



## THE HONG KONG HOUSING AUTHORITY

### Memorandum for the Building Committee

#### **Proposed Master Layout Plan and Project Development Budget for Public Rental Housing Development at Tung Chung Area 56 Phases 1, 2 & 3**

#### **PURPOSE**

To seek Members' endorsement to the Proposed Master Layout Plan and Project Development Budget for the Public Housing Development of Tung Chung Area 56 Phases 1, 2 & 3.

#### **BACKGROUND**

2. Located in the eastern part of Tung Chung, Tung Chung Area 56 is a piece of reclaimed land sandwiched between Road L16 to its north and Road P1 to its south. The site is being formed by the Territory Development Department for handing over to the Housing Department tentatively in September 2002. The Location Plan is shown in **Part 1 A** of the **Annex**.

3. Public housing development in the Area was first proposed in the "Remaining Development in Tung Chung and Tai Ho Comprehensive Feasibility Study". The proposal was included into the HOUSCOM's Control List for a production of 3,000 Group 1 flats in 2006/07. With a total area of approx. 3.4 hectares, the site is currently zoned as "Residential (Group A)" with a maximum permitted domestic plot ratio of 5.

4. Past events relevant to the project are as follows -

Date	Event
(a) 22 June 2001	PDRC endorsed Development Parameters, Conceptual Layout and Project Estimates for submission to SPC (PDRC Paper No. 18/2001)
(b) 21 September 2001	Sai Kung and Islands DipCon approved the Development Parameters. (DipCon Paper No. 10/2001 )
(c) 27 September 2001	SPC approved Development Parameters, Conceptual Layout and Project Estimates and the inclusion of the captioned site in PHDP (SPC Paper No. 35/2001)
(d) 22 February 2002	PDRC endorsed Master Layout Plan and Project Development Budget for submission to BC (PDRC Paper No. 12/2002).

## SCHEME DESIGN

5. The development comprises five 41-storey T-shaped non-standard domestic blocks in Phases 2 & 3, and one 4-storey integrated linear-shaped commercial centre/carpark block (CC/CP Block) in Phase 1 to link the housing development with the future amenity area along Road P1.

6. The CC/CP Block will provide a total of about 2,360 m<sup>2</sup> (IFA) of retail floorspace, a Kindergarten, and a Day Nursery. In addition, 174 private car parking spaces (plus 16 LGV parking space located in Phase 3) have been provided. In calculation of the private car parking and LGV requirements, the lower end of the new parking standards recommended in the Second Parking Demand Study by Transport Department (endorsed via SPC Paper No. 48/2001) is adopted.

7. In view of the extensive use of bicycles as a means of local transportation in Tung Chung, special attention has been drawn to the provision of facilities for bicycles, such as strategic location of bicycle parking areas and the adequate provision of bicycle tracks.

8. With major traffic noise from surrounding Roads L16 and P1; and railway noise from south of the site, vertical fins of 0.5m to 1.2m wide will be provided at the proposed domestic blocks 1, 2, 3 and 5 to achieve the required compliance.

9. The Development Parameters approved by SPC has been revised in the Proposed Master Layout Plan in which all 3B flats have been deleted in accordance with EB Paper No. 330/2001(C). A comparison of the above is listed in Table 1 as follows- (For details, refer to Client Requirements at **Part I** ----- **C of the Annex**)

**Table 1: Revised development parameters as against the approved development parameters by SPC**

		Approved by SPC			Proposed Master Layout Plan		
Gross Site Area		33,800 sq.m (approx.)			33,652 sq.m <sup>(1)</sup>		
No. of Flats		3,440			3,545		
Flat Mix	Flat Type	No.	%	No.	%		
					Required by EB	Provided	
	1P/2P	480	14	485	13.00	13.68	
	2P/3P	720	21	700	20.00	19.75	
	1B	1,240	36	1380	39.00	38.93	
	2B	880	26	980	28.00	27.64	
	3B	120	3	0	0	0	
	Total	3,440	100	3545	100.00	100.00	
Domestic GFA		160,800m <sup>2</sup>			165,355m <sup>2</sup>		
Plot Ratio		5 (access road excluded from site area calculation)			4.91 (access road included for site area calculation) <sup>(2)</sup>		
Population		11,000			11,344		
Parking Provision	Private Cars	252 <sup>(3)</sup>			174 <sup>(4)</sup>		
	LGV	37 <sup>(5)</sup>			16 <sup>(6)</sup>		
	Motor-cycle	23 <sup>(7)</sup>			16 <sup>(7)</sup>		
	Loading/Unloading Bay	3 (Commercial Centre); 5 (1 beneath each block)					

<sup>(1)</sup> Proposed coordinates via memo to TD dated 18.3.02

<sup>(2)</sup> It was clarified with ICU on 18.3.02 that area of access road to loading bay shall NOT be deducted from Site Area Calculation

<sup>(3)</sup> HKPSG: (1:13) for public housing estate (1/2P flats excluded); plus shopper's parking requirement of 1 per 150 m<sup>2</sup> GFA (24 nos.)

<sup>(4)</sup> New ratio under Paper No. SPC 48/01 (Second Parking Demand Study conducted by TD) (1:20); plus shopper's parking requirement of 1 per 200 m<sup>2</sup> GFA (21 nos.)

<sup>(5)</sup> HKPSG: (1:80) for public rental estate (1/2P flats excluded)

<sup>(6)</sup> New ratio under Paper No. SPC 48/01 (1:200) (1/2P flats excluded)

<sup>(7)</sup> HKPSG ratio (10% of domestic private car parking space no.)

10. Theme for the Housing Estate -

(a) **Integral Open Space as Centre of the Housing Estate -**

A circular plaza forms the heart of the estate layout. The five identical residential blocks arranged around the open space are partly lifted up from the ground by having a high headroom at ground floor, maintaining flow of space from the centre to the peripheral.

(b) **Integration with Adjacent Amenities Area via Commercial / Carpark Block (CC/CP Block) -**

An Amenity Area is located along side Road P1 to the south of the site. The CC/CP Block is designed to form a strong connection between the Amenity Area and Estate Plaza as a welcoming entrance for residents and users of the Amenity Area.

(c) **Segregation of Pedestrian and Vehicular Traffic -**

Vehicular accesses are located to the east (the main vehicular access for private cars adjacent to the proposed roundabout at the drainage reserve) and west (from Road L16 for service vehicles to access the ARCS and loading bay, and for LGVs) respectively. The landscaped open space is therefore traffic free, and flows freely beneath the domestic blocks.

11. Site Specific Block Design:

(a) **Identical Blocks for Enhanced Buildability -**

The five residential blocks are identical and radially symmetrical to enhance buildability.

**(b) Maximization of Views -**

The typical block is comprised of three wings, with each floor accommodating 18 flats. By positioning the blocks in a “ringed” fashion, two-thirds of the flats would enjoy views from the outside of the ring, mainly sea views; also, there would be no direct overlooking among the outer wings as they are radially arranged. For flats facing the central open space, there is an opportunity for mountain views through the “entrance” of the ring to the south; also, the opposed blocks within the ring are spaced across the central plaza at a considerable distance of approx. 100 m apart.

**12. Commercial Centre / Carport Block (CC/CP Block) -**

- (a) The CC/CP Block is designed to complement the unique green belt (Amenity Area) adjacent to the site. Shops are located on ground floor to serve both the residents and users of the Amenity Area; restaurants are grouped on the 1<sup>st</sup> floor, providing views towards the green belt (and hence the mountains) as well as the flexibility for outdoor dining above the entrance on a deck with a view towards the central plaza.
- (b) The linear configuration of the CC/CP Block also serves as a noise barrier to reduce traffic noise from Road P1.
- (c) The building opens up at the entry point from the Amenity Area to the Estate, creating a sense of welcoming. Two tubular bridges are seen flying across and above the space as arteries carrying vehicles in the carpark and users of the roof.
- (d) The carpark is lifted to the 2<sup>nd</sup> and the 3<sup>rd</sup> floor to allow better accessibility of the shops on ground floor and restaurants on the 1<sup>st</sup> floor, as well as better integration of the Commercial Centre to the Amenity Area to enhance the streetscape and sense of neighbourhood.

- (e) The Kindergarten and Day Nursery are located on the 1<sup>st</sup> floor opposite the restaurants across the Entrance Atrium, segregated from general circulation.
13. Environmental Design Consideration -
- (a) The CC/CP Block acts as a noise barrier against traffic noise from Road P1 and rail lines.
  - (b) The Domestic Blocks are designed to allow natural cross ventilation in typical lift lobbies and corridors.
  - (c) Automated Refuse Collection System would be provided for the estate.
  - (d) Precast concrete toilet module would be studied.
  - (e) The feasibility of grey water recycling would also be explored.
  - (f) Strategic provision of relevant facilities would be made to encourage cycling as a means of local transport.

## **LANDSCAPE DESIGN**

14. Landscape Design / Open Space Arrangement -

- (a) The building arrangement provides an opportunity for a central circular space free of vehicular traffic. The design of open space aims to maximize all the external areas so that access to the central circular space is extended through the empty bays of buildings at ground level which have a 2-storey high headroom.
- (b) There are two major entrances to the central open space at both north and south sides of the site. At the south side, the entrance is through the atrium of the Commercial Centre while the north side entrance is through an open space leading to blocks 2 & 3. The axis connecting these two entrances dissects the central plaza

asymmetrically and forms a visually dynamic landscape pattern with rocks and plants, which defines circulation routes.

- 
- (c) Integrating with the central courtyard, gardens surrounding the blocks are easily accessed through empty bays at both wings of the building blocks at ground level. (Refer to Master Layout Drawings at **Part II** of the **Annex**)

15. Recreational Facilities -

- (a) Children play areas are located in landscaped areas in between the building blocks; one basketball court and two badminton courts are located at the eastern open spaces of the site in between Blocks 1 and 2.

**PROJECT DEVELOPMENT BUDGET**

16. Based on the proposed Scheme Design, the total Project Development Budget of the captioned development is estimated to be **HK\$1,602.285M** (Details are at **Part IV** of the **Annex**), the breakdown of which is indicated in Table 2.

**Table 2: Proposed Project Development Budget**

<b>Cost Heads</b>		<b>Works Elements</b>	<b>Total \$M</b>
(a)	Site Development Cost	Site Formation Demolition	- -
(b)	Construction Cost	Foundation Building Soft Landscape & Others	363.026 993.552 3.480
		Sub-total	1,360.058
(c)	Other Project Cost [2% on (a) + (b)]	Civil engineering and geotechnical studies, site investigation and material testing etc.	27.202
(d)	Total Site Development and Construction Cost [(a) + (b) + (c)]		1,387.260
(e)	Project Management Cost [15.5% of (d)]	Professional services and overheads, consultation fees and consultant site staff etc.	215.025
(f)	<b>Project Development Budget [(d) + (e)]</b>		<b>1,602.285</b>

## PROJECT DEVELOPMENT COST

17. The relative costs based on the proposed Master Layout Plan are compared with the Approved Project Development Cost Ceiling in Table 3.



**Table 3: Comparison of Proposed Development Cost / Construction Cost and Approved Development Cost Ceiling and Cost Yardstick**

	(a)	(b)	(c)	(d)	(d2)
Buildings/ Portions	Proposed Project Development Cost  (\$/m <sup>2</sup> CFA)	Approved Project Development Cost Ceiling (Paper No. SPC 35/2001)  (\$/m <sup>2</sup> CFA)	Proposed Unit Construction Cost adjusted to tender-in date  (\$/m <sup>2</sup> CFA)	June 2001 Construction Cost Yardstick for Group 1  (\$/m <sup>2</sup> CFA)	June 2001 Construction Cost Yardstick for Group 1 adjusted to tender-in date  (\$/m <sup>2</sup> CFA)
PRH (non-std)	7,721	7,791	5,603	4,559 (Average of NH1 plus 5%)	4,548
Private Car Parking	8,456	10,598	6,446	4,519 (Commercial / Car Park Building)	4,528
Retail Facilities	16,212	20,465	12,716	11,155	11,190
Welfare Facilities	11,813	19,868	-	-	-

Note 1 For comparison with Construction Yardstick, external works, soft landscaping and other sundry cost such as drainage, utility connection, other project cost and project management costs etc. have been excluded from Unit Construction Cost.

18. With reference to Table 3, the proposed unit development costs for PRH, Private Car Parking, Retail Facilities and Welfare Facilities, are all within the respective Approved Development Cost Ceilings and with some savings.

19. Also with reference to Table 3, the proposed unit construction cost for the PRH is 23.20% over the Construction Yardstick of Group 1 (based on New Harmony 1(NH1)), due to deep bedrock level that ranges from -55m to -70m PD. Large Diameter Bored Piles are required as a result.

20. The proposed unit construction cost for Private Car Parking is 42.36% over Construction Yardstick of Carpark within Commercial Centre for the following reasons -

	% over Yardstick
(a) Bridges which connect the carpark across the Entrance Atrium of the CC/CP Block.	3.16%
(b) Deep Foundation due to site situation. (Bedrock at -40 to -55mPD)	39.20%
(Total)	42.36%

21. The proposed unit construction cost for Retail Facilities is 13.64% over Construction Yardstick of Commercial Centre, solely due to deep foundation. (Bedrock at -40 to -55mPD)

#### AVAILABILITY OF FUNDS

22. Based on the proposed development cost budget, the estimated yearly expenditure for the project is indicated as follows, and would be included in the next capital budget updating of the Authority-

<b>Estimated Expenditure (\$M)</b>			
2002/03	2003/04	Post 2003/04	Total
0.350	265.197	1,336.738	1,602.285

## DEVELOPMENT PROGRAMME

23. The key dates for the development programme are as follows-

(a)	Master Layout Plan	PDRC (2)	02/02		
(b)	Master Layout Plan	BC	04/02		
(c)	Detailed Design	DDRP	10/02		
(d)	Piling		Phase 1	Phase 2	Phase 3
		Tender Out	8/03	11/02	11/02
		Commencement	1/04	4/03	4/03
		Completion	3/05	6/04	6/04
(e)	Building		Phase 1	Phase 2	Phase 3
		Tender Out	10/04	1/04	1/04
		Commencement	3/05	6/04	6/04
		Completion	3/07	3/07	3/07

24. The detailed Programme is at **Part III** of the **Annex**. The site availability date will be subject to completion of site formation works under TDD, tentatively in 9/2002.

## RECOMMENDATION

25. It is recommended that the Proposed Master Layout Plan and Proposed Development Budget of \$1,602.285M for the Public Rental Housing Development at Tung Chung Area 56 Phases 1, 2 & 3 as described above and in the Annexes to this paper be approved.

## DISCUSSION

26. At the next meeting of the Building Committee to be held on 25 April 2002, Members will be invited to approve the recommendation in paragraph 25 above.

