

Item	Description	Quantity	Unit	Rate	HK \$
	<u>7.2 - CONCRETE WORKS</u>				
	<u>SPECIAL PREAMBLES</u>				
	In addition to the relevant preambles set out in Bill No. 2, the following apply specifically to this project.)))	
	Notwithstanding the requirement of clause (c)(2) of the "Concrete Works" section of the SMM, the following have been adopted for measurement in this Bill :))))))	
	(a) Reinforcement bars have not been given separately for each size but have been given as follows :)))	
	Bars 16 mm diameter and below.))	
	Bars over 16 mm diameter.))	
	(b) Reinforcement bars have not been given separately for reinforcement bent to curve.))	
	<u>COLUMNS</u>				
	<u>Reinforced concrete Grade C60/20 in</u>				
A	Column.	4716	Cube		
	<u>Formwork to</u>				
B	Column.	21261	Sup.		
C	Circular column.	452	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
D	Bars 16 mm diameter and below.	417244	kg		
E	Bars over 16 mm diameter.	851167	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>STRUCTURAL WALLS</u>				
	<u>Reinforced concrete Grade C45/20 in</u>				
A	150 mm Wall.	160	Cube		
B	200 mm Wall.	742	Cube		
C	300 mm Wall.	35	Cube		
	<u>Formwork to</u>				
D	Wall.	8881	Sup.		
E	Wall circular on plan.	897	Sup.		
F	End of wall up to 300 mm wide.	352	Run		
	<u>Deformed high yield steel bar reinforcement</u>				
G	Bars 16 mm diameter and below.	121079	kg		
	<u>BEAMS</u>				
	<u>Reinforced concrete Grade C45/20 in</u>				
H	Beam.	6596	Cube		
J	Cranked beam.	558	Cube		
K	Cantilever beam.	233	Cube		
L	Strengthening beam.	680	Cube		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>BEAMS (Cont'd)</u>				
	<u>Formwork to</u>				
A	Sides and soffit of beam.	30813	Sup.		
B	Sides and soffit of beam and strutting 5.00 - 10.00 m high.	5324	Sup.		
C	Sides and soffit of cranked beam.	1971	Sup.		
D	Sides and soffit of cranked beam and strutting 5.00 - 10.00 m high.	932	Sup.		
E	Sides and soffit of cantilever beam.	1153	Sup.		
F	Sides and soffit of cantilever beam and strutting 5.00 - 10.00 m high.	192	Sup.		
G	Sides and soffit of strengthening beam.	1982	Sup.		
H	End of beam.	104	Sup.		
J	Tapered sides and sloping of beam.	171	Sup.		
	<u>Reinforced concrete Grade C60/20 in</u>				
K	Beam.	96	Cube		
	<u>Formwork to</u>				
L	Sides and soffit of beam.	179	Sup.		
M	Sides and soffit of beam and strutting 5.00 - 10.00 m high.	77	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
N	Bars 16 mm diameter and below.	295485	kg		
P	Bars over 16 mm diameter.	1636470	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>SUSPENDED SLABS</u>				
	<u>Reinforced concrete Grade C45/20 in</u>				
A	150 mm Suspended slab.	5818	Cube		
B	150 mm Composite slab.	74	Cube		
C	175 mm Suspended slab.	106	Cube		
D	200 mm Suspended slab.	53	Cube		
E	225 mm Suspended slab.	5	Cube		
F	300 mm Suspended slab.	429	Cube		
G	400 mm Suspended slab.	13	Cube		
	<u>Extra for forming the following including thickening slab to maintain 150 mm thickness at sides and bottom and all necessary formwork</u>				
H	Half round surface drain channel 150 mm wide x 490 mm deep in 150 mm slab.	8	Run		
J	Half round surface drain channel 300 mm wide x 490 mm deep in 150 mm slab.	116	Run		
K	Half round surface drain channel 350 mm wide x 490 mm deep in 150 mm slab.	237	Run		
L	Half round surface drain channel 400 mm wide x 490 mm deep in 150 mm slab.	375	Run		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>SUSPENDED SLABS</u> (Cont'd)				
	<u>Waterproof reinforced concrete Grade C45/20 in</u>				
A	150 mm Suspended slab.	118	Cube		
	<u>Formwork to</u>				
B	Soffit of suspended slab.	3250	Sup.		
