	6	3	41.4	20.7
Air Compressor	50%	-	-	3	-	-
Crane Mobile	30%	2.6	10	3	78	23.4
Generator, Silenced	100%	-	-	3	-	-
Water Pump (electric)	100%	-	-	6	-	-
Concrete Lorry Mixer	50%	2.4	10	3	72	36
Total:						80.1
Percentage of Usage Area to Works Area:						0.4%

6.5 Pile Cap at Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	100%	-	-	2	-	-
Bar Bender and Cutter (electric)	50%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Air Compressor	50%	-	-	3	-	-
Breaker, Hand-held	30%	-	-	2	-	-
Total:						96.88
Percentage of Usage Area to Works Area:						0.5%

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Clear Water Bay Road / On Sau Road RIW) = 21100 m²

6.6 Semi-NE Column Post at Central Median

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Lorry	50%	2.4	10	2	48	24
Total:						39.6
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

6.7 Semi-NE Roof Installation

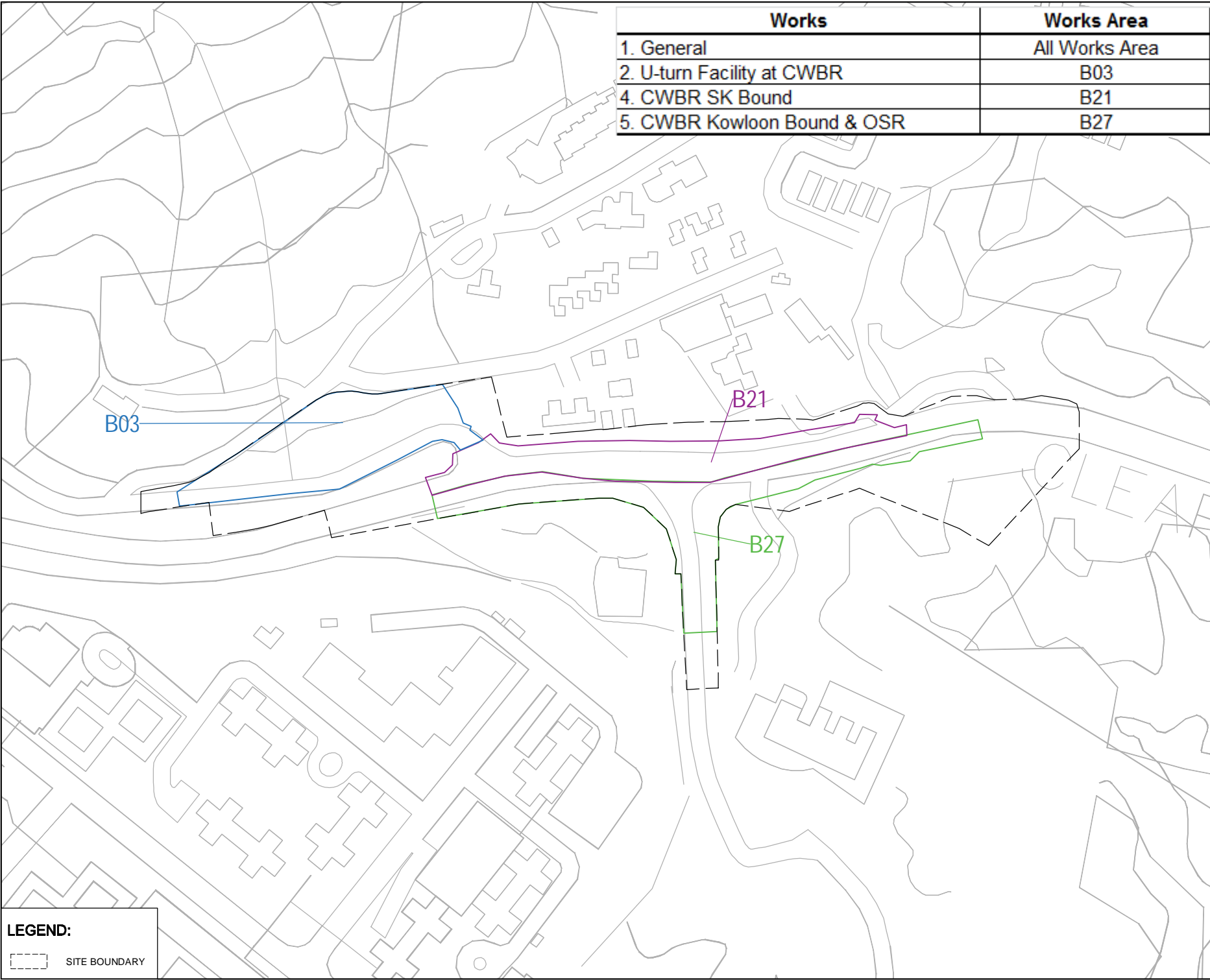
PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Cherry Picker	30%	3.2	8	2	51.2	15.36
Lorry	50%	2.4	10	2	48	24
Total:						54.96
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