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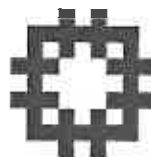
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Date : 22 April 2002

**Proposed Master Layout Plan and Project Development Budget for  
Public Rental Housing Development at  
Tung Chung Area 56 Phases 1, 2 & 3  
Building Committee Submission**

Issue No. 1

28 March 2002



Development and Construction Branch  
Housing Department

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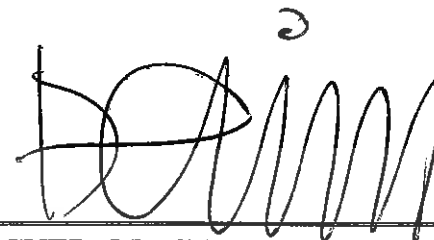
**D. Site Section**

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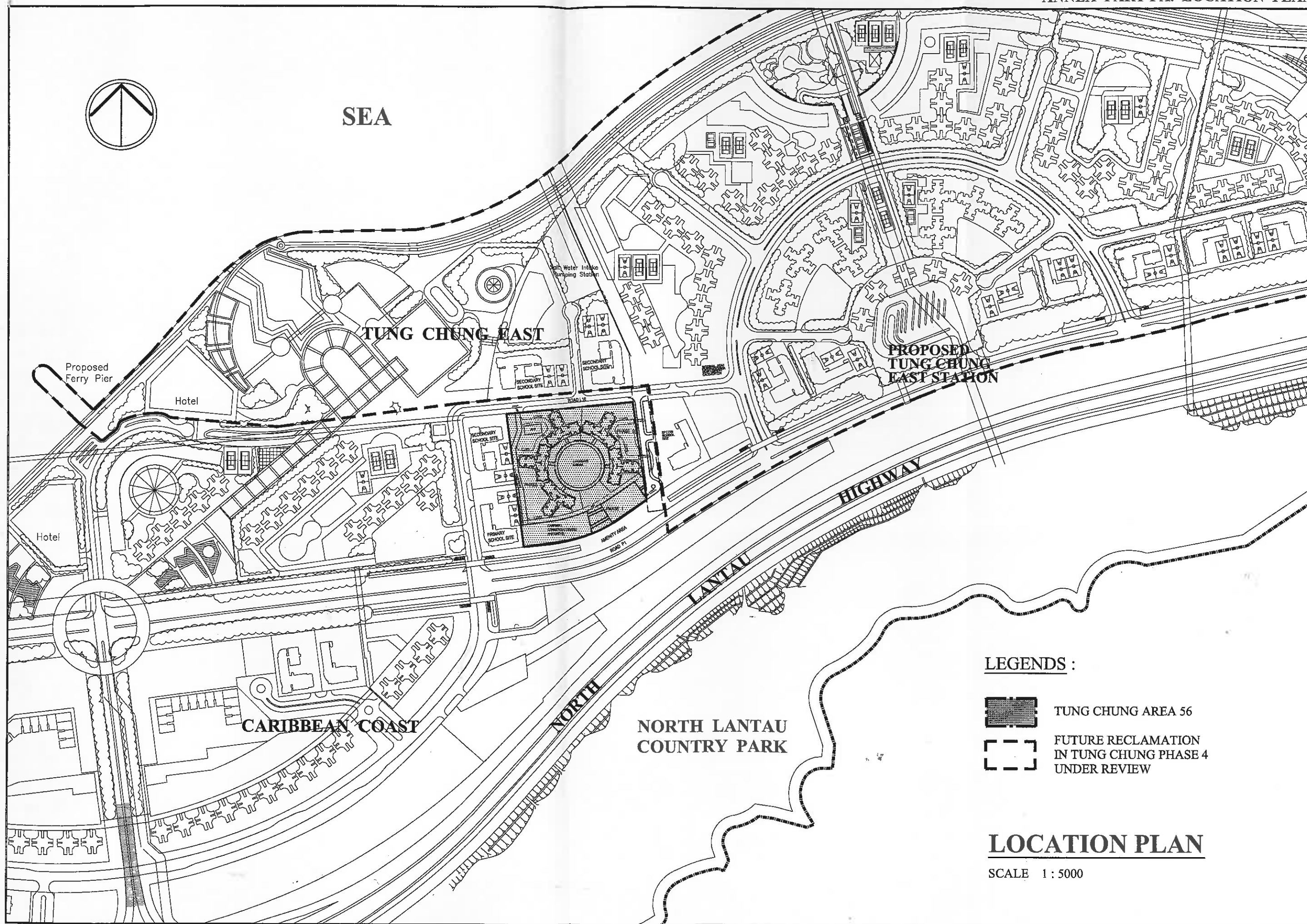
**Part IV: Project Development Budget**

**THIS DOCUMENT HAS BEEN REVIEWED  
AND APPROVED FOR ADEQUACY**

A handwritten signature in black ink, appearing to be 'C. W. KO', written over a horizontal line.

**SIGNED: Mr. C. W. KO (CA/I)**

**Date: 28 March 2002**





Part I – MASTER LAYOUT PLAN

B. Evaluation of Master Layout Plan		
Development Parameters	Master Layout Plan	Remarks
<p><b>B.1 The Site</b></p> <p><b>B.1.1 Site Location</b> Located in the eastern part of Tung Chung, Tung Chung Area 56 is a piece of reclaimed land sandwiched between Road L16 to its north and Road P1 to its south.</p> <p><b>B.1.2 Adjacent Land Use</b> The site is surrounded by school sites to the east, north and west; an amenity area is located adjacent to the southern edge of the site.</p>	<p>As in the Development Parameters</p> <p>As in the Development Parameters</p>	<p>Recommended Outline Development Plan of the Remaining Development in Tung Chung and Tai Ho Comprehensive Study Tung Chung Town Centre Area Layout Plan No. L/I-TCTC/1C</p>
<p><b>B.2 Environmental Mitigation</b> Traffic Noise from Roads P1 and L16 not exceeding 70dB(A); Railway Noise from Airport/ Tung Chung Lines not exceeding 60dB(A).</p>	<p>With major traffic noise from surrounding Roads L16 and P1; and railway noise from south of the site, vertical fins of 0.5m to 1.2m wide to be provided at the proposed domestic blocks 1, 2, 3 and 5.</p>	

## Part I – MASTER LAYOUT PLAN

<b>B. Evaluation of Master Layout Plan</b>		
Development Parameters	Master Layout Plan	Remarks
<b>B.3 <u>Site Formation</u></b> The site is a piece of reclaimed land under reclamation. The site will be formed by the Territory Development Department for handing over to the Housing Department by 9/2002.	As in the Development Parameters.	-
<b>B.4 <u>Zoning Consideration</u></b> The site is zoned Residential (Group A) in the Outline Zoning Plan.	As in the Development Parameters.	Based on the Draft Tung Chung Town Centre Area Outline Zoning Plan No. S/I-TCTC/7
<b>B.5 <u>Infrastructure</u></b> <b>B.5.1 <u>Drainage and Sewerage</u></b> To be completed by TDD	As in the Development Parameters.	-
<b>B.5.2 <u>Water Supply</u></b> New fresh/flush water supplies to be completed by TDD	As in the Development Parameters.	
<b>B.5.3 <u>Utilities</u></b> Application for utilities services would be sought from relevant utility companies.	As in the Development Parameters.	

Part I – MASTER LAYOUT PLAN

C. Accommodation & Facilities																			
Approved by DIPCON (DIPCON Paper No. 10/01)		Master Layout Plan		Remarks															
C.1 <u>Site Area</u> Gross Site Area: 33.80 ha (approx.)		Gross Site Area: 33.65 ha (Further to supply of more detailed information of site boundary)		Memo to TDD, TD and other government departments concerned for comment of site setting out dated 31.12.01; no adverse comments on site boundary received.  Clarified with ICU on 18.3.02 that access road will NOT be deducted from Site Area Calculation.															
C.2 <u>Plot Ratio</u> Domestic GFA is 160,800m <sup>2</sup>  Domestic P. R. is 5.00		Domestic GFA is 165,355m <sup>2</sup>  Domestic P. R. is 4.91		-															
C.3 <u>Design Population</u> Total Design Population is 11,008.		Total Design Population is 11,344		Assumption: 3.2 persons per flat															
C.4 <u>Flat Number and Flat Mix</u> The proposed housing development is planned to provide a total of 3,440 flats.		The proposed housing development is planned to provide a total of 3,545 flats.		<table><tr><td>Flat</td><td>1/2P</td><td>2/3P</td><td>1B</td><td>2B</td></tr><tr><td>No.</td><td>485</td><td>700</td><td>1,380</td><td>980</td></tr><tr><td>%</td><td>13.68</td><td>19.75</td><td>38.93</td><td>27.64</td></tr></table> Total: 3,545 flats; variation within +/- 1% of required percentage.	Flat	1/2P	2/3P	1B	2B	No.	485	700	1,380	980	%	13.68	19.75	38.93	27.64
Flat	1/2P	2/3P	1B	2B															
No.	485	700	1,380	980															
%	13.68	19.75	38.93	27.64															

Part I – MASTER LAYOUT PLAN

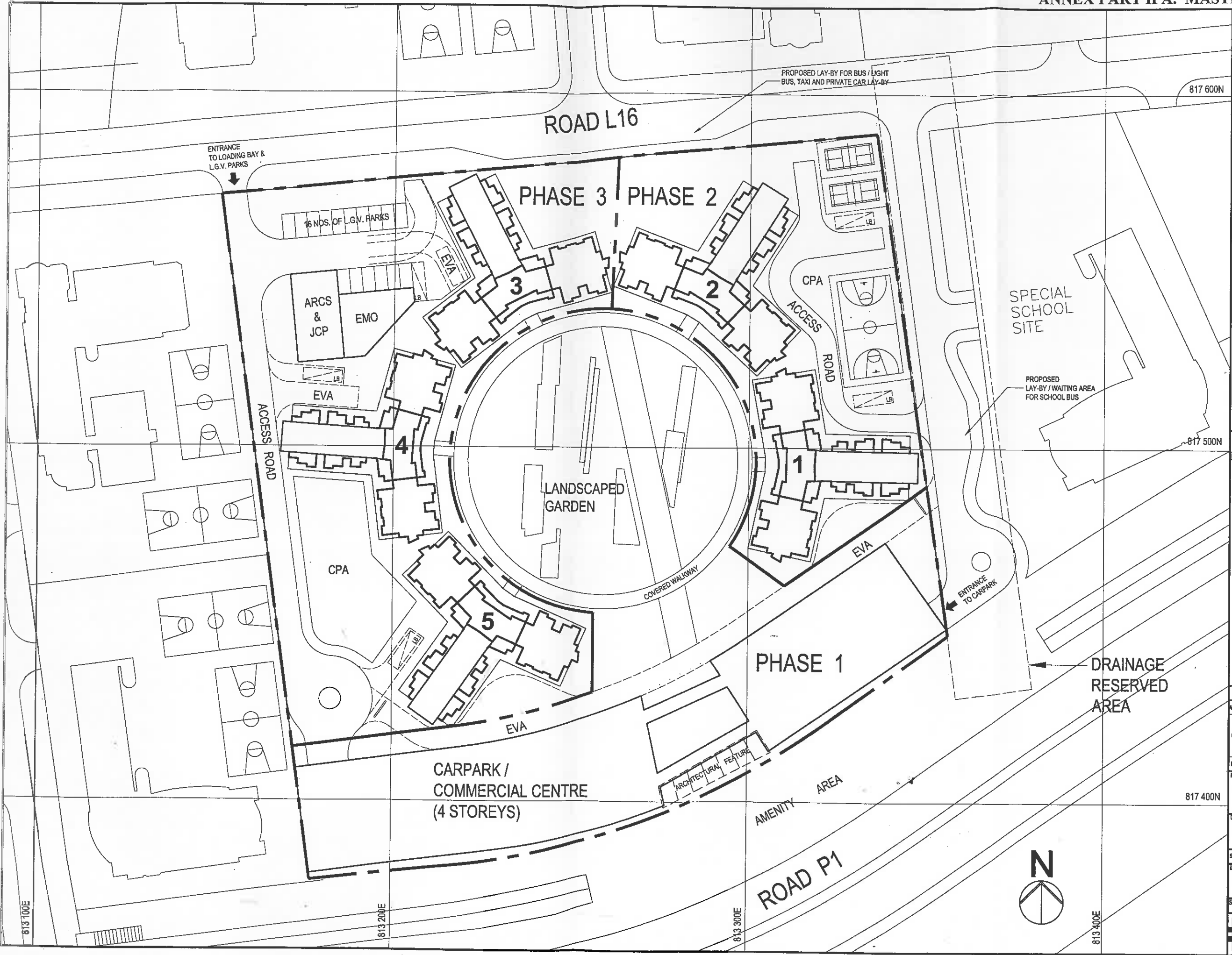
C. Accommodation & Facilities		
Approved by DIPCON (DIPCON Paper No. 10/01)	Master Layout Plan	Remarks
C.5 <u>Retail Provision</u> Details not mentioned	Supermarket..... 1 no. Bakery..... 1 no. Laundromat..... 1 no. Hairdresser..... 1 no. Bank..... 1 no. Fast Food Restaurant..... 2 nos. Specialty Restaurant..... 1 no. Medical Clinic..... 2 nos. Dental Clinic..... 1 no.	As per Client Brief for Shopping Centre issued by HM/R&D(1)
C.6 <u>Community/Educational Facilities</u> Kindergarten (6 bi-sessional) 1 no. Day Nursery (100 places) 1 no.	As in DIPCON Approved Development Parameters.	Located on 1/F, CC/CP Block

## Part I – MASTER LAYOUT PLAN

C. Accommodation & Facilities		
Approved by DIPCON (DIPCON Paper No. 10/01)	Master Layout Plan	Remarks
<b>C.7 Parking Provision</b> <b>C.7.1 Carpark Spaces</b> Residential: 155-228 nos. <sup>1</sup> (1 space per 13 - 16 flats*); Shopper: 18-24 nos. <sup>1</sup> (1 per 200m <sup>2</sup> GFA) Total <b>203-252 nos.</b>  <b>C.7.2 Motor-cycle Spaces</b> <b>9-23 nos.</b> (5-10% of carparking spaces)  <b>C.7.3 Light Goods Vehicle Spaces</b> <b>37 nos.<sup>1</sup></b> (1 space per 80 flats*)  <b>C.7.4 Bicycle Parking Spaces</b> Details not mentioned.	<b>Carpark Spaces</b> Residential: 153 nos. <sup>2</sup> (1 space per 20 flats*); Shopper: 21 nos. <sup>1</sup> (1 per 200m <sup>2</sup> GFA) Total <b>174 nos.</b>  <b>Motor-cycle Spaces</b> <b>16 nos.</b> (10% of carparking spaces)  <b>Light Goods Vehicle Spaces</b> <b>16 nos.<sup>2</sup></b> (1 space per 200 flats*)  <b>C.7.4 Bicycle Parking Spaces</b> <b>237 nos.</b> (1 space per 15 flats as required by HM/D&V(1))	1. HKPSG standard adopted; 2. Ratio in accordance with SPC Paper No. 48/01
* Calculation excludes 1/2P flats		

## Part I – MASTER LAYOUT PLAN

C. Accommodation & Facilities		
Approved by DIPCON (DIPCON Paper No. 10/01)	Master Layout Plan	Remarks
C.8 <u>Management Accommodation</u> Details not mentioned.	Standards in Design Guide will be adopted.	
C.9 <u>Recreational Facilities</u> Basketball Court..... 1 no. Badminton Court..... 2 nos. Table Tennis Table..... 2 nos. Children Play Area..... 880m <sup>2</sup>	) As in DIPCON Approved Development ) Parameters. ) Children Play Area..... 908m <sup>2</sup>	) HKPSG standard adopted ) ) HKPSG: 400m <sup>2</sup> per 5,000 persons; included in open space calculation
C.10 <u>Refuse Collection Facilities</u> ARCS (1 no.) to be provided	As in DIPCON Approved Development Parameters.	
C.11 <u>Local Open Space</u> 10,008m <sup>2</sup>	11,344m <sup>2</sup>	HKPSG Requirement: 1 m <sup>2</sup> /person



NOTES  
LEGENDS:  
--- SITE BOUNDARY LINE  
--- PHASE BOUNDARY LINE

REVISIONS		INITIAL AND DESIGNATION	
NO	DESCRIPTION AND DATE	BY	CHK / AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	D.C.W. NO. CAV	ORIGINAL	SIGNED
	KITTY CHAN S.A. (S)	ORIGINAL	SIGNED
CHECKED	L. MAK A.S.	ORIGINAL	SIGNED
	K.T. WONG S.T.O.A./S.T.O.A.	ORIGINAL	SIGNED
DRAWN	K.T. WONG S.T.O.A./S.T.O.A.	ORIGINAL	SIGNED
	K.T. WONG S.T.O.A./S.T.O.A.	ORIGINAL	SIGNED