C	Soffit of composite slab; including shear studs, temporary propping and supports.	493	Sup.		
D	Soffit of suspended slab and strutting 5 - 10 m high.	4812	Sup.		
E	Soffit of suspended slab over lift shaft.	88	Sup.		
F	Soffit of cantilevered slab projecting beyond the face of building at various levels.	213	Sup.		
G	Edges and breaks in suspended slab up to 300 mm high.	615	Run		
H	Edges and breaks in suspended slab up to 300 mm high circular on plan.	112	Run		
	<u>Wrought Formwork to</u>				
J	Soffit of suspended slab.	22764	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
K	Bars 16 mm diameter and below.	849254	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>ON-GRADE SLABS</u>				
A	150 mm Hardcore on compacted soil.	56	Sup.		
B	Polythene sheet on hardcore.	56	Sup.		
C	A393 Wire mesh reinforcement.	56	Sup.		
	<u>Reinforced concrete grade C45/20 in</u>				
D	150 mm slab.	8	Cube		
	<u>Formwork to</u>				
E	Sides of ground slab up to 300 mm high.	22	Run		
F	Sides of ground slab up to 300 mm high circular on plan.	20	Run		
	<u>Deformed high tensile steel bar reinforcement</u>				
G	Bars 16 mm diameter and below.	270	kg		
H	Bars over 16 mm diameter.	1080	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>STAIRCASES</u>				
	<u>Reinforced concrete Grade C45/20 in</u>				
A	175 mm Suspended landing.	45	Cube		
B	Stairs.	119	Cube		
	<u>Formwork to</u>				
C	Soffit of suspended landing.	214	Sup.		
D	Soffit of suspended landing strutting 3.50 - 5.00 m high.	20	Sup.		
E	Soffit of suspended landing strutting 5.00 - 6.50 m high.	21	Sup.		
F	Sloping soffit of stairs.	50	Sup.		
G	Sloping soffit of stairs and strutting 3.50 - 5.00 m high.	338	Sup.		
H	Sloping soffit of stairs and strutting 5.00 - 6.50 m high.	96	Sup.		
J	Riser 100 - 200 mm high.	1649	Run		
K	Open string of stairs 300 - 400 mm high.	385	Run		
	<u>Deformed high yield steel bar reinforcement</u>				
L	Bars 16 mm diameter and below.	16970	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>WATER TANK</u>				
	<u>Waterproof reinforced concrete Grade C35/20 in</u>				
A	200 mm Wall.	59	Cube		
B	300 mm Wall.	56	Cube		
C	150 mm Suspended top slab.	13	Cube		
D	200 mm Suspended top slab.	7	Cube		
E	250 mm Bottom slab.	12	Cube		
F	300 mm Bottom slab.	19	Cube		
G	Plinth.	2	Cube		
	<u>200 x 200 mm Triangular fillets including all necessary formwork</u>				
H	Horizontal fillet at junction of slab and wall.	111	Run		
J	Vertical fillet at junction of walls.	66	Run		
	<u>300 x 300 mm Triangular fillets including all necessary formwork</u>				
K	Horizontal fillet at junction of slab and wall.	42	Run		
L	Vertical fillet at junction of walls.	40	Run		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>WATER TANK</u> (Cont'd)				
	<u>Formwork to</u>				
A	Walls.	950	Sup.		
B	Soffit of suspended slab.	110	Sup.		
C	Soffit of bottom slab.	51	Sup.		
D	Soffit of bottom slab LEFT- IN.	32	Sup.		
E	Edges and breaks in suspended slab up to 300 mm high.	126	Run		
F	Sides of plinth up to 300 mm high.	53	Run		
	<u>Deformed high yield steel bar reinforcement</u>				
G	Bar 16 mm diameter and below.	17414	kg		
	<u>PIERS</u>				
	<u>Reinforced concrete Grade C45/20 in</u>				
H	Pier.	39	Cube		
	<u>Formwork to</u>				
J	Sides of pier.	433	Sup.		