6.8 Semi-NE Panel Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Cherry Picker	30%	3.2	8	2	51.2	15.36
Lorry	50%	2.4	10	2	48	24
Total:						54.96
<i>Percentage of Usage Area to Works Area:</i>						<i>0.3%</i>

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Works	Works Area
1. General	All Works Area
2. U-turn Facility at CWBR	B03
4. CWBR SK Bound	B21
5. CWBR Kowloon Bound & OSR	B27



LEGEND:

--- SITE BOUNDARY



PROJECT
 DEVELOPMENT OF
 ANDERSON ROAD
 QUARRY SITE -
 INVESTIGATION, DESIGN
 AND CONSTRUCTION

CLIENT
 土木工程發展署
 Civil Engineering and
 Development Department

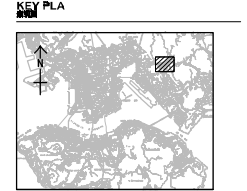
CONSULTANT
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ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.

STATUS

SCALE
 A3 1 : 2000



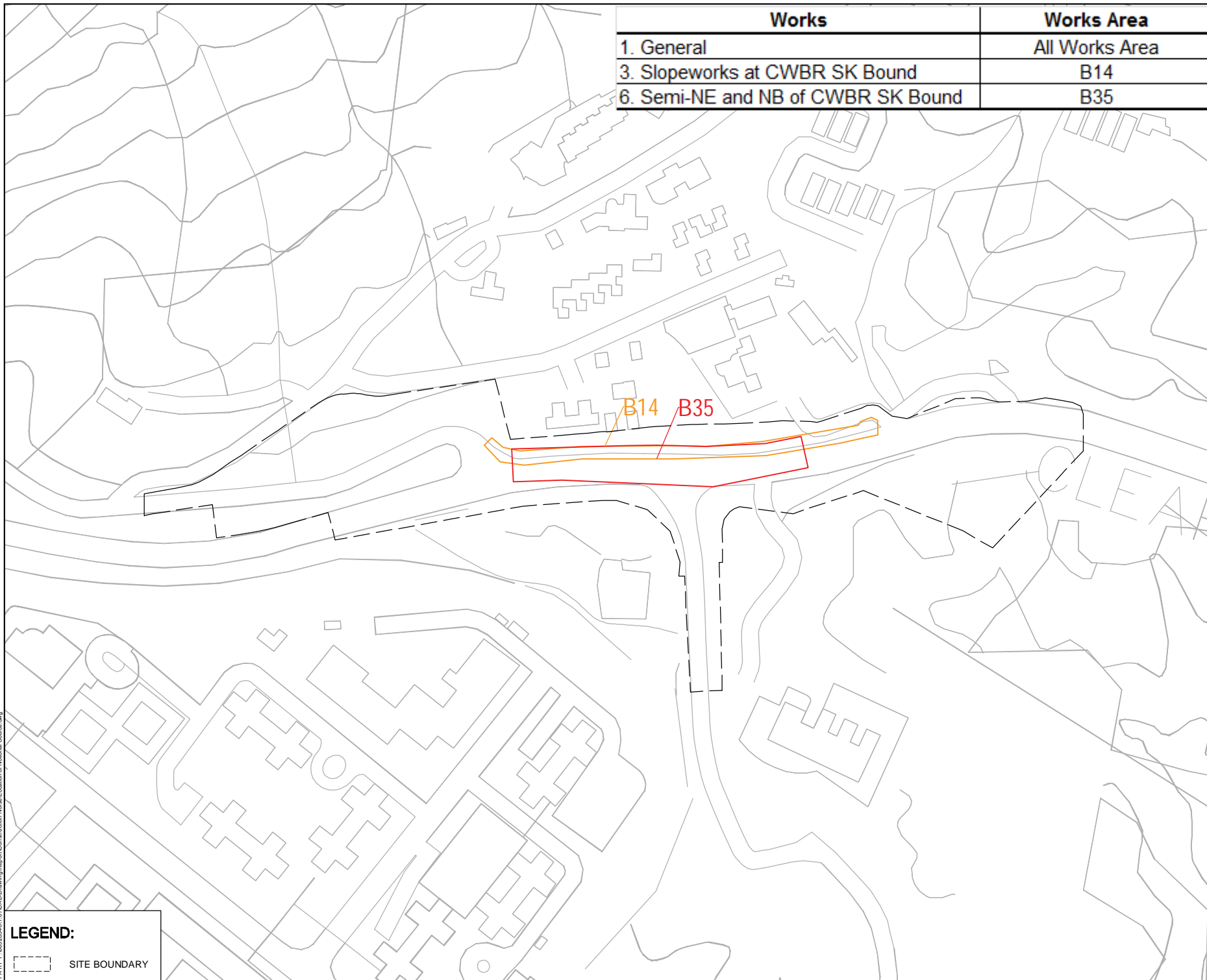
PROJECT NO. 60328348
CONTRACT NO. CE 10/2014 (CE)

