



## **THE HONG KONG HOUSING AUTHORITY**

### **Memorandum for Building Committee**

#### **Proposed Master Layout Plan, Scheme Design & Project Development Budget for Buy or Rent Option Shatin Area 2B (Hin Wo Lane)**

#### **PURPOSE**

To seek Members' approval to the proposed Master Layout Plan, Scheme Design and Project Development Budget for the Public Rental Housing Development at Shatin Area 2B (Hin Wo Lane).

#### **BACKGROUND**

2. Shatin Area 2B was previously reserved for the development of a polyclinic and a general clinic. To meet CE's pledge of 85,000 flats per year, the development was identified as one of HOUSCOM's control projects to boost housing supply in the year 2003/04.
3. The whole of Area 2B is carved out into two separate portions, the major portion for the construction of housing and the remaining portion for clinic building.
4. The housing portion with a gross site area of about 0.573 ha, is re-zoned from "Government, Institution and Community" (GIC) to Residential (A). The Draft Outline Zoning Plan (OZP No. S/ST/13) was gazetted on 8 October 1999.
5. The Strategic Planning Committee (SPC) has, at its meeting held on 11 September 1999, approved the inclusion of this site in the Public Housing Development Programme (PHDP) and the Project Development Cost Ceiling.

6. Noise mitigation measures include the provision of air conditioning units to the domestic flats. As air conditioning is not provided for purely rental blocks, Members were advised at the Building Committee Meeting held on 27 April 2000 that agreement would be sought to designate the project as a Buy or Rent Option (BRO). This designation has now been endorsed by Heads of Branches Meeting. The project is still within the Development Cost Ceiling and the change to BRO does not need to be further endorsed by SPC, but the financial viability has altered and SPC will be informed of the details.

7. Non-standard designs have been investigated to avoid the need for air-conditioning, but the limitations of prescribed window restrictions and a noise source from two directions make these impractical.

8. Past events which are relevant to this project are as follows -

Date	Event
(a) 21 May 1999	Client Brief, Control Plan and Project Estimate endorsed by the department's Project Design Review Committee (Paper No. PDRC 28/99)
(b) 29 June 1999	Shatin District Board Consultation
(c) 11 September 1999	Inclusion into PHDP approved by SPC of Paper No. SPC 30/99
(d) 11 February 2000	DipCon Submission for the agreement on the planning parameters was endorsed
(e) 2 March 2000	Endorsed by Project Design Review Committee for submission to the Building Committee (Paper No. PDRC 4/2000 refers)
(f) 2 May 2000	Endorsed by Heads of Branch Meeting (HBB) to designate the project BRO.

## SCHEME DESIGN PROPOSAL

----- 9. The proposed Master Layout Plan and Scheme Design at **Part I and Part II** of the attached **Annex** generally follows the development parameters and the conceptual layout endorsed in above 8(c). Explanatory notes and drawings attached as **Part I and Part II** of the **Annex** illustrate the disposition of the housing block, vehicular and pedestrian access and other facilities.

10. The proposed development comprises of -

- (a) 1 no. 41- storey New Harmony 1 Option 6 Block on grade;
- (b) 50 nos. covered private car parking spaces & 8 nos. light goods vehicle parking spaces;
- (c) 1 no. Estate Management Office (EMO);
- (d) 1 no. Refuse Collection Point (RCP);
- (e) Associated external works.

11. The main features of the design are as follows -

- (a) To mitigate noise generated from surrounding traffic -
  - A maximum domestic setback of 14m from Che Kung Miu Road and 40m from Tin Sam Street are provided.
  - 10 m noise barrier noise barriers to the west of the site and 7m high on top of roof of carpark to the north is provided.
  - Air-conditioning together with 6mm glass for window will be provided to all domestic flats as noise insulation measures.
- (b) Architectural treatment to the Noise Barrier is as follows -
  - The high noise barriers are the dominant features to the development at street level. Care has been taken to avoid adverse visual impact.

- The overhanging canopy at the top of the noise barrier is repeated at the roof level of the domestic block to unify the appearance of the whole development and provide specific individual identity.
- (c) An 8.5m wide drainage reserve area along site boundary to the south is required to be free from permanent structures.