PROJECT  
TUNG CHUNG AREA 56

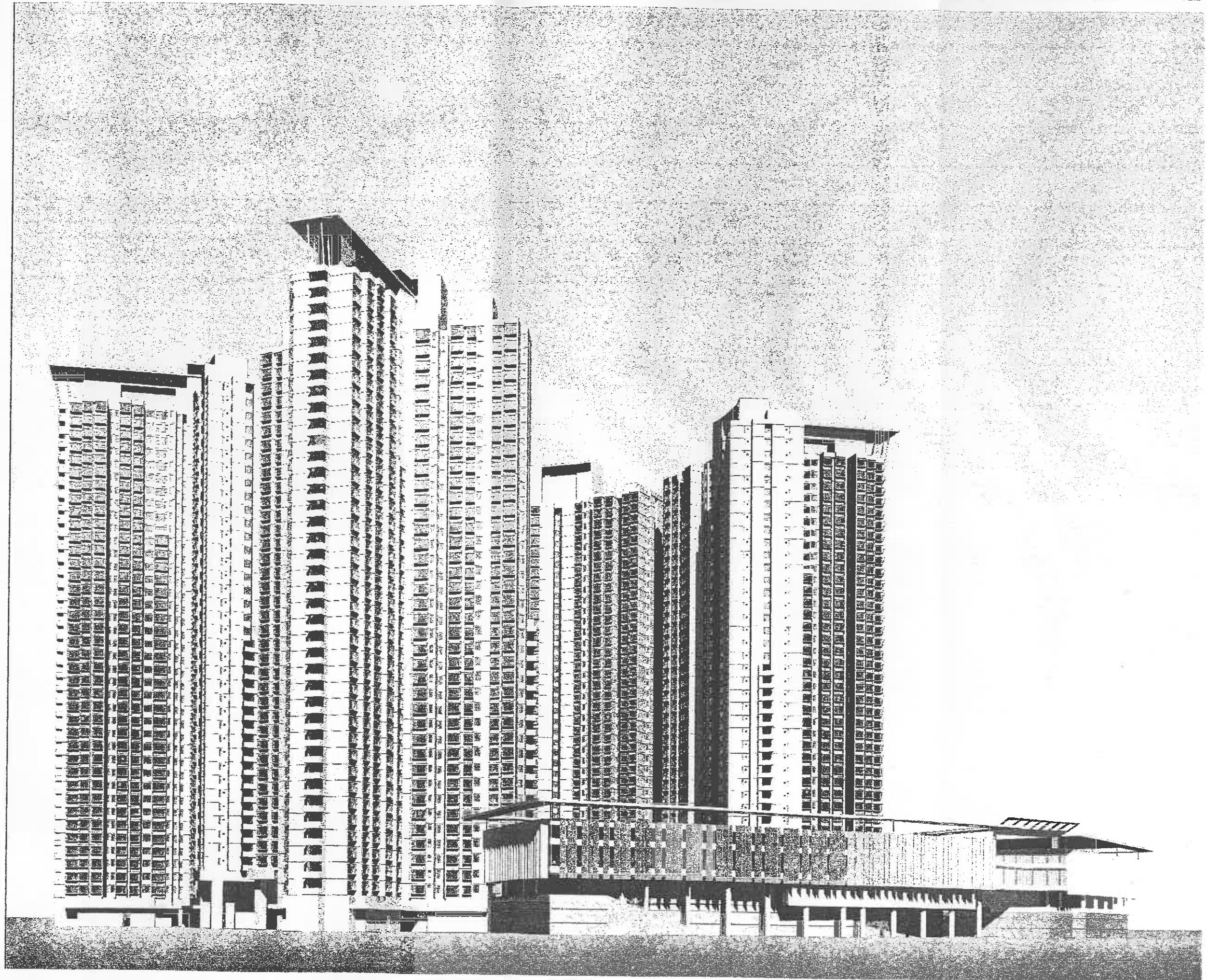
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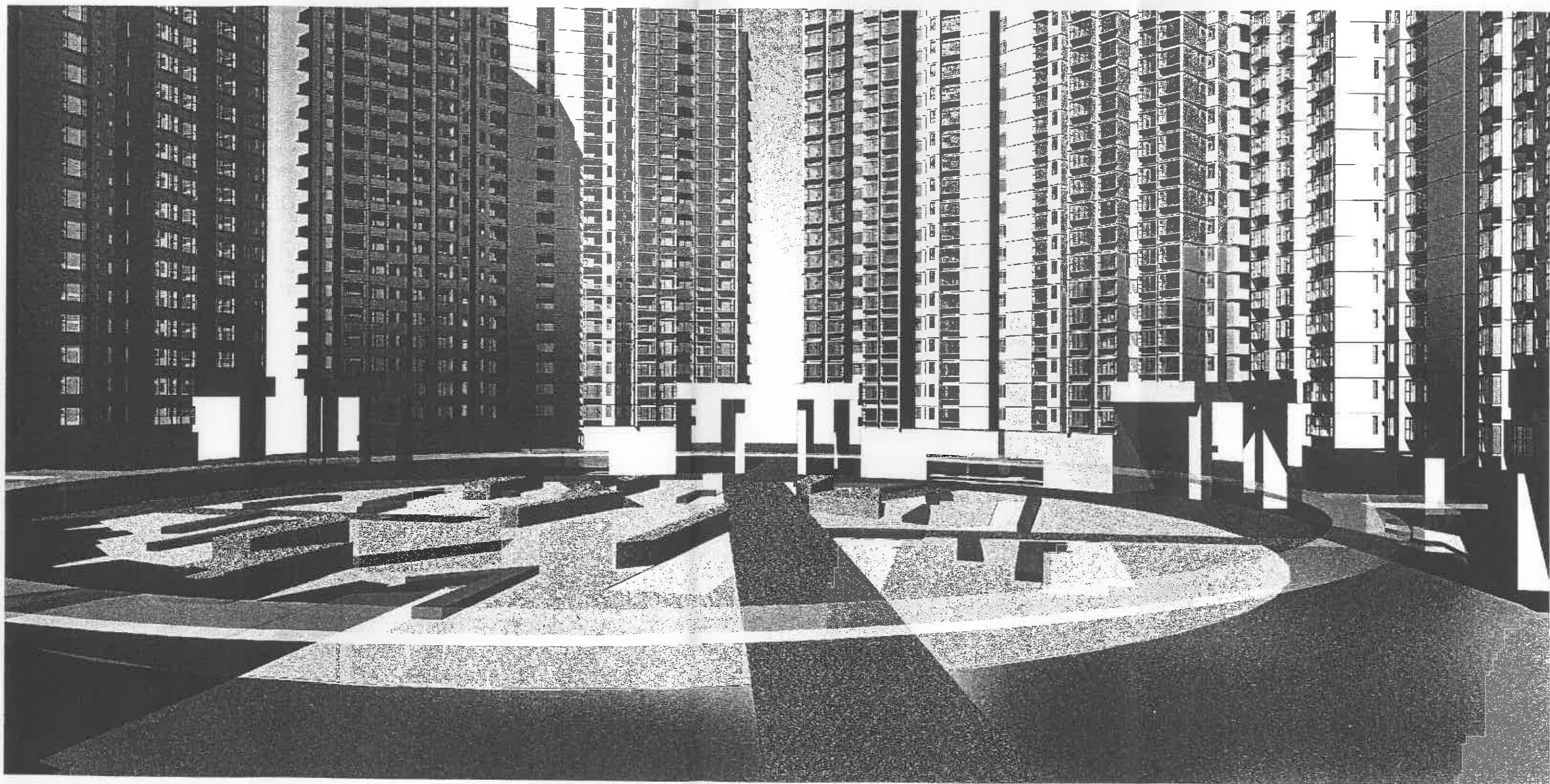
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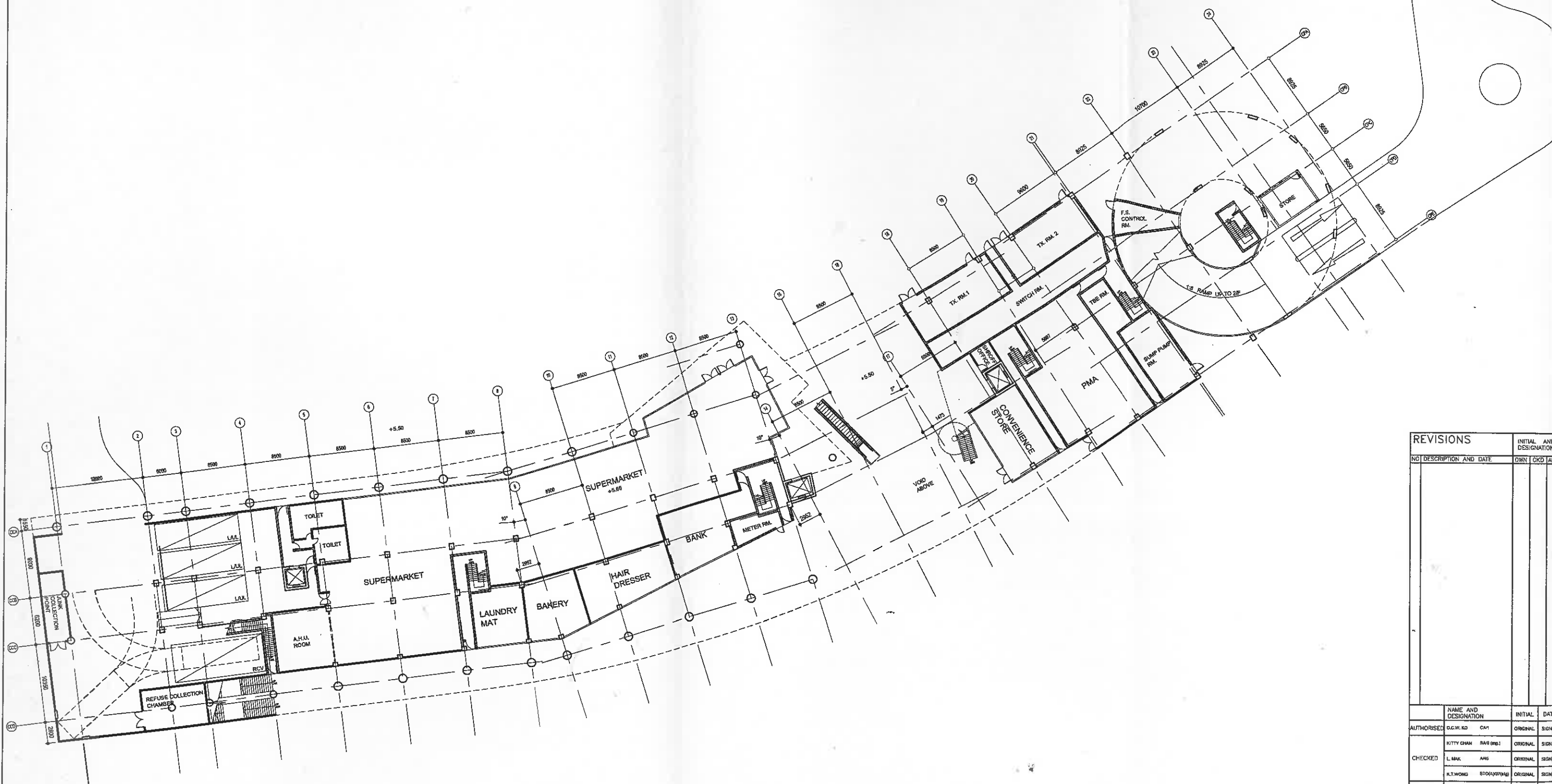
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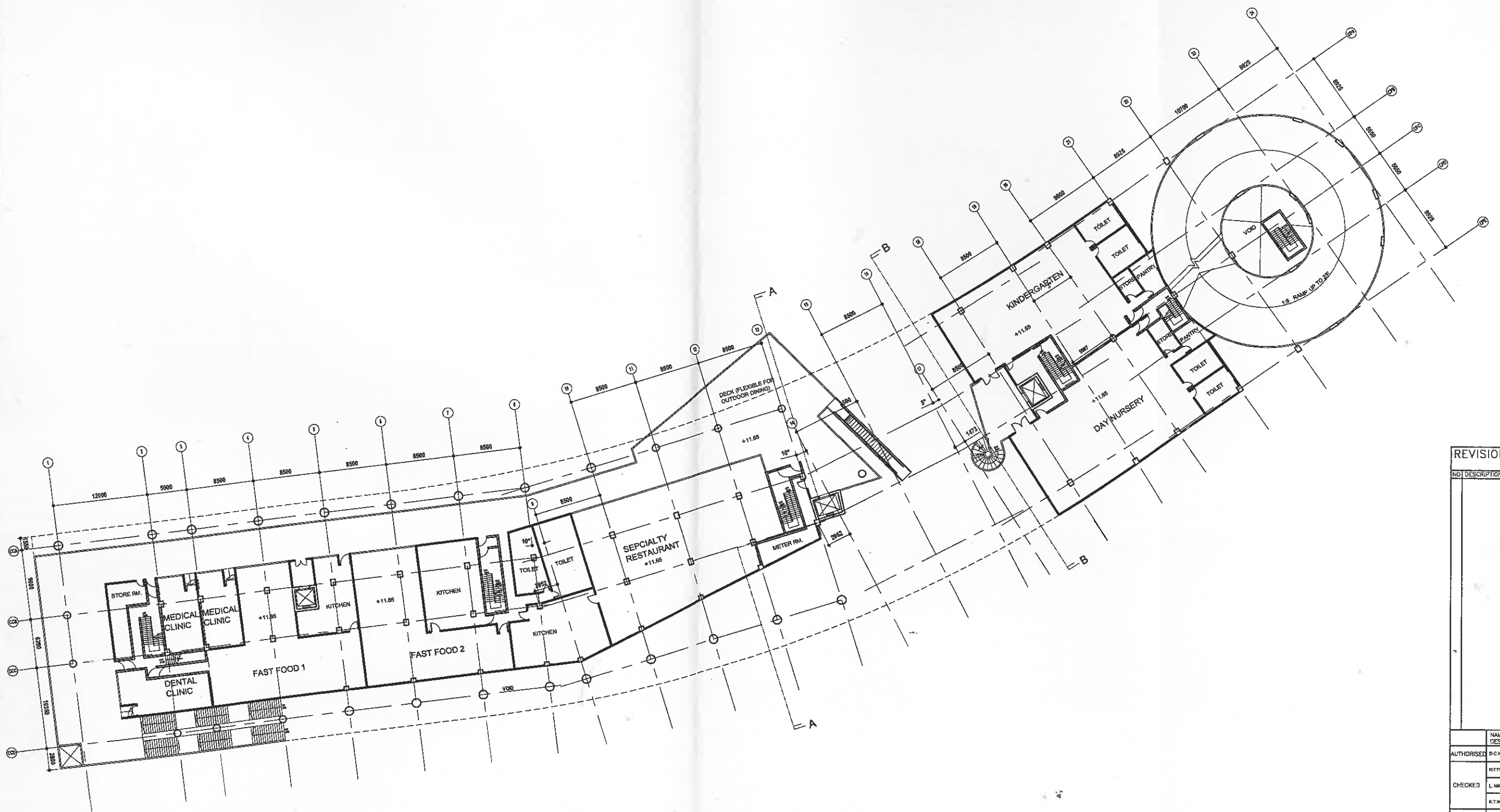
HOUSING DEPARTMENT











REVISIONS		INITIAL AND DESIGNATION
NO	DESCRIPTION AND DATE	DWN CKD AL

NAME AND DESIGNATION		INITIAL	DATE
AUTHORISED	D.C.W. NO. CAY	ORIGINAL	SIGN
CHECKED	KITTY CHAN SAN (SAS)	ORIGINAL	SIGN
	L. MAK ANG	ORIGINAL	SIGN
	K.T. WONG STOKA/STW	ORIGINAL	SIGN
DRAWN	H.Y. KONG TOA/TA	ORIGINAL	SIGN