K	Sloping top of pier exceeding 15 degrees from the horizontal	115	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
L	Bars 16 mm diameter and below.	2869	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>INTERNAL WALL</u>				
	<u>Reinforced concrete Grade C35/20 in</u>				
A	200 mm Wall.	1301	Cube		
	<u>Formwork to</u>				
B	Wall.	12894	Sup.		
C	Wall circular on plan.	111	Sup.		
D	Jamb and soffits of opening in wall up to 300 mm wide.	1083	Run		
	<u>Deformed high yield steel bar reinforcement</u>				
E	Bars 16 mm diameter and below.	154819	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>EXTERNAL WALL</u>				
	<u>Waterproof reinforced concrete Grade C35/20 in</u>				
A	200 mm Wall.	3385	Cube		
B	100 mm Parapet wall.	65	Cube		
C	150 mm Parapet wall.	98	Cube		
D	200 mm Parapet wall.	97	Cube		
E	300 mm Parapet wall.	189	Cube		
F	1000 mm Parapet wall.	9	Cube		
G	175 mm Planter wall.	35	Cube		
H	200 mm Planter wall.	13	Cube		
J	500 mm Planter wall.	9	Cube		
	<u>Formwork to</u>				
K	Wall.	33200	Sup.		
L	Wall circular on plan.	645	Sup.		
M	Parapet wall.	4702	Sup.		
N	Parapet wall circular on plan.	163	Sup.		
P	Planter wall.	84	Sup.		
Q	Planter wall circular on plan.	482	Sup.		
R	End of wall up to 300 mm wide.	12	Run		
S	Jamb and soffits of opening in wall up to 300 mm wide.	4151	Run		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>EXTERNAL WALL</u> (Cont'd)				
	<u>Deformed high yield steel bar reinforcement</u>				
A	Bars 16 mm diameter and below.	427994	kg		
	<u>LINK BRIDGE AND COVERED WALKWAY</u>				
	<u>Columns</u>				
B	Reinforced concrete Grade C45/20 in columns.	9	Cube		
C	Formwork to columns.	77	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
D	Bars over 16 mm diameter.	2520	kg		
	<u>Walls</u>				
E	Reinforced Concrete Grade C45/20 in walls.	5	Cube		
F	Formwork to walls.	25	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
G	Bars over 16 mm diameter.	513	kg		
	<u>Beams</u>				
H	Reinforced Concrete Grade C45/20 in beams.	23	Cube		
J	Formwork to sides and soffit of beam.	189	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
K	Bars 16 mm diameter and below.	893	kg		
L	Bars over 16 mm diameter.	4909	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>LINK BRIDGE AND COVERED WALKWAY</u> (Cont'd)				
	<u>Suspended slab</u>				
A	Reinforced concrete Grade C45/20 in 150 mm suspended slab.	85	Cube		
B	Reinforced concrete Grade C30/20 in 125 mm composite slab.	12	Cube		
	<u>Formwork to</u>				
C	Soffit of suspended slab.	445	Sup.		
D	Soffit of composite slab; including shear studs, temporary propping and supports.	96	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
E	Bars 16 mm diameter and below.	12435	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>LINK BRIDGE AND COVERED WALKWAY</u> (Cont'd)				
	<u>Staircase</u>				
	<u>Reinforced concrete Grade C45/20 in</u>				
A	150 mm Suspended landing.	1	Cube		
B	200 mm Suspended landing.	2	Cube		
C	Stairs.	8	Cube		
	<u>Formwork to</u>				
D	Soffit of suspended landing.	6	Sup.		
E	Soffit of suspended landing strutting 3.50 - 5.00 m high.	12	Sup.		
F	Sloping soffit of stairs.	10	Sup.		
G	Sloping soffit of stairs and strutting 3.50 - 5.00 m high.	19	Sup.		
H	Riser 100 - 200 mm high.	103	Run		
J	Open string of stairs 300 - 400 mm high.	17	Run		
	<u>Deformed high yield steel bar reinforcement</u>				
K	Bars 16 mm diameter and below.	1137	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>LINK BRIDGE AND COVERED WALKWAY</u> (Cont'd)				
	<u>External wall</u>				
	<u>Waterproof reinforced concrete Grade C35/20 in</u>				
A	200 mm Wall.	136	Cube		
B	300 mm Wall.	17	Cube		
C	150 mm Parapet wall.	3	Cube		
D	300 mm Parapet wall.	6	Cube		
	<u>Formwork to</u>				
E	Wall.	1474	Sup.		