## PROPOSED PROJECT DEVELOPMENT BUDGET

12. Based on the proposed Master Layout Plan and Scheme Design, the Project Development Budget for the development is estimated to be **\$379.297 M.**

13. The breakdown of the budget is given in **Part IV** of the **Annex** and the key elements are as follows -

Aspect			Project Development Budget (\$M)
(a)	Site Development Cost		-
(b)	Construction Cost	Foundation	27.260
		Building	269.052
		Soft Landscape & Others	0.942
		Sub-total (b)	297.254
(c)	Project Management Cost (a + b) x 14%		41.616
(d)	Other Project Cost (a + b) x 2%		5.945
(e)	Development Contingency (a+b+c+d) x 10%		34.482
Total Project development Budget (a) + (b) + (c) + (d) + (e)			379.297

14. The Unit Cost of the Proposed Project Development Budget as compared with SPC's Approved Project Development Unit Cost Ceiling is as follows -

	(a)	(b)	(c)	(d)
	Unit Cost of Proposed Project Development Budget	SPC's approved project development unit cost ceiling (Paper No. SPC 30/99)	Overall Unit Cost of Construction included in (a) (excluding external works and others)	June 1999 Cost Yardsticks adjusted to tender-in-date
	(\$ / m <sup>2</sup> CFA)	(\$ / m <sup>2</sup> CFA)	(\$ / m <sup>2</sup> CFA)	(\$ / m <sup>2</sup> CFA)
Domestic (PRH)	10,144	10,812	6,543	5,973
Private Carpark	5,698	6,763	3,059	4,434
LGV	1,419	1,506	1,112	-

15. The proposed Unit Development Cost Budget is within the SPC's Approved Unit Development Cost Ceiling.

16. The difference between the Overall Unit Cost of Construction (excluding external works and others) and the June 1999 Cost Yardsticks for domestic flats adjusted to Tender-In-Date are attributable to the following -

	Contribution
(a) Adjustment for foundations based on preliminary design	+ 1.7 %
(b) Allowance for single block project.	+ 4.4 %
(c) Provision of window A/C unit	+ 2.4 %
(d) Others (e.g. Street hydrant and pump room, Upgrading of window glazing, etc.)	+ 1.0 %

17. The proposed Project Development Cost for the public rental housing portion can be broken down into the cost per flat as follows -

	(a)	(b)	(c)
<b>Flat Type</b>	<b>Proposed Development Cost per flat (\$)</b>	<b>Overall Construction Cost per Flat included in (a) (excluding External Works &amp; Others) (\$)</b>	<b>June 1999 Cost Yardstick Adjusted to Tender-in-Date (per flat) (\$)</b>
1P/2P	\$301,758	\$198,253	\$180,982
2P/3P	\$389,397	\$255,831	\$233,544
1B	\$516,872	\$339,582	\$309,999
2B	\$679,204	\$446,233	\$407,359

#### AVAILABILITY OF FUNDS

18. The estimated yearly expenditure of the Proposed Budget is shown below and would be included in the next capital budget updating of the Authority -

	<b>Estimated Expenditure (\$M)</b>			
	<i>2000/2001</i>	<i>2001/2002</i>	<i>Post 31.3.2001</i>	<i>Total</i>
Estimate	17.400	93.750	268.147	379.297

19. Provision in the Housing Authority's Capital Budget for the year 2000/2001 is \$31.650M (Paper No. FC 2/2000).

## DEVELOPMENT PROGRAMME

20. Details of the Development Programme are in **Part III** of the **Annex**. The key dates are -

	Event	Date
(a) Scheme Design	PDRC(2)	2/3/00
(b) Design & Budget	BC	5/00
(c) Detailed Design	DDRP	6/00
(d) Piling	Commencement	10/00
	Completion	7/01
(e) Building	Commencement	7/01
	Completion	1/04

## RECOMMENDATIONS

21. It is recommended that the proposed Master Layout Plan, Scheme Design and Project Development Budget for the proposed Buy or Rent Option block at Shatin Area 2B be approved.

## DISCUSSION

22. At the next meeting of the Building Committee to be held on 25 May 2000, Members will be invited to approve the recommendation in paragraph 21 above.