PROJECT  
TUNG CHUNG AREA 56

DRAWING TITLE  
FIRST FLOOR PLAN  
COMMERCIAL CENTRE

SCALE 1:500

DRAWING NO.  
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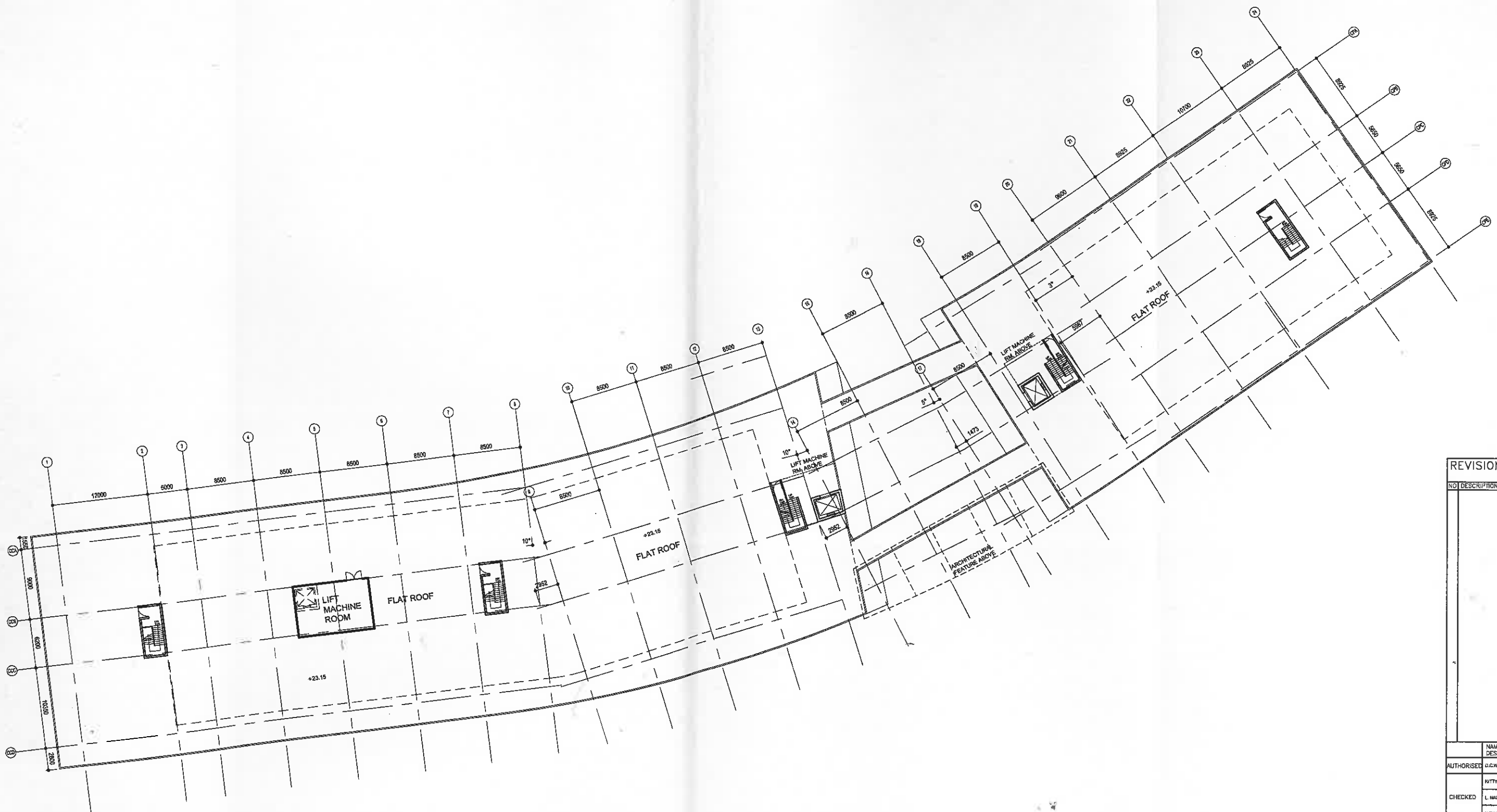
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REVISIONS		INITIAL AND DESIGNATION	
NO	DESCRIPTION AND DATE	DWN	CKD

NAME AND DESIGNATION		INITIAL	DATE
AUTHORISED	G.C.W. HO	CHY	
CHECKED	KITTY CHAN	SAE (ng)	
	L. MAK	AKS	
	K.T. WONG	STOKA/STW	
DRAWN	H.Y. KONG	TOYAH	

PROJECT

**TUNG CHUNG AREA 56**

DRAWING TITLE

**MAIN ROOF PLAN  
COMMERCIAL CENTRE**

SCALE 1:500

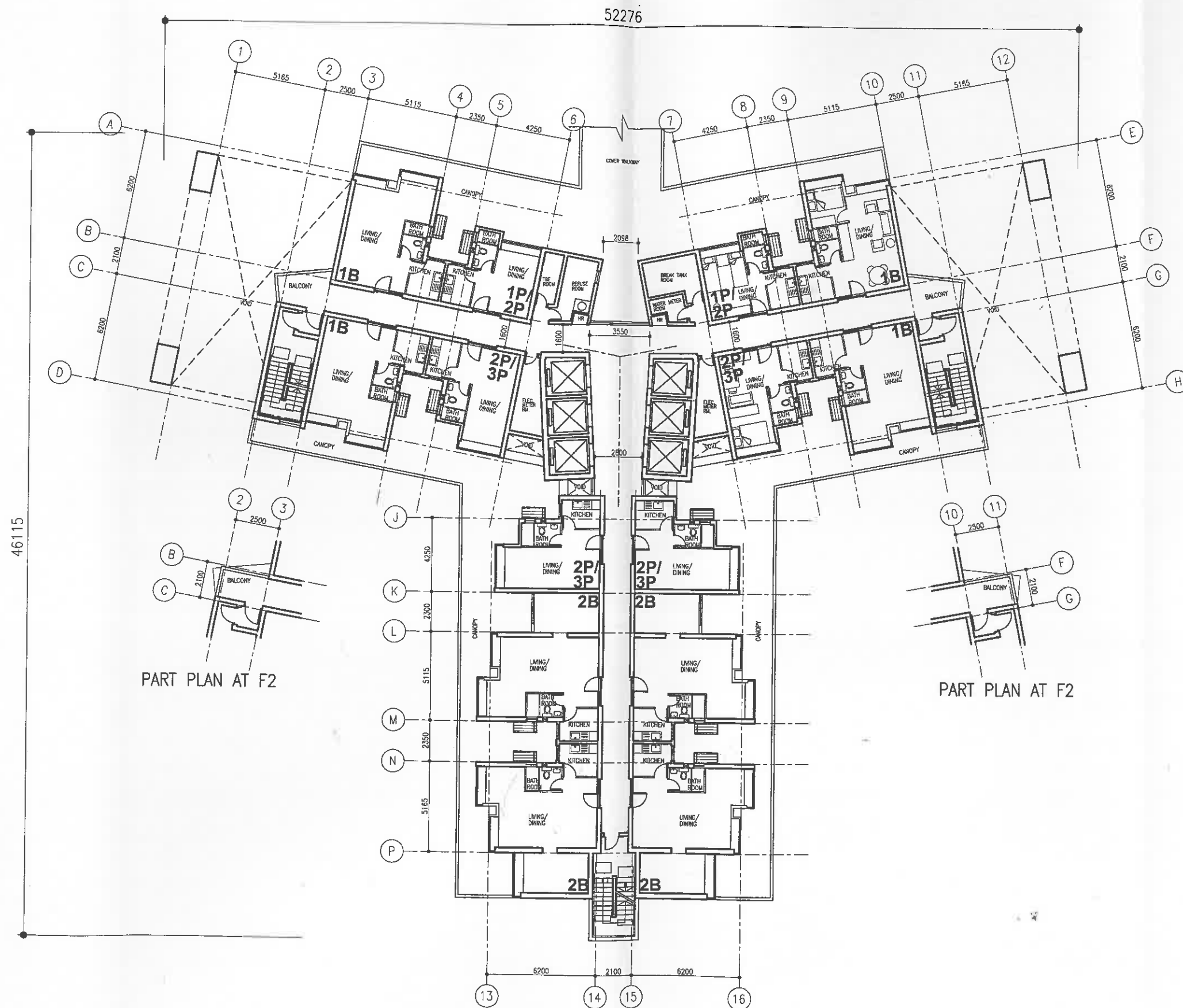
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**TC56/CC/A/DLO-05/P4**

SOURCE

HOUSING DEPARTMENT





**TYPICAL FLOOR  
(F1 - F2)**

# NOTES

## REVISIONS

NO DESCRIPTION AND DATE

INITIAL AND  
DESIGNATION

DWN CKD AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	CA/1 D.C.W. KO	ORIGINAL	SINGED
	SA/B(Atg.) KITTY CHAN	ORIGINAL	SINGED
CHECKED	A/45 L.C.K. MAK	ORIGINAL	SINGED
	STO(A)/37 K.T. WONG	ORIGINAL	SINGED
DRAWN	TO(A)/148 P.L. CHAN	ORIGINAL	SINGED

## PROJECT

TUNG CHUNG AREA 56

DRAWING TITLE  
TYPICAL FLOOR PLAN  
(F1-F2)

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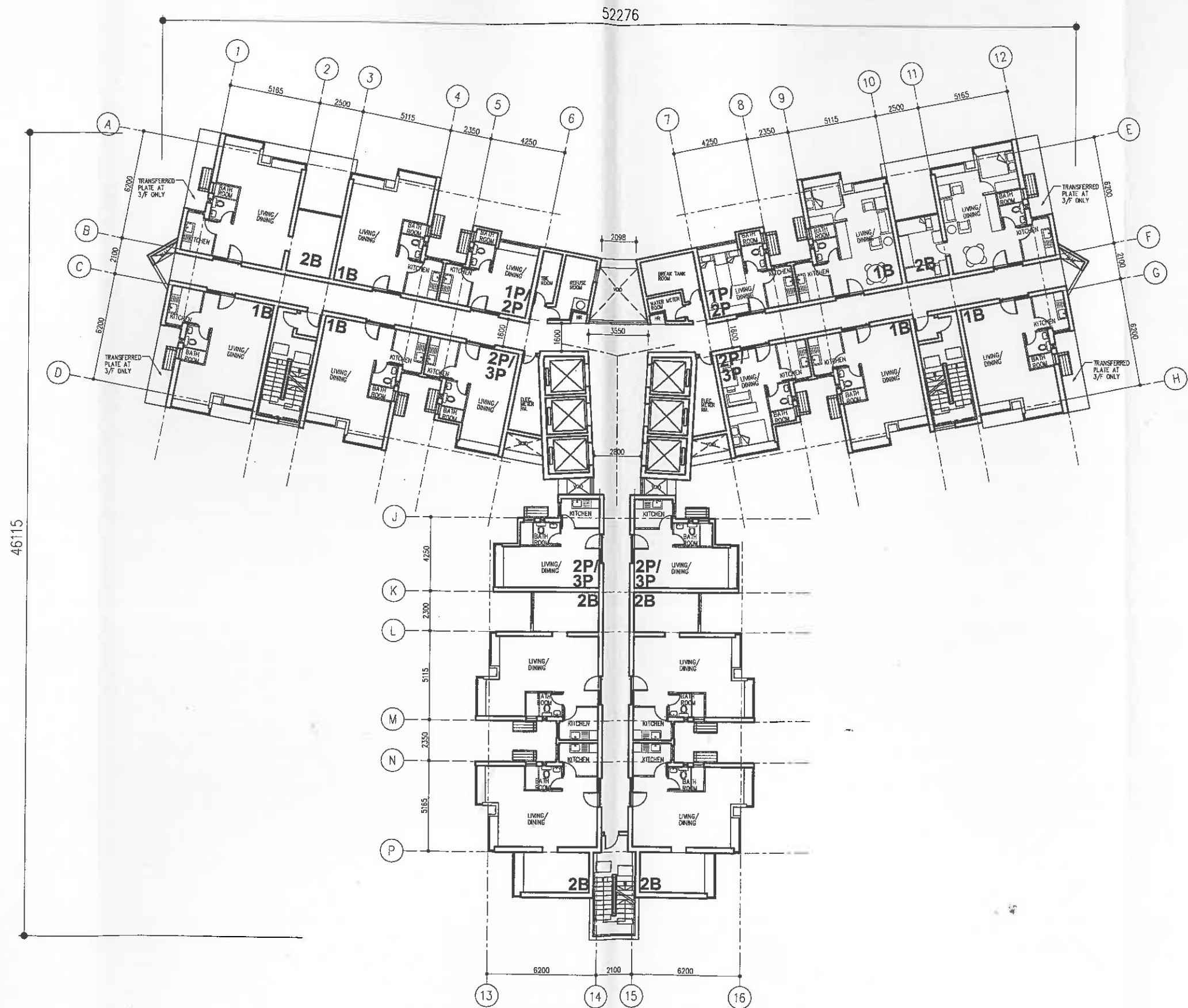
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TC56-S14A-P-SK-03A



WORKS GROUP  
HOUSING DEPARTMENT





**TYPICAL FLOOR PLAN  
(F3-F20)**

**NOTES**

**REVISIONS**

NO	DESCRIPTION AND DATE	INITIAL AND DESIGNATION		
		DWN	CHK	AUTH

	NAME AND DESIGNATION		INITIAL	DATE
AUTHORISED	CA/1	D.C.W. KO	ORIGINAL	SINGED
	SA/8	VERA CHOI	ORIGINAL	SINGED
CHECKED	A/45	L.C.K. MAK	ORIGINAL	SINGED
	STO(A)/37 (etc)	K.T. WONG	ORIGINAL	SINGED
DRAWN	TO(A)/146	P.L. CHAN	ORIGINAL	SINGED

**PROJECT**

**TUNG CHUNG AREA 56**

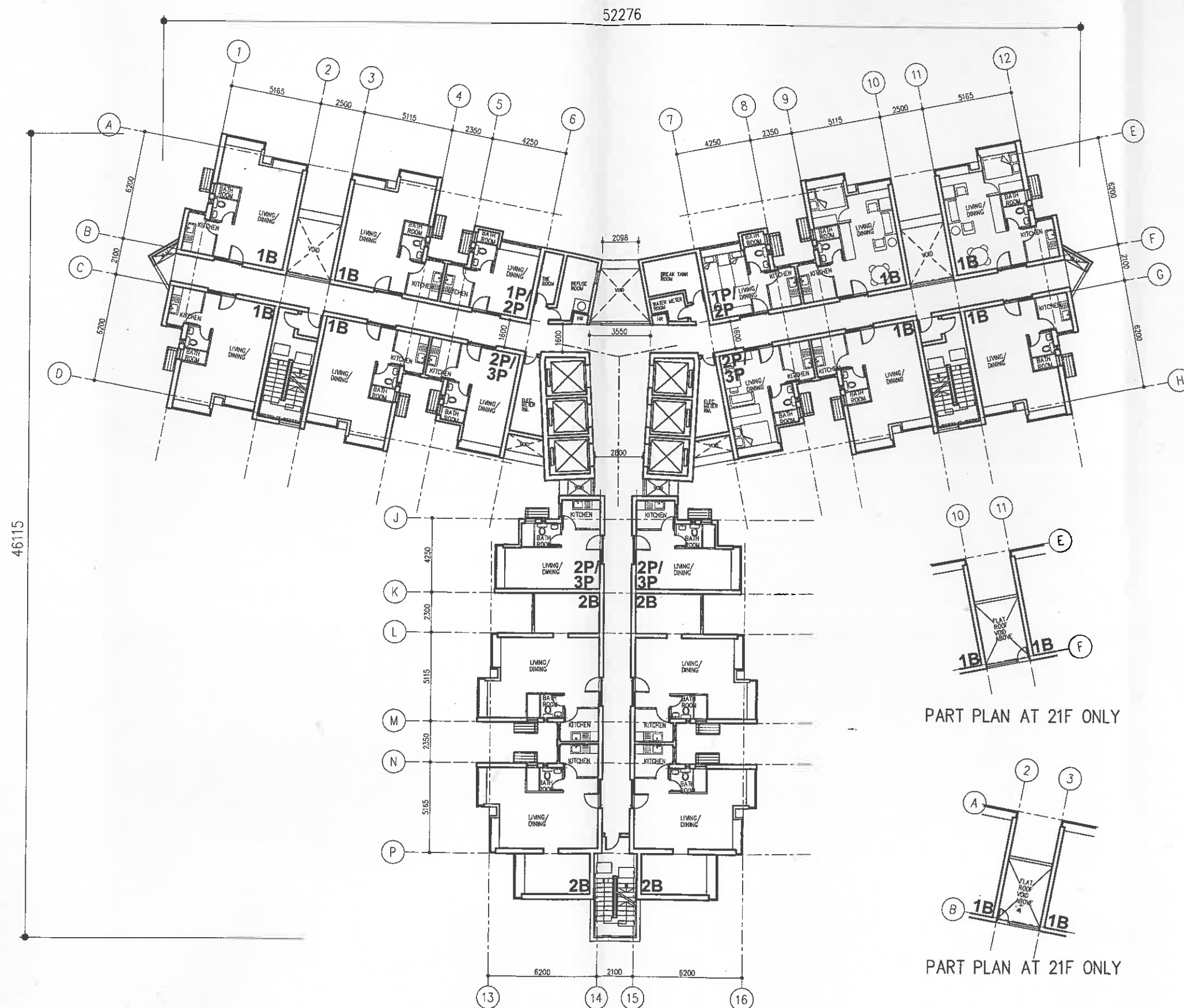
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(F3-F20)