SHEET TITLE
 Worksite Location
 (J/O CWBR/OSR RIW) (1 of 2)

SHEET NUMBER
 Appendix 4.3

Plot File by: Choroitek
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 Project Management Initials: Designer: Checkset: Approved: ISO A1 (564mm x 841mm)

Works	Works Area
1. General	All Works Area
3. Slopeworks at CWBR SK Bound	B14
6. Semi-NE and NB of CWBR SK Bound	B35



LEGEND:

--- SITE BOUNDARY

AECOM

PROJECT
 DEVELOPMENT OF
 ANDERSON ROAD
 QUARRY SITE -
 INVESTIGATION, DESIGN
 AND CONSTRUCTION

CLIENT
 土木工程發展署
 Civil Engineering and
 Development Department

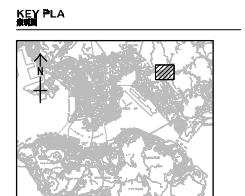
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NO.	DATE	DESCRIPTION	CHK.

STATUS

SCALE
 A3 1 : 2000



PROJECT NO. 60328348
CONTRACT NO. CE 10/2014 (CE)

SHEET TITLE
 Worksite Location
 (J/O CWBR/OSR RIW) (2 of 2)

SHEET NUMBER
 Appendix 4.3

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Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

1. General

1.1 Site Clearance

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Lorry	50%	2.4	10	2	48	24
Total:						81.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2. TKOR Slip Rd SMP Bound Re-alignment

2.1 Temp Cut Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	1	25.6	16.64
Total:						40.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2.2 Retaining Wall

2.2.1 Pile Foundation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Piling Rig	50%	2.3	6	2	27.6	13.8
Air Compressor	50%	1.5	2.5	2	7.5	3.75
Crane Mobile	30%	2.6	10	2	52	15.6
Generator, Silenced	100%	-	-	2	-	-
Water Pump (electric)	100%	-	-	2	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						57.15
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2.2.2 Retaining Wall Structure

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	100%	-	-	2	-	-
Bar bender and cutter (electric)	50%	-	-	2	-	-
Saw, Circular, Wood	50%	-	-	2	-	-
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Air Compressor	50%	1.5	2.5	2	7.5	3.75
Breaker, Hand-held	40%	-	-	2	-	-
Crane Mobile	30%	2.6	10	2	52	15.6
Total:						100.63
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

2.3 Backfilling of Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						49.12
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2.4 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Total:						30.515
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2.5 Utility Diversion

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Total:						30.515
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

2.6 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						56.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

2.9 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						90.26
Percentage of Usage Area to Works Area:						0.1%