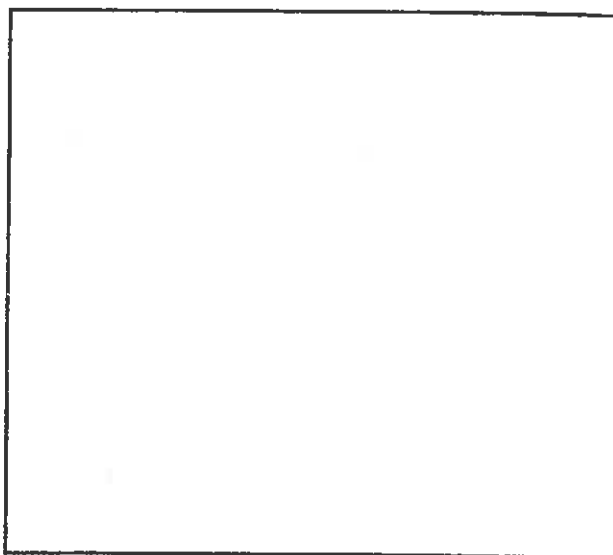
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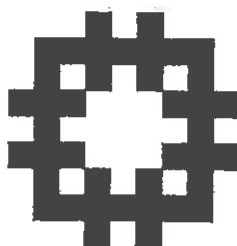
Date : 19 May 2000

**PROPOSED  
BUY OR RENT OPTION (BRO)  
AT  
SHATIN AREA 2B**

**PROPOSED MASTER LAYOUT PLAN &  
PROJECT DEVELOPMENT COST BUDGET**



**BC SUBMISSION, MAY 2000**



**DEVELOPMENT AND CONSTRUCTION BRANCH  
HOUSING DEPARTMENT**



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# AMENDMENT RECORD SHEET

Content	DATE OF ISSUE	
	MONTH	YEAR
	04	05
Amendment Record Sheet	00	00
<b>Part I : Master Layout Plan</b>		
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2. Site Analysis & Evaluation		
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3. Accommodation and Facilities		
3.1 Site Area	1	2
3.2 Development Ratio	1	2
3.3 Flat Number and Flat Mix	1	2
3.4 Design Population	1	2
3.5 Refuse Collection Point	1	2
3.6 Management Accommodation	1	2
3.7 Open Space	1	2
4. Circulation and Transportation Matters		
4.1 Vehicular Access	1	2
4.2 Pedestrian Access	1	2
4.3 Control of Ingress / Egress	1	2
4.4 Emergency Vehicular Access	1	2
4.5 Pedestrian Network	1	2
4.6 Parking Provision	1	2
5. Design Consideration		
5.1 Block Types, Disposition & Orientation	1	2
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This document has been reviewed and approved for adequacy		
 SIGNED : Mr. LA. GALLOWAY CA/2 (Atg.) DATE : 12 May 2000		



# 1. INTRODUCTION

## 1.1 BACKGROUND

1. The site is bounded by Che Kung Miu Road to the north and Tin Sam Street to the east. To its immediate west is a primary school located within Hin Keng Estate and south is an array of GIC facilities including a neighbourhood community centre, Tim Sum Divisional Police Station and Fire station. The site has a gross area of approx. 0.78 ha.
2. Originally, the site was reserved for the development of polyclinic and general clinic only. In view of the projected territory-wide shortfall of housing supply in the period 2001–2006, the Government identified the reserve clinic site in Area 2B as one of HOUSCOM's Control List for completion in 2003/04. As a result, a joint development proposal incorporating public housing of not less than 600 flats and the clinic will be planned, constructed and funded by HD and Health D respectively.
3. The subject site is originally zoned as GI/C and re-zoning of the housing portion to Residential (A) was incorporated into the Shatin OZP No. S/ST/13 which was gazetted on 8.10.1999 and no objection was received.
4. At present, the north-western portion of the site is occupied by Water Services Department under a short-term tenancy as a temporary maintenance yard. The southern portion is used as a temporary carpark. Upon DLO/ST's advice, the entire site can be ready for hand-over to HD and the Health Department for works commencement in October 2000.
5. The approval status of this BRO scheme is as follows:
  - a) the development parameters, conceptual layout plans and cost estimates had been endorsed with revision on 21.5.1999 (PDRC Paper No. 28/99 refers).
  - b) the development parameters, conceptual layout plans and cost estimates were subsequently approved by Strategic Planning Committee (SPC) on 11.9.1999 (SPC Paper No. 30/99 refers) for inclusion into the Public Housing Development Programme (PHDP).
  - c) the planning parameters have been submitted for DIPCON circulation on September 1999 and was endorsed on 11.2.2000.
  - d) On 2.3.2000, the Proposed Master Layout Plan and the Project Development Cost Budget was endorsed by the Project Design Review Committee (Paper No. PDRC 4/00 refers)
  - e) On 2.5.2000, the Project is endorsed by HDD to change to BRO Scheme.