**SCALE** 1 : 250

**DRAWING NO**  
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**SOURCE**  
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TC56 - S14.A.-P.-SK-03.A

**WORKS GROUP  
HOUSING DEPARTMENT**



**TYPICAL FLOOR PLAN  
(F21-F30)**

**NOTES**

**REVISIONS**

NO DESCRIPTION AND DATE

INITIAL AND DESIGNATION

DWN CKD AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	CA/1 D.C.W. KO	ORIGINAL	SINGED
	SA/8 VERA CHOI	ORIGINAL	SINGED
CHECKED	A/45 L.C.K. MAK	ORIGINAL	SINGED
	STO(A)/37 K.T. WONG	ORIGINAL	SINGED
DRAWN	TC(A)/146 P.L. CHAN	ORIGINAL	SINGED

PROJECT

**TUNG CHUNG AREA 56**

**DRAWING TITLE**  
**TYPICAL FLOOR PLAN  
(F21-F30)**

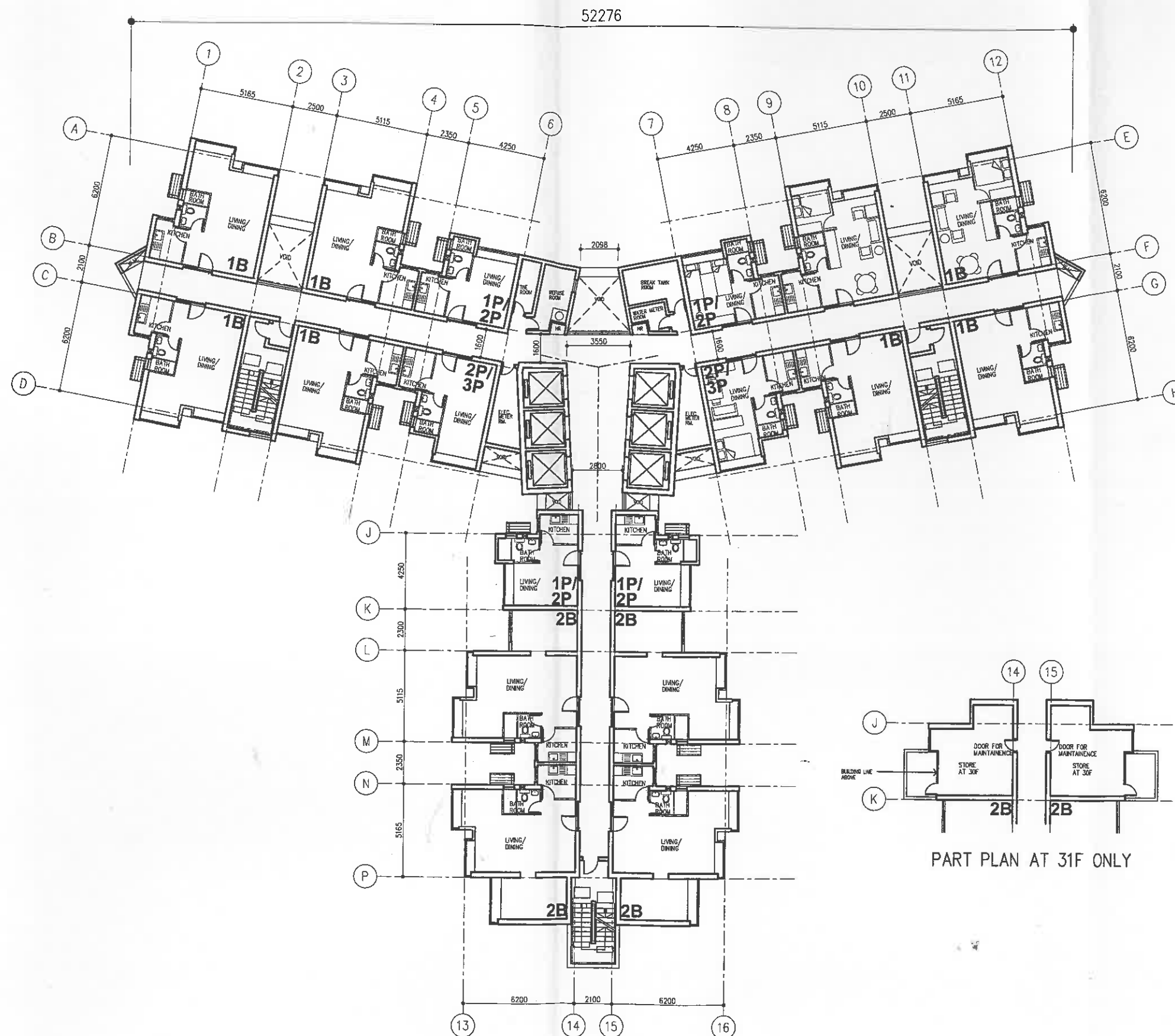
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**SOURCE**  
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**WORKS GROUP  
HOUSING DEPARTMENT**



**TYPICAL FLOOR PLAN  
(F31-F40)**

**NOTES**

**REVISIONS**

NO DESCRIPTION AND DATE

INITIAL AND DESIGNATION

OWN CHD AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	CA/1 D.C.W. KO	ORIGINAL	SINGED
	SA/8 VERA CHOI	ORIGINAL	SINGED
CHECKED	A/45 L.C.K. MAK	ORIGINAL	SINGED
	STO(A)/37 K.T. WONG	ORIGINAL	SINGED
DRAWN	TO(A)/146 P.L. CHAN	ORIGINAL	SINGED

PROJECT

**TUNG CHUNG AREA 56**

DRAWING TITLE  
**TYPICAL FLOOR PLAN  
(F31-F40)**

SCALE 1 : 250

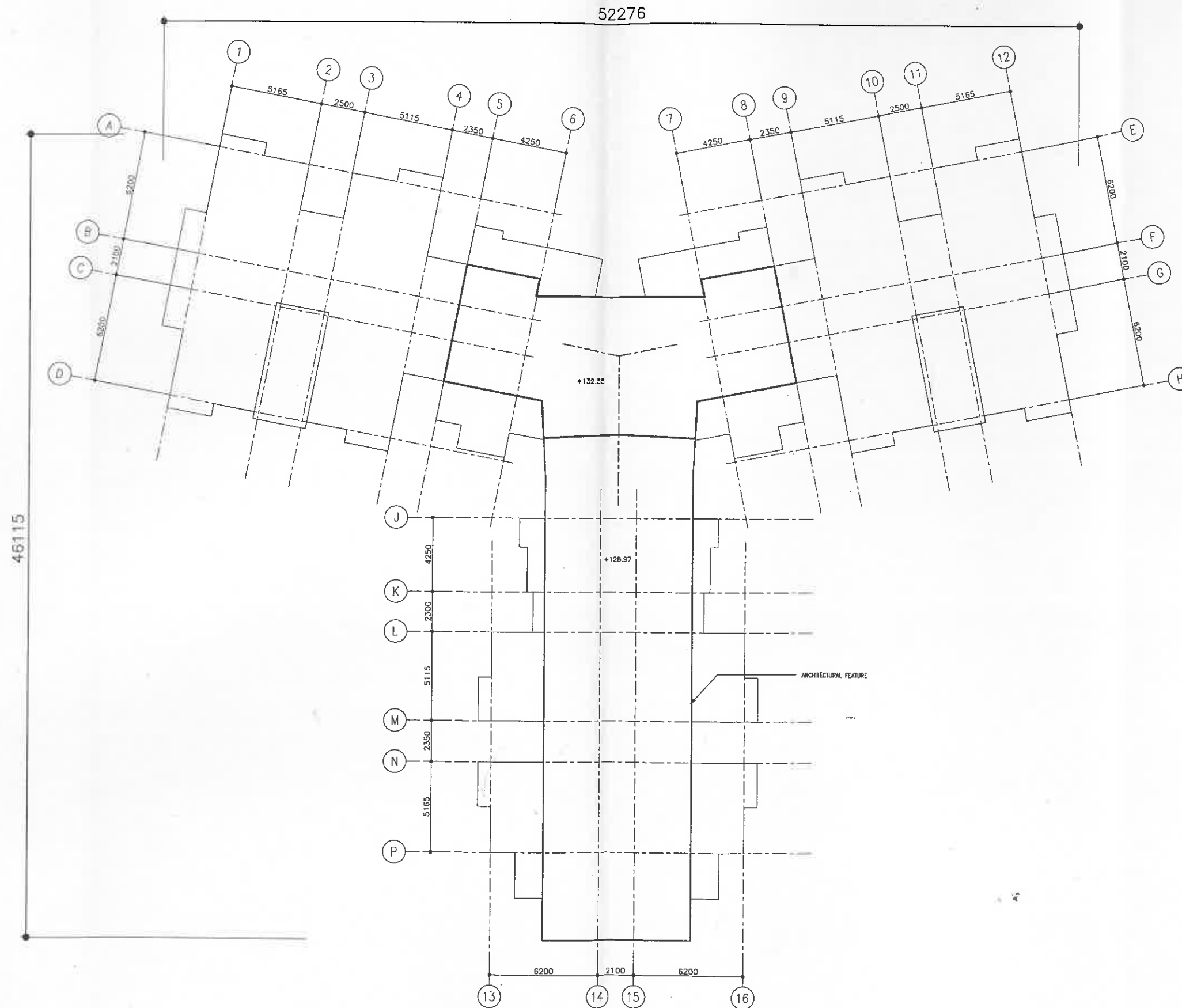
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TC56 - S14.A.-P.-SK-03.A









UPPER ROOF FLOOR PLAN

NOTES

REVISIONS

NO.	DESCRIPTION AND DATE	INITIAL AND DESIGNATION		
		OWN	CHK	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	CA/1 D.C.W. KO	ORIGINAL	SINGED
CHECKED	SA/8(Alg.) KITTY CHAN	ORIGINAL	SINGED
	A/45 L.C.K. MAK	ORIGINAL	SINGED
	STO(A)/37 K.T. WONG	ORIGINAL	SINGED
DRAWN	TD(A)/146 P.L. CHAN	ORIGINAL	SINGED

PROJECT  
TUNG CHUNG AREA 56

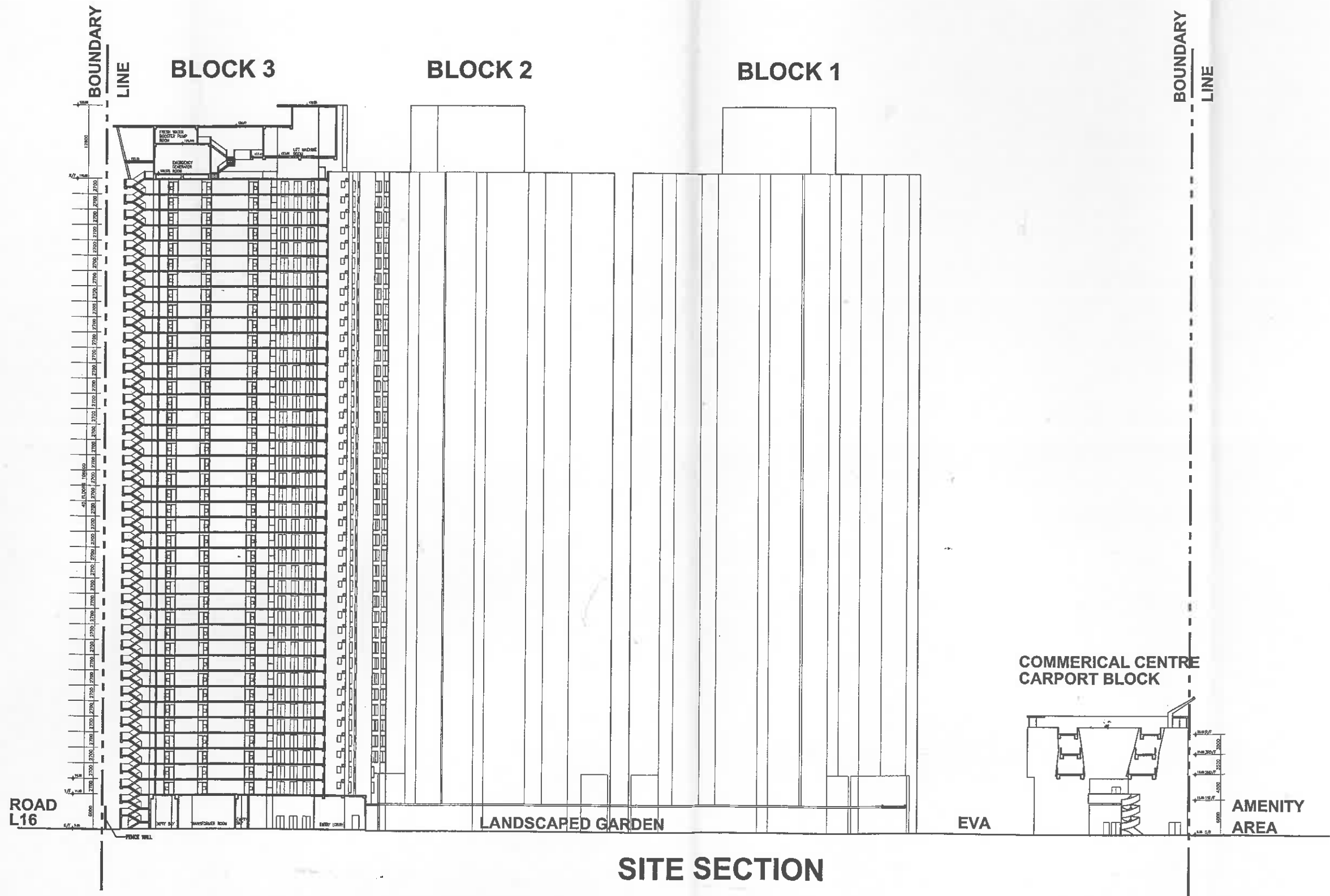
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UPPER ROOF FLOOR PLAN

SCALE 1 : 250

DRAWING NO  
TC56/BLK/A/DLO-08/P3

SOURCE  
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TC56-S14A-P-SK-03A





NOTES

REVISIONS

NO	DESCRIPTION AND DATE	DWN	CIC	AUTH
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	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	CA/1 D.C.W. KO	ORIGINAL	SINGED
	SA/8(A/g) KITTY CHAN	ORIGINAL	SINGED
CHECKED	A/45 L.C.K. MAK	ORIGINAL	SINGED
	STO(A)/37 K.T. WONG	ORIGINAL	SINGED
DRAWN	TO(A)/146 P.L. CHAN	ORIGINAL	SINGED

PROJECT  
TUNG CHUNG AREA 56

DRAWING TITLE  
SITE SECTION

SCALE 1 : 750

DRAWING NO  
TC56/SITE/A/S15/DLO-02/P1

SOURCE



### Revision B





Proposed Project Budget

	Cost Heads	Work Elements	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total (\$M)
(a)	Site Development Cost	Site Formation	-	-	-	-
		Demolition	-	-	-	-
		Sub-total :	-	-	-	-
(b)	Construction Cost	Foundation	61.728	120.256	181.042	363.026
		Building	148.891	330.385	514.276	993.552
		Soft Landscape and Others	1.218	0.843	1.419	3.480
		Sub-total :	211.837	451.484	696.737	1,360.058
(c)	Other Project Costs [2% on (a) & (b)]	Civil engineering and geotechnical studies, site investigation, material testing and the like	4.237	9.030	13.935	27.202
(d)	Total Site Development & Construction Costs [(a) + (b) + (c)] :		216.074	460.514	710.672	1,387.260
(e)	Project Management Cost [15.5% on (d)]	Professional Services and Overheads, Consultation Fees and Consultant Site Staff	33.491	71.380	110.154	215.025
(f)	Project Development Budget [(d) + (e)] :		249.565	531.894	820.826	1,602.285

Note: Development contingencies of \$10.073M, \$21.576 and \$33.293M for non-standard blocks/buildings and elements in Phase 1, 2 and 3 respectively are included in the Site Development and Construction Costs. These contingencies are allowed in accordance with Paper No. SPC 45/2000 to cover for unforeseen development risks and change in client's requirements.