3. Flyover Construction

3.1 Pile Foundation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	2	51.2	33.28
Piling Rig	50%	2.3	6	2	27.6	13.8
Oscillator	50%	2	2	2	8	4
Reverse Circulation Drill	50%	2	2	2	8	4
Generator, Silenced	100%	-	-	2	-	-
Bar bender and cutter (electric)	50%	-	-	2	-	-
Water Pump (electric)	100%	-	-	2	-	-
Crane Mobile	50%	2.6	10	2	52	26
Air Compressor	50%	-	-	2	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						105.08
Percentage of Usage Area to Works Area:						0.2%

3.2 Pile Cap

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	100%	-	-	2	-	-
Bar bender and cutter (electric)	65%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Poker, Vibratory, Hand-held	65%	-	-	2	-	-
Air Compressor	65%	1.5	2.5	2	7.5	4.875
Breaker, Hand-held	65%	-	-	2	-	-
Crane Mobile	65%	2.6	10	2	52	33.8
Total:						119.955
Percentage of Usage Area to Works Area:						0.2%

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

3.3 Bridge Pier and Abutment

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	100%	-	-	2	-	-
Bar bender and cutter (electric)	65%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Poker, Vibratory, Hand-held	65%	-	-	2	-	-
Air Compressor	65%	1.5	2.5	2	7.5	4.875
Breaker, Hand-held	65%	-	-	2	-	-
Crane Mobile	65%	2.6	10	2	52	33.8
Total:						119.955
Percentage of Usage Area to Works Area:						0.2%

3.4 Insitu Deck

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	100%	-	-	2	-	-
Bar bender and cutter (electric)	65%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Poker, Vibratory, Hand-held	65%	-	-	2	-	-
Air Compressor	65%	1.5	2.5	2	7.5	4.875
Breaker, Hand-held	65%	-	-	2	-	-
Crane Mobile	65%	2.6	10	2	52	33.8
Total:						119.955
Percentage of Usage Area to Works Area:						0.2%

3.5 Noise Barrier Installation

3.5.1 NB Column Post

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Lorry	50%	2.4	10	2	48	24
Total:						39.6
Percentage of Usage Area to Works Area:						0.1%

3.5.2 Panel Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Cherry Picker	30%	3.2	8	2	51.2	15.36
Lorry	50%	2.4	10	2	48	24
Total:						54.96
Percentage of Usage Area to Works Area:						0.1%

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

3.6 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						90.26
Percentage of Usage Area to Works Area:						0.1%

4. SMPR Re-alignment

4.1 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Total:						30.515
Percentage of Usage Area to Works Area:						0.1%

4.2 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						56.48
Percentage of Usage Area to Works Area:						0.1%

4.3 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						90.26
Percentage of Usage Area to Works Area:						0.1%

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

4.4 Junction Modification

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Total:						42.515
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

5. Semi-NE and NB along SMPR

5.1 Utility Diversion

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Total:						30.515
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

5.2 Pile Foundation at Uphill

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Piling Rig	50%	2.3	6	2	27.6	13.8
Air Compressor	50%	1.5	2.5	2	7.5	3.75
Crane Mobile	30%	2.6	10	2	52	15.6
Generator, Silenced	100%	-	-	2	-	-
Water Pump (electric)	100%	-	-	2	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						57.15
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

5.3 Pile Cap at Uphill

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	65%	-	-	2	-	-
Bar bender and cutter (electric)	50%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Crane Mobile	65%	2.6	10	2	52	33.8
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	65%	-	-	2	-	-
Air Compressor	50%	1.5	2.5	2	7.5	3.75
Breaker, Hand-held	65%	-	-	2	-	-
Total:						118.83
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

5.4 Semi-NE and NB Column Post at Uphill

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	2	52	15.6
Lorry	50%	2.4	10	2	48	24
Total:						39.6
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

5.5 Pile Foundation at Downhill

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Piling Rig	50%	2.3	6	2	27.6	13.8
Air Compressor	50%	1.5	2.5	2	7.5	3.75
Crane Mobile	30%	2.6	10	2	52	15.6
Generator, Silenced	100%	-	-	2	-	-
Water Pump (electric)	100%	-	-	2	-	-
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Total:						57.15
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