# 1. INTRODUCTION

## 1.2 LOCATION PLAN



## 2. SITE ANALYSIS & EVALUATION

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<p><b>2.1 Planning and Land Matters</b></p> <p><b>2.1.1 Site Location</b> Shatin Area 2B, is bounded by Che Kung Miu Road to the north and Tin Sam Street to the east.</p> <p><b>2.1.2 Adjacent Land Uses</b> To the west a primary school and the south GIC facilities such as neighbourhood community centre, police station and fire station.</p> <p><b>2.1.3 Zoning Consideration</b> The Shatin Outline Zoning Plan No. S/ST/13 was gazetted on 8 October 99 and no objection within the statutory period was received.</p> <p><b>2.1.4 Land Clearance/ Resumption</b> No specific requirement.</p> <p><b>2.1.5 Height Restriction</b> Nil</p>	<p>As in the Approved Development Parameters.</p> <p>As in the Approved Development Parameters.</p> <p>As in the Approved Development Parameters.</p>	<p>The site is relatively flat with no slope in the adjoining areas.</p>
<p><b>2.2 Engineering Considerations</b></p> <p><b>2.2.1 Noise</b> Study to be undertaken by HD.</p>	<p>According to the Final Road Traffic Noise Assessment by HD's consultant, Messrs. Ove Arup &amp; Partners (ARUP) submitted to EPD on 28.2.2000, vertical noise barriers will be provided : - 7m high at roof top of</p>	<p>The final report was submitted to EPD on 23.2.2000 and EPD's memo dated 21.3.2000 required air-conditioning to the noise affected flats (i.e.300 out of 799 flats) was stated.</p> <p>As this project is changed to BRO, full air-conditioners</p>

## 2. SITE ANALYSIS & EVALUATION

Approved Development Parameters	Proposed Master Layout Plan	Remarks
	<p>carport facing Tin Sum Street, and 10m high along western boundary facing Che Kung Miu Road.</p> <p>- Residual noise impacts will be mitigated by the provision of upgraded 6mm thick glass pane windows for the affected flats, with noise levels in excess of 70dB(A).</p>	<p>together with 6mm glass windows will be provided to all domestic flats.</p> <p>A feature wall to be designed with solid and transparent screens to be provided for best noise screening as well as aesthetic results. (pls. refer to dwg no. SK/A/PLO-01 )</p>
<p><b>2.2.2 <u>Geotechnical Considerations</u></b> The site is underlain by superficial deposits and in situ weathered soils down to some 45m to 60m below ground.</p>		
<p><b>2.2.3 <u>Foundation Design</u></b> Deep foundations are recommended for the building block and the noise barrier, shallow footings can be adopted for other lightly loaded structures.</p>	As in the Approved Development Parameters.	
<p><b>2.2.4 <u>Drainage and Sewerage</u></b></p>	As in the Approved Development Parameters.	
<p><b>2.2.5 <u>Water Supply</u></b> Adequate water supply provisions for the proposed development to be undertaken by WSD.</p>	As in the Approved Development Parameters.	
<p><b>2.2.6 <u>Electricity, Telephone, Gas</u></b> Adequate utility supply provisions for the proposed development to be undertaken by utility companies.</p>	As in the Approved Development Parameters.	