**ANALYSIS OF SITE DEVELOPMENT &  
CONSTRUCTION COST BUDGET NO. 3**  
(For Financial Viability Assessment Purpose)

PROJECT :Tung Chung Area 56 Phases 1 to 3 PHDP Code : IS10PR01 to 03

Budget Costs (Incl. common elements apportioned across all phases within the Whole Development Site)	COST PORTIONS								Total
	PRH	HOS	CC	CP (PC)	OLGV	WEL	UN	GN	
A. Phase 1 (Budget no. 3 )	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>
CFA of Cost Portions (m2)			6,071	10,303		797			17,171
1.0 Site Development Costs			<----- Cost in (\$ '000) ----->						
1.1 Demolition			-	-		-			-
1.2 Site Formation									
2.0 Construction Costs									
2.1 Foundation (incl. caps)			22,628	36,130		2,970			61,728
2.2 Building (incl. building services)			62,232	41,882		5,193			109,307
2.3 Transfer Structures			-	-		-			-
2.4 External Works			2,567	4,358		337			7,261
2.5 Automated Refuse Collection System			-	-		-			-
2.6 Public Transport Interchange			-	-		-			-
2.7 Other Separate Contracts (Incl. soft landscape)			105	178		14			297
3.0 Other Project Costs									
3.1 Other Project Costs			1,751	1,651		170			3,572
Budget of Phase 1 (Budget no. 3 )									
Projected to Date of Tenders (A)			89,283	84,199		8,684			182,165
(Unit Cost in terms of \$/m2 CFA) :-			14.706	8.172		10.896			10.609
A. Phase 2 (Budget no. 3 )	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>
CFA of Cost Portions (m2)	73,357						292		73,649
1.0 Site Development Costs			<----- Cost in (\$ '000) ----->						
1.1 Demolition	-						-		-
1.2 Site Formation									
2.0 Construction Costs									
2.1 Foundation (incl. caps)	119,780						476		120,256
2.2 Building (incl. building services)	297,934						2,613		300,547
2.3 Transfer Structures	-						-		-
2.4 External Works	31,021						123		31,144
2.5 Automated Refuse Collection System	19,227						-		19,227
2.6 Public Transport Interchange	-						-		-
2.7 Other Separate Contracts (Incl. soft landscape)	1,269						5		1,274
3.0 Other Project Costs									
3.1 Other Project Costs	9,385						64		9,449
Budget of Phase 2 (Budget no. 3 )									
Projected to Date of Tenders (A)	478,616						3,281		481,897
(Unit Cost in terms of \$/m2 CFA) :-	6.524						11.236		6.543

**ANALYSIS OF SITE DEVELOPMENT &  
CONSTRUCTION COST BUDGET NO. 3**  
(For Financial Viability Assessment Purpose)

PROJECT :Tung Chung Area 56 Phases 1 to 3 PHDP Code : IS10PR01 to 03

Budget Costs (incl. common elements apportioned across all phases within the Whole Development Site)	COST PORTIONS								Total
	PRH	HOS	CC	CP	OLGV	WEL	UN	GN	
C. Phase 3 (Budget no. 3 ) CFA of Cost Portions (m2)	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>
	110,035						370		110,405
	Cost in (\$'000)								
1.0 Site Development Costs									
1.1 Demolition	-								-
1.2 Site Formation									
2.0 Construction Costs									
2.1 Foundation (incl. caps)	179,670				-		1,372		181,042
2.2 Building (incl. building services)	446,899				927		2,732		450,558
2.3 Transfer Structures	-				-		-		-
2.4 External Works	46,531				-		156		46,687
2.5 Automated Refuse Collection System	28,822				-		-		28,822
2.6 Other Separate Contracts (Incl. soft landscape)	1,903				-		6		1,909
3.0 Other Project Costs									
3.1 Other Project Costs	14,076				19		84		14,179
Budget of Phase 3 (Budget no. 3 )									
Projected to Date of Tenders (B)	717,901				946		4,350		723,197
(Unit Cost in terms of \$/m2 CFA) :-	6.524						11.757		6.550
GRAND TOTAL = (A) to (C)	1,196,517		89,283	84,199	946	8,684	7,631		1,387,260
(Unit Cost in terms of \$/m2 CFA) :-	6.524		14.706	8.172		10.896	11.527		10.874
(Fund Split % pro-rata on cost values) :-	86.25%		6.44%	6.07%	0.07%	0.63%	0.55%		100.00%

**Legend for Cost Portions :**

PRH - Public Rental Housing	CP (PC) - Private Car Carpark	TS - Transfer structure
HOS - Home Ownership Scheme	OLGV - Open LGV parking	EW - External Works
CC - Commercial (Shopping) Centre	UN - Unallocable	
WEL - Welfare Facilities	GN - Government Non-reimbursable	

**Notes :**

- All prices are at June 2001 price level and adjusted for tender price inflation to tender in dates of contracts based on -3.3% per annum from June 2001 to December 2001 and 0.7% per annum from January 2002 onwards.
- Special External Works cost comprises both foundation and building costs of those items classified as special external works included in building contract.
- Apportionment of the Site Development and Construction Costs are in accordance with relevant DCMBI.
- Development Contingencies are set at 2% for all standard blocks superstructure and 5% for all non-standard blocks and all standard block elements other than superstructure.
- Other Project Costs (e.g. traffic and environmental studies, land surveying studies, site potential and other engineering studies, site investigation, geotechnical advisory services, construction material test, piling test carried out by direct testing contractor, etc.) are set at 2% on Site Development Costs, Construction Costs and Development Contingencies.

**Exclusions :**

- Project Management Costs, e.g. professional services & overheads, consultant fees, etc.

**Basis of the Estimate :**

Refer Summary Sheet of each Phase

Prepared by : Michael Ching (D.G.Jones & Partners)

Date : 12 April 2002

**Summary of Cost Apportionment of Commonly Shared Elements in Construction and Site Development Cost**  
**Budget No. 3**

	Phase 1	Phase 2	Phase 3	Total
Total CFA (m2)	17,171	73,649	110,405	201,225
Total CFA excluding PWP items (m2)	-	-	-	-
CFA of buildings/portions served by ARCS (m2)	-	-	-	-

COST ELEMENTS	(excluding provisions for fluctuations)			Total (\$,000)
	Phase 1	Phase 2	Phase 3	
<b>A. Cost Items (incl. tender price inflation) expended under different phases before Cost Apportionment</b>				
1 Site Formation	-	-	-	-
2 Demolition	-	-	-	-
3 External Works	39,584	17,360	28,148	85,091
4 Transfer Structures	-	-	-	-
5 Automated Refuse Collection System	-	12,478	35,571	48,049
6 Other Separate Contracts (incl. Softlandscape)	1,218	843	1,419	3,480
<b>Total :-</b>	<b>40,802</b>	<b>30,681</b>	<b>65,137</b>	<b>136,620</b>

<b>B. <u>Construction Cost Budget (incl. tender price inflation) to respective Tender-in dates</u></b>							
1	Foundation	61,728		120,256		181,042	363,026
2	Building (excl. building services)	80,336		256,125		383,898	720,359
3	Building Services	28,971		44,422		66,660	140,053
4	External Works for Specific Businesses	-		-		-	-
5	Public Transport Interchange	-		-		-	-
6	Others (please specify)	-		-		-	-
<b>Construction Cost Budget :- (excl. commonly shared elements)</b>		171,035		420,803		631,600	1,223,438
<b>C. <u>Adjustment for Costs of Common Elements Apportioned to each Phases within the Whole Development Site</u> (see Note 1 and 2))</b>							
1	Demolition	-		-		-	-
2	Site Formation	-		-		-	-
3	Transfer Structures	-		-		-	-
4	External Works for Commonly shared elements	7,261		31,144		46,687	85,091
5	Automated Refuse Collection System			19,227		28,822	48,049
6	Other Separate Contracts (incl. Softlandscape)	297		1,274		1,909	3,480
<b>Total of Common Apportioned Elements :- (Phase split in %)</b>		7,558 5.53%		51,645 37.80%		77,418 56.67%	136,620 100.00%
<b>D. <u>Total Cost Budget (incl. common elements apportioned across all phases within the Whole Development Site)</u> (Item D = Item B + Item C)</b>							
1	Demolition	-		-		-	-
2	Site Formation	-		-		-	-
3	Foundation	61,728		120,256		181,042	363,026
4	Building (excl. building services)	80,336		256,125		383,898	720,359
5	Building Services	28,971		44,422		66,660	140,053
6	Transfer Structures	-		-		-	-
7	External Works	7,261		31,144		46,687	85,092
8	Public Transport Interchange	-		-		-	-
9	Automated Refuse Collection System			19,227		28,822	48,049
10	Other Separate Contracts (incl. Soft landscape)	297		1,274		1,909	3,480
<b>Total Cost Budget for Financial Viability :- (excl. Provisions for Fluctuations)</b>		178,593		472,448		709,018	1,360,059

**Notes :**

- (1) The costs of commonly shared items expended under each phase are identified from the Cost Budget of respective phases and the total cost apportioned across all phases of the same Development Site (in Item C above) pro-rata on CFA basis

### SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 3

PROJECT : Tung Chung Area 56 Phase : 1 PHDP Code : IS10PR01

	COST HEADS	WORK ELEMENTS	BUDGET COST (\$M)
(a)	Site Development Cost	Site Formation	-
		Demolition	-
		Sub-total :	0.000
(b)	Construction Cost	Foundation	61.728
		Building	148.891
		Other separate contracts (incl. soft landscape)	1.218
		Sub-total :	211.837
(c)	Other Project Cost (2% on (a) & (b))	Civil engineering and geotechnical studies, site investigation, material testing and the like	4.237
(d)	Total Site Development and Construction Cost (a) + (b) + (c) :		216.074

#### Notes :

- (1) All prices are at June 2001 price level and adjusted for tender price inflation to tender in dates of contracts based on -3.3% per annum from June 2001 to December 2001 and 0.7% per annum from January 2002 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in DCMBI No. P24/00.
- (3) The costs for softlandscaping works, utilities connections, diversion works by Government Departments or Utility Companies, and minor works carried out specifically for the project, eg. Roadworks or slopeworks outside boundaries under separate contracts but charged to the project are grouped under Other Separate Contracts.
- (4) The fluctuation provisions is worked out based on the formula as shown on the Guidance Notes for Standard Cost Yardsticks.
- (5) Development contingencies of \$10.073M for non-standard blocks/buildings and non-standard elements such as civil engineering works (site formation, slope protection, etc.) demolition, foundation, external works and underground drainage, etc. are included in the Site Development and Construction Cost.

#### Inclusions :

#### Exclusions :

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees and Construction Site Staff.
- (2) Publicity cost, financing and legal costs/expenses, etc.

#### Assumptions :

#### Basis of the Budget :

- (1) Please refer to Phase Summary.

Prepared by D.G. Jones & Partners (HK) Ltd.

Date : 12 April 2002

PROJECT : Tung Chung Area 56

PHASE : 1\_ PHDP Code : IS10PR01

	COST PORTIONS								Common Items		Total
	PRH	HOS	CC	CP (PC)	OLGV	WEL	UN	GN	TS	EW	
CFA of Cost Portions (m2)			6,071	10,303		797					17,171
Estimated Cost in \$,000											
<b>A. Site Development &amp; Construction Cost Budget At June 01 (Excluding Other Project Costs &amp; Tender Price Inflation)</b>											
<b>1.0 Site Development Costs</b>											
1.1 Site Formation Contract											
1.2 Demolition Contract											
<b>2.0 Construction Costs</b>											
2.1 Foundation Contract			22,725	36,284		2,983					61,992
2.2 Building Contract											
2.21 Building (excl. building services)			41,422	34,748		3,853					80,023
2.22 Building Services			20,567	6,971		1,320				39,429	28,858
2.23 External Works for commonly shared elements											39,429
2.24 External Works for Specific Businesses										0	0
2.25 Automated Refuse Collection System											
2.26 Transfer Structures											
2.27 Public Transport Interchange										1,213	1,213
2.3 Other Separate Contracts (incl. Softlandscape)											
<b>Cost Budget At June 01 Price Level (A)</b>			84,714	78,003		8,156				40,642	211,515
<b>B. Site Development &amp; Construction Cost Budget At June 01 (Incl. Tender Price Inflation) (Cost in Item (A) plus Cost x (v), (w), (y) or (z))</b>											
<b>1.0 Site Development Costs</b>											
1.1 Site Formation Contract											
1.2 Demolition Contract											
<b>2.0 Construction Costs</b>											
2.1 Foundation Contract			22,628	36,130		2,970					61,728
2.2 Building Contract											
2.21 Building (excl. building services)			41,584	34,884		3,868					80,336
2.22 Building Services			20,648	6,998		1,325				39,584	28,971
2.23 External Works for commonly shared elements											39,584
2.24 External Works for Specific Businesses										0	0
2.25 Automated Refuse Collection System											
2.26 Transfer Structures											
2.27 Public Transport Interchange										1,218	1,218
2.3 Other Separate Contracts (incl. Softlandscape)											
<b>Cost Budget Projected To Proposed Dates Of Tenders (B)</b>			84,860	78,012		8,163				40,802	211,837

**Types of Contract**

Site Formation

Demolition

Foundation

Building &amp; Footing ( for inflation adjustment, "External Works", "Others", etc.,

Tender-In Dates to be taken the same as "Building")

**Tender In Dates****Adjustment for months after Jun 01**

-	Months x -3.3 % / 12 +	-	Months x 0.7 % / 12 =	-
0	Months x -3.3 % / 12 +	0	Months x 0.7 % / 12 =	0.00000
6	Months x -3.3 % / 12 +	21	Months x 0.7 % / 12 =	-0.00425
6	Months x -3.3 % / 12 +	35	Months x 0.7 % / 12 =	0.00392

For the basis, exclusions and notes of this Cost Budget, please refer to information shown on Page 2.

**SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 3 (cont'd)**

**PROJECT :** Tung Chung Area 56

**PHASE :** 1    **PHDP Code :** IS10PR01

**Legend for Cost Portions :**

PR	-	Public Rental Housing	CP (PC)	-	Private Car Carpark	TS	-	Transfer structure
HO	-	Home Ownership Scheme	OLGV	-	Open LGV parking	EW	-	External Works
CC	-	Commercial (Shopping) Centre	UN	-	Unallocable			
WE	-	Welfare Facilities	GN	-	Government Non-reimbursable			

**Notes :**

- (1) All prices are at June 2001 price level and adjusted for tender price inflation to tender in dates of contracts based on -3.3% per annum from June 2001 to December 2001 and 0.7% per annum from January 2002 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in relevant DCMBI.

**Inclusions :**

**Exclusions :**

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees, etc.
- (2) Other Project Costs (e.g. traffic and environmental studies, land surveying studies, site potential and other engineering studies, site investigation, geotechnical advisory services, construction material test, piling test carried out by direct testing contractor, etc.) are set at 2% on Site Development Costs, Construction Costs and Development Contingencies.