5.6 Pile Cap at Downhill

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Generator, Silenced	65%	-	-	2	-	-
Bar bender and cutter (electric)	50%	-	-	2	-	-
Saw, Circular, Wood	65%	-	-	2	-	-
Crane Mobile	65%	2.6	10	2	52	33.8
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	65%	-	-	2	-	-
Air Compressor	50%	1.5	2.5	2	7.5	3.75
Breaker, Hand-held	65%	-	-	2	-	-
Total:						118.83
<i>Percentage of Usage Area to Works Area:</i>						<i>0.2%</i>

5.7 Semi-NE Column Post at Downhill

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Lorry	50%	2.4	10	1	24	12
Total:						19.8
<i>Percentage of Usage Area to Works Area:</i>						<i>0.0%</i>

5.8 Semi-NE Roof Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Cherry Picker	30%	3.2	8	1	25.6	7.68
Lorry	50%	2.4	10	1	24	12
Total:						27.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.0%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

5.9 Panel Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Crane Mobile	30%	2.6	10	1	26	7.8
Cherry Picker	30%	3.2	8	1	25.6	7.68
Lorry	50%	2.4	10	1	24	12
Total:						27.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.0%</i>

6. TKOR Slip Road near Hong Wah Court

6.1 Temp Cut Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Total:						28.64
<i>Percentage of Usage Area to Works Area:</i>						<i>0.0%</i>

6.2 Retaining Wall Structure

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Generator, Silenced	100%	-	-	1	-	-
Bar bender and cutter (electric)	50%	-	-	1	-	-
Saw, Circular, Wood	50%	-	-	1	-	-
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Crane Mobile	30%	2.6	10	1	26	7.8
Total:						50.315
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

6.3 Backfilling of Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Excavator	65%	3.2	8	1	25.6	16.64
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						49.12
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

6.4 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Total:						30.515
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

6.5 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						44.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

6.6 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Total:						54.26
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

7. Lin Tak Road pick up/drop off construction

7.1 Cut Slope

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Excavator	65%	3.2	8	2	51.2	33.28
Total:						57.28
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

7.2 Slope Drainage

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Concrete Lorry Mixer	50%	2.4	10	1	24	12
Poker, Vibratory, Hand-held	30%	-	-	1	-	-
Total:						12
<i>Percentage of Usage Area to Works Area:</i>						<i>0.0%</i>

7.3 Utility Installation

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Excavator	65%	3.2	8	1	25.6	16.64
Compactor, Vibratory	50%	2.4	10	1	24	12
Air Compressor	50%	1.5	2.5	1	3.75	1.875
Breaker, Hand-held	40%	-	-	1	-	-
Total:						30.52
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

7.4 Formation of Carriageway

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Compactor, Vibratory	50%	2.4	10	1	24	12
Road Roller	80%	3.2	8	1	25.6	20.48
Total:						56.48
<i>Percentage of Usage Area to Works Area:</i>						<i>0.1%</i>