## 2. SITE ANALYSIS & EVALUATION

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<b>2.2.7 Traffic Improvement</b> Traffic improvement has been covered by CED's Supplementary Traffic Impact Assessment.	As in the Approved Development Parameters.	Roadworks to be carried out by CED on behalf of TDD.
<b>2.2.8 Drainage Reserve Area</b> Drainage reserves of 8.5m alongside the South-western boundary of the site.	As in the Approved Development Parameters.	
<b>2.2.9 Site Formation</b> The site is held under Short Term Tenancy which will be terminated before piling works commence on October 2000. No site formation work is required.	As in the Approved Development Parameters.	Health Department is responsible to take up the works of the clinic portion.



### 3. ACCOMMODATION AND FACILITIES

Approved Development Parameters	Proposed Master Layout Plan	Remarks															
<b>3.1 Site Area</b>  Gross site area: 7,800 m <sup>2</sup> Clinic Site : 2,070 m <sup>2</sup> Domestic Site Area : 5,730 m <sup>2</sup>	As approved in SPC paper No. 30/99 dated 11 September 99.	Net site area = domestic site area.															
<b>3.2 Development Ratio</b>  Permissible DR : 5-7  <b>Gross Floor Space</b> Domestic 36,816m <sup>2</sup> Clinic 7,000m <sup>2</sup> Total: 43,816m <sup>2</sup>  Development Ratio : =43,816 / 6,411 =6.83  Domestic Plot Ratio : 7.98 Non-Domestic Plot Ratio : 0.13 (refer to plot ratio and development calculation sheets)	<b>Development Ratio (D.R.) Calculation</b> <b>Gross Floor Space</b> NH1 Opt. 6 = 38,253 m <sup>2</sup> (933 m <sup>2</sup> x 41 ) Area attached in Wings C = 93.56 m <sup>2</sup> Total : 38,346.56m <sup>2</sup>  <b>Development Ratio :</b> =38,346.56/ 5,730 = 6.7 < 7	Domestic GFA = *34,625.63 m <sup>2</sup> * refer to BC11/99 dated 15 January 99.  GFA of EMO & Contractor's offices = 501.7 m <sup>2</sup>															
<b>3.3 Flat Number and Flat Mix</b>  The proposed public rental housing development is planned to provide a total of 799 flats.	The proposed development provided one standard New Harmony 1 Opt 6. The flat mix is as follows: <table><tr><td>Flat</td><td>1/2P</td><td>2/3P</td><td>1B</td><td>2B</td></tr><tr><td>Nos.</td><td>159</td><td>320</td><td>160</td><td>160</td></tr><tr><td>%</td><td>19.9</td><td>40.1</td><td>20.0</td><td>20.0</td></tr></table>	Flat	1/2P	2/3P	1B	2B	Nos.	159	320	160	160	%	19.9	40.1	20.0	20.0	
Flat	1/2P	2/3P	1B	2B													
Nos.	159	320	160	160													
%	19.9	40.1	20.0	20.0													

### 3. ACCOMMODATION AND FACILITIES

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<b>3.4 <u>Design Population</u></b>	The design population for 799 flats is 2,020 persons. (2.53 persons/ unit)	
<b>3.5 <u>Refuse Collection Point</u></b> 1 for the whole Estate	Proposed to be located at the corner of carpark. (110m <sup>2</sup> IFA).	
<b>3.6 <u>Management Accommodation</u></b> <b>3.6.1 <u>Estate Management Office</u></b> 1 for the whole Estate	Proposed to be located at G/F of Wing C.	As per SHM/D&V's "Standard Provision for Rental Estate" for the project dated 5.5.99.
<b>3.6.2 <u>M.A.C. Office</u></b> 1 for each block (15 - 20 m <sup>2</sup> IFA)	Proposed to be provided at G/F of Wing B (17.3 m <sup>2</sup> IFA).	Ditto.
<b>3.6.3 <u>Artisan Workshop</u></b> 1 for the whole Estate, to be detached from the Main EMO (20-40 m <sup>2</sup> IFA)	Proposed to be provided at G/F of Wing B (21.5 m <sup>2</sup> IFA).	Ditto.
<b>3.6.4 <u>Office for Cleansing Contractor</u></b> 1 for the whole Estate (32.5-46.5 m <sup>2</sup> IFA)	Proposed to be provided at G/F of Wing B (22.2 m <sup>2</sup> IFA)	Ditto.
<b>3.6.5 <u>BW Term Maintenance Contractor Service / Store Room</u></b> 1 for the whole Estate (70-100 m <sup>2</sup> IFA)	Proposed to be provided at G/F of Wing B (49 m <sup>2</sup> IFA)	Ditto.