F	Wall circular on plan.	115	Sup.		
G	Parapet wall.	143	Sup.		
H	Jamb and soffits of opening in wall up to 300 mm wide.	213	Run		
	<u>Deformed high yield steel bar reinforcement</u>				
J	Bars 16 mm diameter and below.	17928	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>LINK BRIDGE AND COVERED WALKWAY</u> (Cont'd)				
	<u>Sundry concrete</u>				
A	Mass concrete Grade 15P filling on slab to make up levels.	88	Cube		
	<u>Reinforced concrete Grade C35/20 in</u>				
B	Curb.	2	Cube		
	<u>Formwork to</u>				
C	Sides of curb up to 300 mm high.	12	Run		
	<u>Deformed high yield steel bar reinforcement</u>				
D	Bars 16 mm diameter and below.	147	kg		
	<u>Expansion joint as drawing no. J2962 - FP005, J2962 - FP006</u>				
E	50 mm Wide expansion joint between new reinforced concrete slab for extension and existing reinforced concrete slab comprising proprietary stainless steel cover plate, water barrier, approved corner filler, 10 mm polysulphide pointing, wire mesh and all necessary fixing accessories as described and as drawing in 150 mm slab.	42	Run		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>SUNDRY CONCRETE</u>				
A	Mass concrete Grade 15P filling on slab to make up levels.	103	Cube		
B	Mass concrete Grade 15P filling on slab to form ramp.	11	Cube		
	<u>Reinforced concrete Grade C35/20 in</u>				
C	Curb.	67	Cube		
D	Plinth.	98	Cube		
	<u>Formwork to</u>				
E	Sides of mass concrete filling on slab to make up levels.	8	Sup.		
F	Sides of curb up to 300 mm high.	1206	Run		
G	Sides of curb circular on plan up to 300 mm high.	3	Run		
H	Sides of plinth up to 300 mm high.	201	Run		
J	Sides of plinth over 300 mm high.	83	Sup.		
	<u>Deformed high yield steel bar reinforcement</u>				
K	Bars 16 mm diameter and below.	14550	kg		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>PRECAST OR CAST IN-SITU CONCRETE</u> <u>GRADE C35/20 INCLUDING ALL MOULDS.</u> <u>REINFORCEMENT, FINISHING FAIR ON</u> <u>EXPOSED SURFACES WHERE REQUIRED.</u> <u>HOISTING AND SETTING IN POSITION</u> <u>AND BEDDING, JOINTING AND POINTING</u> <u>IN CEMENT MORTAR (1:2:4)</u>				
A	100 x 150 mm Lintel reinforced with one 12 mm diameter GMS steel bar. (<u>In 102 No.</u>)	347	Run		
B	100 x 225 mm Lintel reinforced with one 16 mm diameter GMS steel bar. (<u>In 24 No.</u>)	190	Run		
C	150 x 150 mm Lintel reinforced with one 12 mm diameter GMS steel bar. (<u>In 39 No.</u>)	91	Run		
D	150 x 225 mm Lintel reinforced with one 16 mm diameter GMS steel bar. (<u>In 35 No.</u>)	118	Run		
E	150 x 300 mm Lintel reinforced with one 20 mm diameter GMS steel bar. (<u>In 2 No.</u>)	24	Run		
Carried to Collection					

Item	Description	Quantity	Unit	Rate	HK \$
	<u>EXPANSION JOINT AS DRAWING NO. J2962 - FP002</u>				
A	25 mm Wide expansion joint between new reinforced concrete slab for extension and existing reinforced concrete slab comprising proprietary stainless steel cover plate, water barrier, approved corner filler, 10 mm polysulphide pointing, wire mesh and all necessary fixing accessories as described and as drawing in 150 mm slab.	18	Run		
B	50 mm Wide expansion joint between new reinforced concrete slab for extension and existing reinforced concrete slab comprising proprietary stainless steel cover plate, water barrier, approved corner filler, 10 mm polysulphide pointing, wire mesh and all necessary fixing accessories as described and as drawing in 150 mm slab.	208	Run		
Carried to Collection					