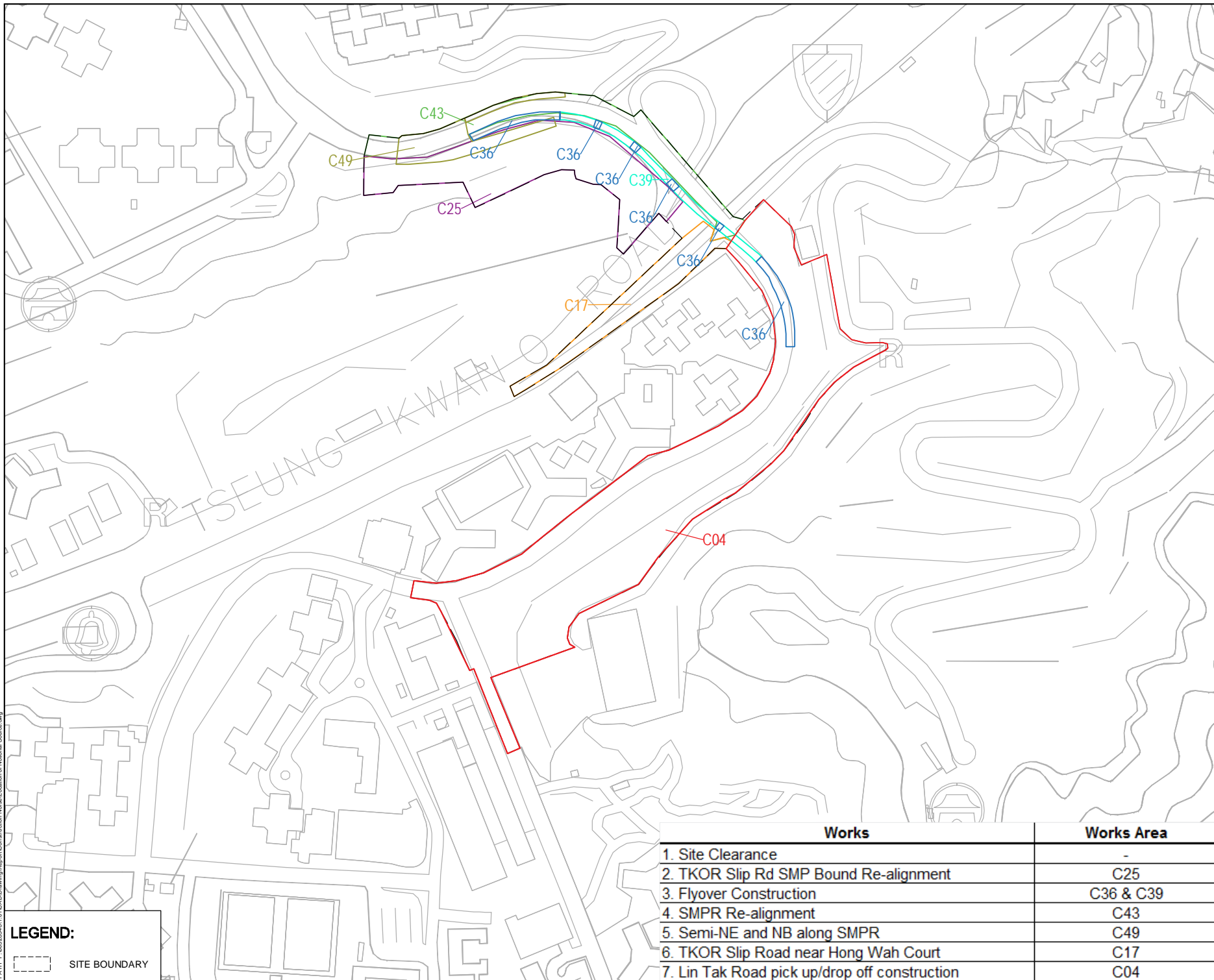
Appendix 4.3 - Justification of Percentage Active Works Area for RIW

Total Area of Works Area
(Lin Tak Road / Sau Mau Ping Road RIW) = 61,000 m²

7.5 Pavement Construction

PME	Percentage of Usage (%)	PME Size				Area in term of Time of Usage (m ²)
		B (m)	L (m)	No. of Item	Area(m ²)	
Dump Truck	50%	2.4	10	2	48	24
Road Roller	80%	3.2	8	1	25.6	20.48
Asphalt Paver	80%	3.2	8	1	25.6	20.48
Paint line marker	65%	1	2	1	2	1.3
Concrete Lorry Mixer	50%	2.4	10	2	48	24
Poker, Vibratory, Hand-held	30%	-	-	2	-	-
Total:						90.26
Percentage of Usage Area to Works Area:						0.1%

ISO A1 (594mm x 841mm) Approved: Checked: Designer: Project Management Initials:



LEGEND:

 SITE BOUNDARY

Works	Works Area
1. Site Clearance	-
2. TKOR Slip Rd SMP Bound Re-alignment	C25
3. Flyover Construction	C36 & C39
4. SMPR Re-alignment	C43
5. Semi-NE and NB along SMPR	C49
6. TKOR Slip Road near Hong Wah Court	C17
7. Lin Tak Road pick up/drop off construction	C04

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.

STATUS

SCALE
 A3 1:4000

KEY PLAN



PROJECT NO. 60328348
CONTRACT NO. CE 10/2014 (CE)

SHEET TITLE
 Worksite Location
 (J/O SMPR/LTR RIW)

SHEET NUMBER
 Appendix 4.3

This drawing has been prepared for use as a reference only. It is not to be used for construction purposes. It is the responsibility of the user to verify the accuracy of the information contained herein. AECOM shall not be held responsible for any errors or omissions.