### 3. ACCOMMODATION AND FACILITIES

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<b>3.6.6 BS Term Maintenance Contractor Service / Store Room</b> 1 for the whole Estate (70-100 m <sup>2</sup> IFA)	Proposed to be provided at G/F attached to Wing B (54.7 m <sup>2</sup> IFA).	Area as shown on the control plan in PDRC Paper No. 28/99 is 58.2m <sup>2</sup> .
<b>3.7 Open Space</b> <b>3.7.1 Local Open Space</b> A minimum of 2,560 m <sup>2</sup> . of local open space shall be provided to serve the proposed development.	3,000 m <sup>2</sup> is provided to serve the proposed development.	
<b>3.7.2 Recreation Facilities</b> 205 m <sup>2</sup> . Children Playing Area is required.	240 m <sup>2</sup> of CPA to be provided at podium garden.	

#### 4. CIRCULATION AND TRANSPORTATION MATTERS

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<b>4.1 Vehicular Access</b> Main access from Hin Keng Lane	As in the Approved Development Parameters	
<b>4.2 Pedestrian Access</b> No special requirement	Pedestrian access is provided at these points: at south-east giving access to the adjoining Hin Keng Estate and existing bus stops; at north-west giving access to the nearby KCR station; at north-east giving access to an existing pedestrian subway under Tin Sam Street.	
<b>4.3 Control of Ingress and Egress</b> No special requirement	Guard kiosk, drop gate to be provided at entrance to the estate road; automated carpark control system to be provided later by carpark operator as required.	
<b>4.4 Emergency Vehicular Access (EVA)</b> No special requirement	Domestic block and carpark building shall be accessible with EVA/estate road.	
<b>4.5 Pedestrian Network</b> No special requirement.		

#### 4. CIRCULATION AND TRANSPORTATION MATTERS

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<b>4.6 Parking Provision</b> <b>4.6.1 Carpark Spaces</b> $*799 / 16 = 50$ nos.  * includes the no. of 1P/2P flat	As in the Approved Development Parameters	<u>Rate of Provision for carpark</u> BRO : 1 per 9-13 flats excluding 1P/2P flats  <u>Dimension</u> 2.5m (W) x 5m (L) x 2.4m (H)
<b>4.6.2 Motor-cycle Spaces</b> 3 nos.	As in the Approved Development Parameters	5 % of total parking space.
<b>4.6.3 Light Goods Vehicle (LGV) Spaces</b> $(799 - *159) / 80 = 8$ nos. *  * no. of 1P/2P flats	Along the site boundary at the South	<u>Rate of provision for LGV :</u> 1 space per 80 flats  TD has no objection to the number of LGV provided. [PM/2 's memo to TD dated 22 March 00 (ref: HD(PM)55/693/1) refers]
<b>4.6.4 Residential Loading/ Unloading</b> 1 no. is required.	As in the Approved Development Parameters	Provision of 1 per domestic block.
<b>4.6.5 Bicycle Parking</b> 27 nos. is required.	As in the Approved Development Parameters	<u>Rate of provision for bicycle:</u> 1 space per 30 flats

## 5. DESIGN CONSIDERATIONS

Approved Development Parameters	Proposed Master Layout Plan	Remarks
5.1 <u>Block Types, Disposition and Orientation</u>	As per Control Plan except :- i) orientation of block revised ii) RCP is relocated to away from the vehicular and pedestrian entrance.	
5.2 <u>Design of Noise Barrier</u> No special requirement.	<p>The site, with its trees and garden, and its limited area, suggested glass noise barrier would be appropriate. The result is a curtain of glass defines the development, yet maintain a certain degree of transparency.</p> <p>This transparent membrane adopted a playful form originated from the noise reduction requirement.</p> <p>The eave-like canopy defines the top-end of the noise barrier to reduce it to a human scale.</p> <p>The canopy at the roof top of the domestic block is proposed to reflect the canopy of the noise barrier, to unify the Development as a whole and to enhance the individual identity of the Development.</p>	<p>Both Transport Department and Highways Department have no objection to the proposed projection of canopies over street. [TE(NTE)Div./TD's memo dated 5.4.2000 (ref: NR 182/191-41) and Highways/NT Region 's memo dated 20.3.2000 (ref: HNT 706/ST/14) refers]</p> <p>Comment from DLO/ST is pending.</p>