**Assumptions :**

**Basis of the Budget :**

- (1) Project information included in the following documents:
  - Drawings and revised information received from A/45 on 10/4/02
  - BS cost information as per BSE/CS3's memo on 28/12/01
  - Structural information as per SE/130 memo on 28/12/01
  - Ditto as per SE/89 memo on 15/1/02
  - Geotechnical information as per GE/8 memo on 21/9/01
  - 
  -

**Prepared by :**                      Michael Ching (D.G.Jones & Partners)

**Date :**                                12 April 2002

PROJECT : Tung Chung Area 56

PHASE 1 PHDP Code : IS10PR01

Building : 1 No. 4-storey Integrated Commercial/Carpark Block

Cost at June <u>01</u> Price Level	CFA (m2)	Estimated Cost		TOTAL
		Foundation (Excl Caps)	Building (Incl Caps)	
<div><div></div><div>\$'000</div><div></div></div>				
<b>1.0 <u>Commercial Centre (Integrated with Carpark Building) based on Cost Yardsticks</u></b>				
(a) Shopping Centre Portion (incl. loading & unloading area) CFA= <u>6,071</u> m2 (IFA/CFA = <u>38.82</u> %)	6,071	21,643	39,449	61,092
(b) Building Services		-	10,919	10,919
(c) Add A/C Provision to Shopping Centre @\$ <u>2,293</u> per m2 A/C area (Total A/C Area = <u>3,780</u> m2)		-	8,669	8,669
Sub-total (A) :-		21,643	59,037	80,680  (\$13,289/m2 CFA)  15.26% above that calculated based on Standard Yardsticks
<div><div></div><div>\$,000.00</div><div></div></div>				
<b>2.0 <u>Development Contingency</u></b>		1,082	2,952	4,034
Total Cost of Commercial Centre Portion at June 01 Price Level = (A) + Item 2.0 (including Provisions for Contract Fluctuations)		22,725	61,989	84,714  (\$13,254/m2 CFA)
<b><u>Difference between Actual Design (item 1.0 above) and Cost Yardsticks/Cost Ceiling/Budget due to the following:-</u></b>		Foundation (Excl Caps)	Building (Incl Caps)	TOTAL
<div><div></div><div>\$ '000</div><div></div></div>				



PROJECT : Tung Chung Area 56

PHASE 1

PHDP Code : IS10PR01

Building : 1 No. 4-storey Integrated Commercial/Carpark Block

Cost at June 01 Price Level	Space (No.)	Estimated Cost		TOTAL
		Foundation (Incl. Caps)	Building (Excl. Caps)	
1.0 <u>Estimated cost for Carpark in integrated Commercial/Carpark Block</u>		<-----\$ ,000.00----->		
(a) Carpark Portion		34,556	33,093	67,649
- Private	174			
- Motorcycle	16			
	190			
(b) Building Services			6,639	6,639
Sub-total (A) :-		34,556	39,732	74,288
(Total CFA based on Actual Design = 10,303 m2 & Average CFA per carparking space = 58.54 m2)				(\$7,210/m2 CFA) (\$343,926 per space) 59.6% over that calculated based on Standard Yardsticks
2.0 <u>Development Contingency</u>		<-----\$ ,000.00----->		
		1,728	1,987	3,715
Total Cost of Carpark Portion at June 01 Price Level = (A) + Item 2.0 (including Provisions for Contract Fluctuations)		36,284	41,719	78,003
				(\$7,571/m2 CFA) (\$361,125 per space)
3.0 <u>Difference between Actual Design (Item 1.0 above) and Cost Yardsticks due to the following :</u>		<-----\$ ,000.00----->		

Remark:

- The 16 No. of motorcycle carparking space is regarded as 2 No. of private carparking space

Construction Cost Budget No. 3 (Welfare Portion)

PROJECT : Tung Chung Area 56

PHASE 1

PHDP Code : IS10PR01

Building : 1 No. 4-storey Integrated Commercial/Carpark Block

Cost at June <u>01</u> Price Level	CFA m2	Cost per m2		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
<b>1.0 Estimated Cost for Rental Welfare Facilities</b>				
(a) Ancillary/Welfare facilities - Kindergarten & Day Nursery (no fitting out included)	797	3,565	4,402	7,967
<hr/>				
Cost per Flat x CFA (Total CFA = <u>797</u> m2)				
		2,841	3,508	6,349 (\$7,966/m2 CFA)
(b) Add for fitting out cost of ancillary/welfare facilities - Kindergarten (total area to be fitted out = 368 m2 CFA)		-	655	655
(c) Add for fitting out cost of ancillary/welfare facilities - Day Nursery (total area to be fitted out = 429 m2 CFA)		-	764	764
<hr/>				
<b>2.0 Adjustments to Item 1.0 Above</b>				
<b>3.0 Development Contingency</b>		142	246	388
<hr/>				
<b>Total Cost of Welfare Portion at June <u>01</u> Price Level = Total of Items 1.0 to 3.0 (including Provisions for Contract Fluctuations)</b>		2,983	5,173	8,156 (\$10,233/m2 CFA)

Remarks:

- Welfare Portion includes the following:  
 Kindergarten 368 m2 CFA  
 Day Nursery 429 m2 CFA  
 797 m2 CFA
- The construction costs and fitting out costs for Kindergarten is entirely HA funded.
- Fitting Out cost of Day Nursery is for HA funded portion only which excludes the fitting out charging to Lotteries Fund.

PROJECT : Tung Chung Area 56

PHASE 1

PHDP Code : IS10PR01

Total GEA = 13,120 m2

Total CFA= 17,171 m2

GEA : CFA = 1 : 1.31

Cost at June 01 Price Level	Estimated Cost		TOTAL
	Foundation (Excl Caps)	Building (Incl Caps)	
<b>1.0 External Works based Cost Yardsticks (incl. Contract Price Fluctuation)</b>	\$,000.00		
(a) Hard Landscape Works (Amenities)	-	18,342	18,342
(b) Underground Drainage	-	8,371	8,371
<b>Sub-total (A)</b>	0	26,713	26,713 (\$1,556/m2 CFA) (\$2,036 /m2 GEA)
<b>2.0 Special External Works based on Actual Design (incl. Contract Price Fluctuation)</b>	\$,000.00		
(a) Allow for landscape on roof	-	3,500	3,500
(b) Allow cost for protection works to drainage reserve area	-	300	300
(c) Allow cost for architectural feature as Estate identity	-	7,038	7,038
<b>Sub-total (B)</b>	0	10,838	10,838 (\$631/m2 CFA) (\$826 /m2 GEA)
<b>3.0 Development Contingency</b>	\$,000.00		
	0	1,878	1,878
<b>Sub-Total (C)</b>	0	1,878	1,878 (\$109/m2 CFA) (\$143 /m2 GEA)
<b>Total Cost of Commonly Shared External Works at June 01 Price Level = (A) + (B) + (C) (including Provisions for Contract Fluctuations)</b>	0	39,429	39,429 (\$2,296/m2 CFA) (\$3,005 /m2 GEA)

<b>4.0 Cost of Automated Refuse Collection System at June 01 Price Level</b>	\$,000.00		
	-	-	-
<b>5.0 Development Contingency</b>	\$,000.00		
	-	-	-
<b>Total Cost of Automated Refuse Collection System at June 01 Price Level = Total of Items 4.0 to 5.0 (including provisions for Contract Fluctuation)</b>		0	0 (\$0/m2 CFA) (\$0 /m2 GEA)

Cost at June 01 Price Level	Estimated Cost		TOTAL
	Soft Landscape	Fees & Others	
<b>6.0 Cost of Other Separate Contracts (incl. Softlandscaping Work) at June 01 Price Level</b>	\$,000.00		
	499	656	1,155
<b>7.0 Development Contingency</b>	25	33	58
<b>Cost of Other Separate Contracts (incl. Softlandscaping Work) at June 01 Price Level = Total of Items 6.0 to 7.0 (including Provisions for Contract Fluctuations)</b>	524	689	1,213 (\$71/m2 CFA) (\$92 /m2 GEA)

Remark:

### SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 3

PROJECT : Tung Chung Area 56 Phase : 2 PHDP Code : IS10PR02

	COST HEADS	WORK ELEMENTS	BUDGET COST (\$M)
(a)	Site Development Cost	Site Formation	-
		Demolition	0.000
		Sub-total :	0.000
(b)	Construction Cost	Foundation	120.256
		Building	330.385
		Other separate contracts (incl. soft landscape)	0.843
		Sub-total :	451.484
(c)	Other Project Cost (2% on (a) & (b))	Civil engineering and geotechnical studies, site investigation, material testing and the like	9.030
(d)	Total Site Development and Construction Cost (a) + (b) + (c) :		460.514

#### Notes :

- (1) All prices are at June 2001 price level and adjusted for tender price inflation to tender in dates of contracts based on -3.3% per annum from June 2001 to December 2001 and 0.7% per annum from January 2002 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in DCMBI No. P24/00.
- (3) The costs for softlandscaping works, utilities connections, diversion works by Government Departments or Utility Companies, and minor works carried out specifically for the project, eg. Roadworks or slopeworks outside boundaries under separate contracts but charged to the project are grouped under Other Separate Contracts.
- (4) The fluctuation provisions is worked out based on the formula as shown on the Guidance Notes for Standard Cost Yardsticks.
- (5) Development contingencies of \$21.576 M for non-standard blocks/buildings and non-standard elements such as civil engineering works (site formation, slope protection, etc.) demolition, foundation, external works and underground drainage, etc. are included in the Site Development and Construction Cost.

#### Inclusions :

#### Exclusions :

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees and Construction Site Staff.
- (2) Publicity cost, financing and legal costs/expenses, etc.

#### Assumptions :

#### Basis of the Budget :

- (1) Please refer to Phase Summary.

Prepared by D.G. Jones & Partners (HK) Ltd.

Date : 12 April 2002 -

## SUMMARY OF SITE DEVELOPMENT &amp; CONSTRUCTION COST BUDGET NO.3

PHASE 2

PROJECT : Tung Chung Area 56

PHASE : 2 PHDP Code : IS10PR02

PROJECT : Tung Ching Area 36		PHASE : 2		PRH Cost : 1516182		COST PORTIONS										Common items		Total
						PRH	HOS	CC	CP	OLGV	WEL	UN	GN	Others	TS	EW	Total	
CFA of Cost Portions (m2)						73,357						292					73,649	
COST ITEMS						Estimated Cost in \$,000												
A. <u>Site Development &amp; Construction Cost Budget At June 01</u> <u>(Excluding Other Project Costs &amp; Tender Price Inflation)</u>																		
1.0 <u>Site Development Costs</u>																		
1.1 Site Formation Contract																		
1.2 Demolition Contract																		
2.0 <u>Construction Costs</u>																		
2.1 Foundation Contract						120,929						481				630	122,040	
2.2 Building Contract																		
2.21 Building (excl. building services)						254,325						2,141					256,466	
2.22 Building Services						44,006						476					44,482	
2.23 External Works for commonly shared elements															16,758	16,758		
2.24 External Works for Specific Businesses																		
2.25 Automated Refuse Collection System															12,495	12,495		
2.26 Transfer Structures																0	0	
2.27 Public Transport Interchange																		
2.3 Other Separate Contracts (incl. Softlandscape)															844	844		
Cost Budget At June 01 Price Level (A)						419,260						3,098				30,727	453,085	
B. <u>Site Development &amp; Construction Cost Budget At June 01</u> <u>(Incl. Tender Price Inflation)</u> ( Cost in Item (A) plus Cost x (v), (w), (y) or (z) )																		

**Types of Contract**

Site Formation

Demolition

Foundation

Building and piling ( for inflation adjustment, "External Works", "Others", etc.,

Tender-In Dates to be taken the same as "Building")

**Tender In Dates****Adjustment for months after Jun 01**

-	Months x -3.3 % / 12 +	-	Months x 0.7 % / 12 =	-
-	Months x -3.3 % / 12 +	-	Months x 0.7 % / 12 =	-
12/02	6	Months x -3.3 % / 12 +	12	Months x 0.7 % / 12 = -0.00950
02/04	6	Months x -3.3 % / 12 +	26	Months x 0.7 % / 12 = -0.00133

For the basis, exclusions and notes of this Cost Budget, please refer to information shown on Page 2.

# SUMMARY OF CONSTRUCTION COST BUDGET NO. 3 (cont'd)

Phase 2

PROJECT : Tung Chung Area 56

PHASE : I PHDP Code : IS10PR02

## Legend for Cost Portions :

PR - Public Rental Housing  
HO - Home Ownership Scheme  
CC - Commercial (shopping) Centre  
CP - Carpark

OLGV - Open LGV parking  
Wel - Welfare portion  
UN - Unallocable  
GN - Government Non-reimbursable

TS - Transfer Structure  
EW - External Works

## Notes :

- (1) All prices are at June 2001 price level and adjusted for tender price inflation to tender in dates of contracts based on -3.3% per annum from June 2001 to December 2001 and 0.7% per annum from January 2002 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in relevant DCMBI.

## Inclusions :

## Exclusions :

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees, etc.
- (2) Other Project Costs (e.g. traffic and environmental studies, land surveying studies, site potential and other engineering studies, site investigation, geotechnical advisory services, construction material test, piling test carried out by direct testing contractor, etc.) are set at 2% on Site Development Costs, Construction Costs and Development Contingencies.

## Assumptions :

## Basis of the Budget :

- (1) Project information included in the following documents:
  - Drawings and revised information received from A/45 on 10/4/02
  - BS cost information as per BSE/C53's memo on 28/12/01
  - Structural information as per SE/130 memo on 28/12/01
  - Ditto as per SE/89 memo on 15/1/02
  - Geotechnical information as per GE/8 memo on 21/9/01
  - Wind Tunnel test cost as per SE/130 memo on 14/1/02

Prepared by : Michael Ching (D.G.Jones & Partners)

Date : 12 April 2002

Construction Cost Budget No. 3 (Public Rental Housing Portion)

PROJECT : Tung Chung Area 56

PHASE 2

PHDP Code : IS10PR02

Domestic Blocks : 2 No. 41-storey (including G/F storey for each block) non-standard blocks

Cost at June 01 Price Level	m2 CFA	Cost per m2		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
<b>1.0 Non-Standard Blocks</b>				
(a) 2 No. non-standard blocks	73,357	1,570	3,781	5,351
<div> <div>1P/2P Flat</div> <div>No. of Flats</div> <div>194</div> </div> <div> <div>2P/3P Flat</div> <div>No. of Flats</div> <div>280</div> </div> <div> <div>1B Flat</div> <div>No. of Flats</div> <div>552</div> </div> <div> <div>2B Flat</div> <div>No. of Flats</div> <div>392</div> </div> <div> <div>1,418</div> </div>				
<b>Cost per Flat x Flat No. = Sub-Total (A)</b> (Total CFA = <u>73,357</u> m2)		115,170	277,363	392,533
				(\$5,351/m2 CFA) (\$276,822 per Flat)
<b>2.0 Adjustments to Item 1.0 Above</b>				
(a) Allow cost for roof features		-	600	600
(b) Add cost for revised window design, revised precast façade with bay windows		-	6,162	6,162
<b>Sub-Total (B)</b>		0	6,762	6,762
				(\$92/m2 CFA) (\$4,769 per Flat)
<b>3.0 Non-standard Blocks</b>				
N/A				
<b>Sub-Total (C)</b>		-	-	
<b>4.0 Development Contingency</b>				
(a) All standard blocks superstructure only		-	-	-
(b) All non-standard blocks and all standard block elements other than superstructure		5,759	14,206	19,965
<b>Sub-Total (D)</b>		5,759	14,206	19,965
				(\$272/m2 CFA) (\$14,080 per Flat)
<b>Total Cost of Domestic Block - Public Rental Housing Portion at June 01, Price Level = (A) + (B) + (C) + (D)</b> (including Provisions for Contract Fluctuations)		120,929	298,331	419,260
				(\$5,715/m2 CFA) (\$295,670 per Flat)

PROJECT : Tung Chung Area 56

PHASE 2

PHDP Code : IS10PR02

Building : 2 No. 41-storey (including G/F storey for each block) non-standard blocks

Cost at June <u>01</u> Price Level	CFA (m2)	Cost per CFA		TOTAL
		Foundation (Incl. Caps)	Building (Excl Caps)	
<b>1.0 Ancillary/Welfare Facilities in Isolated Building (G/F)</b>				
(a) Ancillary facilities (no fitting out included)	292	1,570	5,794	7,364
<b>Cost per m2 CFA x m2 CFA</b>		<-----\$'000----->		
		458	1,692	2,150
(b) Fitting Out for Ancillary/Welfare Facilities (Total area to be fitted out = 292 m2 GFA)	292	0	800	800
<b>2.0 Other Adjustments for Item 1.0 Above</b>				
<b>3.0 Development Contingency</b>				
		23	125	148
<b>Total Cost of Unallocable Portion at June 01 Price Level = Total of Items in 1.0 to 3.0 (including Provisions for Contract Fluctuations)</b>		<-----\$'000----->		
		481	2,617	3,098 (\$10,610/m2 CFA)