## **5. DESIGN CONSIDERATIONS**

<b>Approved Development Parameters</b>	<b>Proposed Master Layout Plan</b>	<b>Remarks</b>
<b>5.3 Landscape Design</b> No specific requirement.	<p>Curvilinear planters create a leisure atmosphere and contrasting to the rectilinear building block.</p> <p>Landscaping in the roof garden and pedestrian area is to be designed in safe and secure manner to improve the built environment and visual quality of the Estate.</p>	
<b>5.4 Design for the Disabled</b> No special requirement.	<p>All buildings, open spaces, pedestrian circulation and public transport facilities are designed to cater for the needs of the disabled.</p>	
<b>5.5 Graphics and Signage</b> No specific requirement.	<p>Graphic and signage system to be designed in accordance with the D&amp;S's signage manuals.</p>	<p>Reference: Signage Manual for Public Housing Estates.</p>

## **2 MASTER LAYOUT DRAWING**



## **MASTER LAYOUT DRAWINGS**

### **DRAWING LIST :-**

<b><u>Drawing No.</u></b>	<b><u>Revision</u></b>	<b><u>Drawing Title</u></b>
ST32/SITE/A/PLO-01	P02	SITE LOCATION PLAN
ST32/SITE/A/PLO-02	P03	G/F LAYOUT PLAN
ST32/SITE/A/PLO-03	P02	PODIUM LAYOUT PLAN
ST32/SITE/A/PLO-04	P02	ROOF PLAN
ST32/SITE/A/PLO-05	P02	WEST ELEVATION
ST32/SITE/A/PLO-06	P02	SECTION A-A
ST32/BL1/A/PLO-01	P01	BLOCK 1 – G/F PLAN
ST32/BL1/A/PLO-02	P01	BLOCK 1 – F40 PLAN
ST32/BL1/A/PLO-03	P01	BLOCK 1 – UPPER ROOF PLAN WITH SPRINKLER TANK
SK/A/PLO-01	P02	ELEVATION OF NOISE BARRIER
SK/A/PLO-02	P02	AXONOMETRIC VIEW FROM CHE KUNG MIU ROAD
SK/A/PLO-03	P01	AXONOMETRIC VIEW FROM HIN WO LANE



**NOTES**

REVISIONS		INITIAL AND DESIGNATION		
NO	DESCRIPTION AND DATE	DWN	CKD	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.T. WONG CA/2 (ATG.)	ORIGINAL SIGNED	02/00
	MARTIN MAGILL SA/14	ORIGINAL SIGNED	02/00
CHECKED	JIMMY TAM A/107	ORIGINAL SIGNED	02/00
	MARY CHAN AG/4	ORIGINAL SIGNED	02/00
	Y.W. CHAN STO(A)/13	ORIGINAL SIGNED	02/00
	T.H. LAM TO(A)/142	ORIGINAL SIGNED	02/00
DRAWN	T.H. LAM TO(A)/142	ORIGINAL SIGNED	02/00

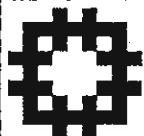
PROJECT  
**SHATIN AREA 2B  
HIN WO LANE**