**Remarks**

1. Unallocable Portion includes the following :

MAC Office	30	m2 CFA
Cleansing Contractor's Office	31	m2 CFA
Office for Maintenance Service/Store Rm.	154	m2 CFA
Plant Nursery	77	m2 CFA
Total	292	m2 CFA

+



PROJECT : Tung Chung Area 56

PHASE 2

PHDP Code : IS10PR02

Total GEA = 7,544 m2

Total CFA = 73,649 m2

GEA : CFA = 1 : 9.76

Cost at June 01 Price Level	Estimated Cost		TOTAL
	Foundation (Excl Caps)	Building (Incl Caps)	
1.0 <u>External Works based Cost Yardsticks (incl. Contract Price Fluctuation)</u>	\$,000.00		
(a) Hard Landscape Works (Amenities)	-	10,547	10,547
(b) Underground Drainage	-	4,813	4,813
Sub-total (A)	0	15,360	15,360 (\$209/m2 CFA) (\$2,036 /m2 GEA)
2.0 <u>Special External Works based on Actual Design (incl. Contract Price Fluctuation)</u>	\$,000.00		
(a) Allow cost for sculpture	-	300	300
(b) Allow cost for sheet piling adjacent to Block 1	600	-	600
(c) Allow cost for protection works to drainage reserve area	-	300	300
Sub-total (B)	600	600	1,200 (\$16/m2 CFA) (\$159 /m2 GEA)
3.0 <u>Development Contingency</u>	\$,000.00		
	30	798	828
Sub-Total (C)	30	798	828 (\$11/m2 CFA) (\$110 /m2 GEA)
Total Cost of Commonly Shared External Works at June 01 Price Level = (A) + (B) + (C) (including Provisions for Contract Fluctuations)	630	16,758	17,388 (\$236/m2 CFA) (\$2,305 /m2 GEA)
4.0 <u>Cost of Automated Refuse Collection System at June 01 Price Level</u>	\$,000.00		
	0	11,900	11,900
5.0 <u>Development Contingency</u>	0	595	595
Total Cost of Automated Refuse Collection System at June 01 Price Level = Total of Items 4.0 to 5.0 (including provisions for Contract Fluctuation)	0	12,495	12,495 (\$170/m2 CFA) (\$1,656 /m2 GEA)
Cost at June 01 Price Level	Estimated Cost		TOTAL
	Soft Landscape	Fees & Others	
6.0 <u>Cost of Other Separate Contracts (Incl. Softlandscaping Work) at June 01 Price Level</u>	287	517	804
7.0 <u>Development Contingency</u>	14	26	40
Cost of Other Separate Contracts (Incl. Softlandscaping Work) at June 01 Price Level = Total of Items 6.0 to 7.0 (including Provisions for Contract Fluctuations)	301	543	844 (\$11/m2 CFA) (\$112 /m2 GEA)

**Remark:**

Cost for wind tunnel test of \$350,000 is shared between Phase 2 and 3 and be included in "Fees & Others".

### SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 3

PROJECT : Tung Chung Area 56 Phase : 3 PHDP Code : IS10PR03

	COST HEADS	WORK ELEMENTS	BUDGET COST (\$M)
(a)	Site Development Cost	Site Formation	-
		Demolition	0.000
		Sub-total :	0.000
(b)	Construction Cost	Foundation	181.042
		Building	514.276
		Other separate contracts (incl. soft landscape)	1.419
		Sub-total :	696.737
(c)	Other Project Cost (2% on (a) & (b))	Civil engineering and geotechnical studies, site investigation, material testing and the like	13.935
(d)	Total Site Development and Construction Cost (a) + (b) + (c) :		710.672

#### Notes :

- (1) All prices are at June 2001 price level and adjusted for tender price inflation to tender in dates of contracts based on -3.3% per annum from June 2001 to December 2001 and 0.7% per annum from January 2002 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in DCMBI No. P24/00.
- (3) The costs for softlandscaping works, utilities connections, diversion works by Government Departments or Utility Companies, and minor works carried out specifically for the project, eg. Roadworks or slopeworks outside boundaries under separate contracts but charged to the project are grouped under Other Separate Contracts.
- (4) The fluctuation provisions is worked out based on the formula as shown on the Guidance Notes for Standard Cost Yardsticks.
- (5) Development contingencies of \$33.293 M for non-standard blocks/buildings and non-standard elements such as civil engineering works (site formation, slope protection, etc.) demolition, foundation, external works and underground drainage, etc. are included in the Site Development and Construction Cost.

#### Inclusions :

#### Exclusions :

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees and Construction Site Staff.
- (2) Publicity cost, financing and legal costs/expenses, etc.

#### Assumptions :

#### Basis of the Budget :

- (1) Please refer to Phase Summary.

Prepared by D.G. Jones & Partners (HK) Ltd.

Date : 12 April 2002

## SUMMARY OF SITE DEVELOPMENT &amp; CONSTRUCTION COST BUDGET NO.3

PHASE 3

PROJECT : Tung Chung Area 56

PHASE : 3 PHDP Code : IS10PR03

	COST PORTIONS									Common items		Total
	PRH	HOS	CC	CP	WEL	OLGV	UN	GN	Others	TS	EW	
CFA of Cost Portions (m2)	110,035						370					110,405
COST ITEMS	Estimated Cost in \$,000											
A. <u>Site Development &amp; Construction Cost Budget At June 01</u> <u>(Excluding Other Project Costs &amp; Tender Price Inflation)</u>												
1.0 <u>Site Development Costs</u>												
1.1 Site Formation Contract												
1.2 Demolition Contract												
2.0 <u>Construction Costs</u>												
2.1 Foundation Contract	181,393					0	1,385				0	182,778
2.2 Building Contract												
2.21 Building (excl. building services)	381,486					823	2,100					384,409
2.22 Building Services	66,008					105	636				28,185	66,749
2.23 External Works for commonly shared elements												28,185
2.24 External Works for Specific Businesses											35,618	35,618
2.25 Automated Refuse Collection System												0
2.26 Transfer Structures												
2.27 Public Transport Interchange											1,421	1,421
2.3 Other Separate Contracts (incl. Softlandscape)												
Cost Budget At June 01 Price Level (A)	628,887					928	4,121				65,224	699,160
B. <u>Site Development &amp; Construction Cost Budget At June 01</u> <u>(Incl. Tender Price Inflation)</u> (Cost in Item (A) plus Cost x (v), (w), (y) or (z))												
	<u>Contract</u>											
1.0 <u>Site Development Costs</u>	<u>Total (\$'M)</u>											
1.1 Site Formation Contract	-											
1.2 Demolition Contract	\$0.000											
2.0 <u>Construction Costs</u>												
2.1 Foundation Contract	-	179,670				0	1,372				0	181,042
2.2 Building Contract	\$695.318											
2.21 Building (excl. building services)	-	380,979				822	2,097					383,898
2.22 Building Services	-	65,920				105	635				28,148	66,660
2.23 External Works for commonly shared elements	-											28,148
2.24 External Works for Specific Businesses	-										35,571	35,571
2.25 Automated Refuse Collection System	-											
2.26 Transfer Structures	-											
2.27 Public Transport Interchange	-										1,419	1,419
2.3 Other Separate Contracts (incl. Softlandscape)	\$1.419											
Cost Budget Projected To Proposed Dates Of Tenders	\$696.737 (B)	626,569				927	4,104				65,137	696,737

Types of Contract

Site Formation

Demolition

Foundation

Building and piling ( for inflation adjustment, "External Works", "Others", etc.,

Tender-In Dates to be taken the same as "Building")

Tender In Dates

-

-

12/02

02/04

Adjustment for months after Jun 01

Months x -3.3 % / 12 + - Months x 0.7 % / 12 = -

Months x -3.3 % / 12 + - Months x 0.7 % / 12 = -

6 Months x -3.3 % / 12 + 12 Months x 0.7 % / 12 = -0.00950

6 Months x -3.3 % / 12 + 26 Months x 0.7 % / 12 = -0.00133

For the basis, exclusions and notes of this Cost Budget, please refer to information shown on Page 2.

SUMMARY OF CONSTRUCTION COST BUDGET NO. 3 (cont'd)

Phase 3

PROJECT : Tung Chung Area 56

PHASE : 3 PHDP Code : IS10PR03

Legend for Cost Portions :

PR - Public Rental Housing  
HO - Home Ownership Scheme  
CC - Commercial (shopping) Centre  
CP - Carpark

OLGV  
Wel  
UN  
GN

Open LGV parking  
Welfare portion  
Unallocable  
Government Non-reimbursable

TS  
EW

Transfer Structure  
External Works

Notes :

- (1) All prices are at June 2001 price level and adjusted for tender price inflation to tender in dates of contracts based on -3.3% per annum from June 2001 to December 2001 and 0.7% per annum from January 2002 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in relevant DCMBI.

Inclusions :

Exclusions :

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees, etc.
- (2) Other Project Costs (e.g. traffic and environmental studies, land surveying studies, site potential and other engineering studies, site investigation, geotechnical advisory services, construction material test, piling test carried out by direct testing contractor, etc.) are set at 2% on Site Development Costs, Construction Costs and Development Contingencies.

Assumptions :

Basis of the Budget :

- (1) Project information included in the following documents:
  - Drawings and revised information received from A/45 on 10/4/02
  - BS cost information as per BSE/C53's memo on 28/12/01
  - Structural information as per SE/130 memo on 28/12/01
  - Ditto as per SE/89 memo on 15/1/02
  - Geotechnical information as per GE/8 memo on 21/9/01
  - Wind Tunnel test cost as per SE/130 memo on 14/1/02

Prepared by : Michael Ching (D.G.Jones & Partners)

Date : 12 April 2002

Construction Cost Budget No. 3 (Public Rental Housing Portion)

PROJECT : Tung Chung Area 56

PHASE 3

PHDP Code : IS10PR03

Domestic Blocks : 3 No. 41-storey (including G/F storey for each block) non-standard blocks

Cost at June 01 Price Level	m2 CFA	Cost per m2		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
<b>1.0 Non-Standard Blocks</b>				
(a) 3 No. non-standard blocks	110,035	1,570	3,781	5,351
<div> <div>-</div> <div>1P/2P Flat</div> <div>No. of Flats</div> <div>291</div> </div> <div> <div>-</div> <div>2P/3P Flat</div> <div>420</div> </div> <div> <div>-</div> <div>1B Flat</div> <div>828</div> </div> <div> <div>-</div> <div>2B Flat</div> <div>588</div> </div> <div> <div>2,127</div> </div>				
<b>Cost per Flat x Flat No. = Sub-Total (A)</b> (Total CFA = <u>110,035</u> m2)		172,755	416,042	588,797
		\$,000.00		(\$5,351/m2 CFA) (\$276,820 per Flat)
<b>2.0 Adjustments to Item 1.0 Above</b>				
(a) Allow cost for roof features		-	900	900
(b) Add cost for revised window design, revised precast façade with bay windows		-	9,243	9,243
<b>Sub-Total (B)</b>		0	10,143	10,143
		\$,000.00		(\$92/m2 CFA) (\$4,769 per Flat)
<b>3.0 Non-standard Blocks</b>				
N/A				
<b>Sub-Total (C)</b>		-	-	-
		\$,000.00		
<b>4.0 Development Contingency</b>				
(a) All standard blocks superstructure only		-	-	-
(b) All non-standard blocks and all standard block elements other than superstructure		8,638	21,309	29,947
<b>Sub-Total (D)</b>		8,638	21,309	29,947
		\$,000.00		(\$272/m2 CFA) (\$14,079 per Flat)
<b>Total Cost of Domestic Block - Public Rental Housing Portion at June 01 Price Level = (A) + (B) + (C) + (D)</b> (including Provisions for Contract Fluctuations)		181,393	447,494	628,887
		\$,000.00		(\$5,715/m2 CFA) (\$295,669 per Flat)

PROJECT : Tung Chung Area 56

PHASE 3

PHDP Code : IS10PR01

Building : Domestic Block

Cost at June <u>01</u> Price Level	CFA (m2)	Cost per CFA		TOTAL
		Foundation (Incl. Caps)	Building (Excl Caps)	
<b>1.0 Ancillary/Welfare Facilities in Domestic Building</b>				
(a) Ancillary facilities (no fitting out included)	370	3,565	4,303	7,868
<b>Cost per m2 CFA x m2 CFA</b>		<-----\$'000----->		
		1,319	1,592	2,911
(b) Fitting Out for Ancillary/Welfare Facilities (Total area to be fitted out = 370 m2 GFA)	370	0	1,014	1,014
<b>2.0 Other Adjustments for Item 1.0 Above</b>				
<b>3.0 Development Contingency</b>				
		66	130	196
<b>Total Cost of Unallocable Portion at June 01 Price Level = Total of Items in 1.0 to 3.0 (including Provisions for Contract Fluctuations)</b>		<-----\$'000----->		
		1,385	2,736	4,121 (\$11,138/m2 CFA)

**Remarks**

1. Unallocable Portion includes the following :

Estate Management Office	370	m2 CFA
Total	370	m2 CFA

+

PROJECT : Tung Chung Area 56

PHASE 3

PHDP Code : IS10PR03

Cost at June <u>01</u> Price Level	Space (No.)	Estimated Cost		TOTAL
		Foundation (Incl. Caps)	Building (Excl. Caps)	
		←-----\$ ,000.00-----→		
<b>1.0 <u>Estimated cost for Open LGV Parking</u></b>				
(a) Open LGV parking		0	884	884
LGV		16		

**Remark:**

- The 68 No. of motorcycle carparking space is regarded as 10 No. of private carparking space

PROJECT : Tung Chung Area 56

PHASE 3

PHDP Code : IS10PR03

Total GEA = 12,988 m2

Total CFA = 110,405 m2

GEA : CFA = 1 : 8.50

Cost at June 01 Price Level	Estimated Cost		TOTAL
	Foundation (Excl Caps)	Building (Incl Caps)	
1.0 External Works based Cost Yardsticks (incl. Contract Price Fluctuation)	\$,000.00		
(a) Hard Landscape Works (Amenities)	-	18,157	18,157
(b) Underground Drainage	-	8,286	8,286
Sub-total (A)	0	26,443	26,443 (\$240/m2 CFA) (\$2,036 /m2 GEA)
2.0 Special External Works based on Actual Design (incl. Contract Price Fluctuation)	\$,000.00		
(a) Allow cost for protection works to drainage reserve area	-	400	400
Sub-total (B)	0	400	400 (\$4/m2 CFA) (\$31 /m2 GEA)
3.0 Development Contingency	\$,000.00		
	0	1,342	1,342
Sub-Total (C)	0	1,342	1,342 (\$12/m2 CFA) (\$103 /m2 GEA)
Total Cost of Commonly Shared External Works at June 01 Price Level = (A) + (B) + (C) (including Provisions for Contract Fluctuations)	0	28,185	28,185 (\$255/m2 CFA) (\$2,170 /m2 GEA)
4.0 Cost of Automated Refuse Collection System at June 01 Price Level	0	33,922	33,922
5.0 Development Contingency	0	1,696	1,696
Total Cost of Automated Refuse Collection System at June 01 Price Level = Total of Items 4.0 to 5.0 (including provisions for Contract Fluctuation)	0	35,618	35,618 (\$333/m2 CFA) (\$2,742 /m2 GEA)
Cost at June 01 Price Level	Estimated Cost		TOTAL
	Soft Landscape	Fees & Others	
6.0 Cost of Other Separate Contracts (incl. Softlandscaping Work) at June 01 Price Level	494	859	1,353
7.0 Development Contingency	25	43	68
Cost of Other Separate Contracts (incl. Softlandscaping Work) at June 01 Price Level = Total of Items 6.0 to 7.0 (including Provisions for Contract Fluctuations)	519	902	1,421 (\$13/m2 CFA) (\$109 /m2 GEA)

**Remark:**

Cost for wind tunnel test of \$350,000 is shared between Phase 2 and 3 and be included in "Fees & Others".