DRAWING TITLE  
**SITE LOCATION PLAN**

SCALE 1:4000

DRAWING NO  
**ST32/SITE/A/PLO-01/P02**

SOURCE

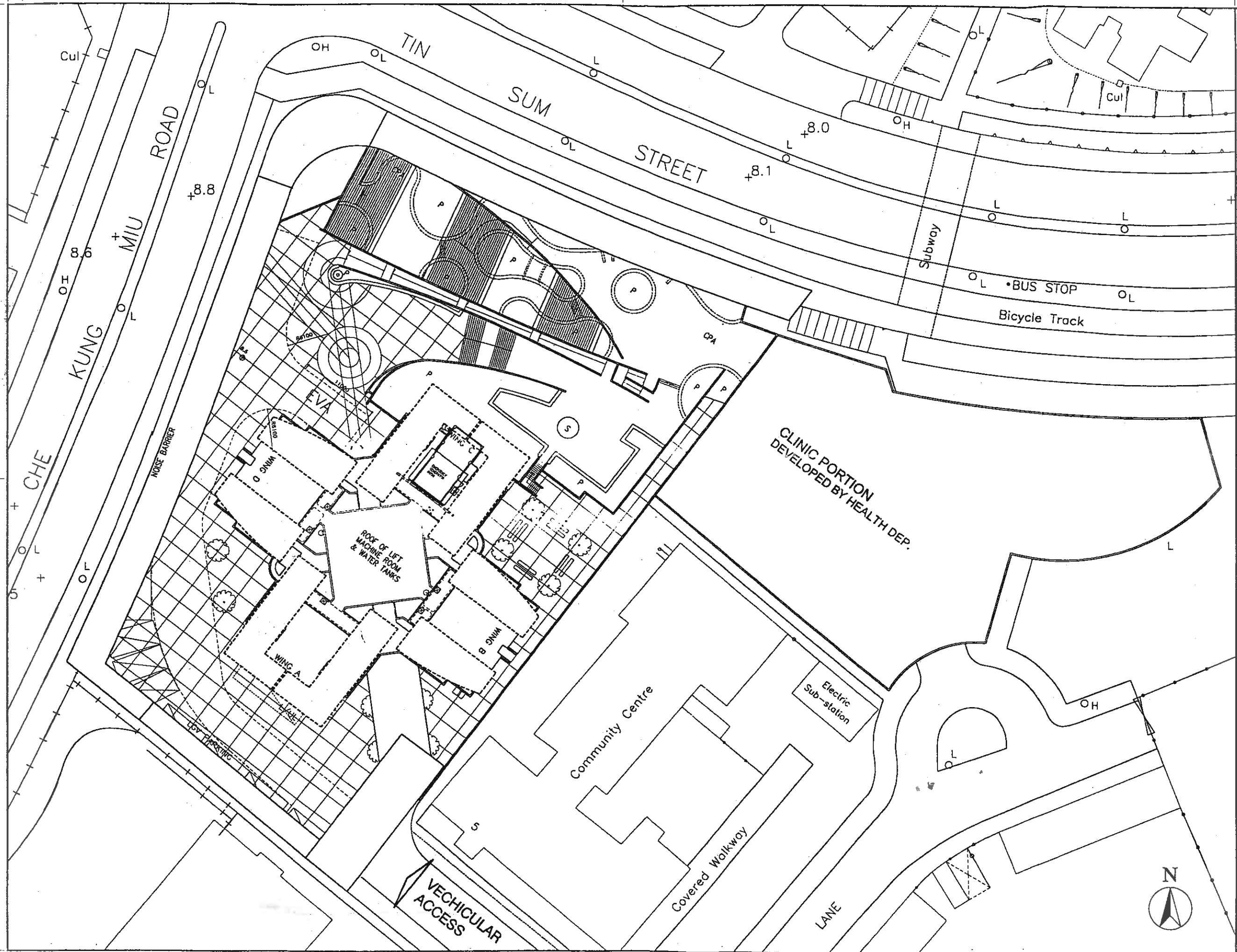


CADAM V3R2    A5 297 x 420  
**WORKS GROUP  
HOUSING DEPARTMENT**









# NOTES

## REVISIONS

NO.	DESCRIPTION AND DATE	OWN	CHK	AUTH

NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED C.Y. WONG CA/2 (ATC)	ORIGINAL SIGNED	02/00
MARTIN MAGILL SA/14	ORIGINAL SIGNED	02/00
JAMIE TAM A/107	ORIGINAL SIGNED	02/00
CHECKED MARY CHAN AD/A	ORIGINAL SIGNED	02/00
T.M. CHAN ST04A/12	ORIGINAL SIGNED	02/00
DRAWN T.R. LAM FO0A/142	ORIGINAL SIGNED	02/00

PROJECT  
SHATIN AREA 2B  
HIN WO LANE

DRAWING TITLE  
ROOF PLAN

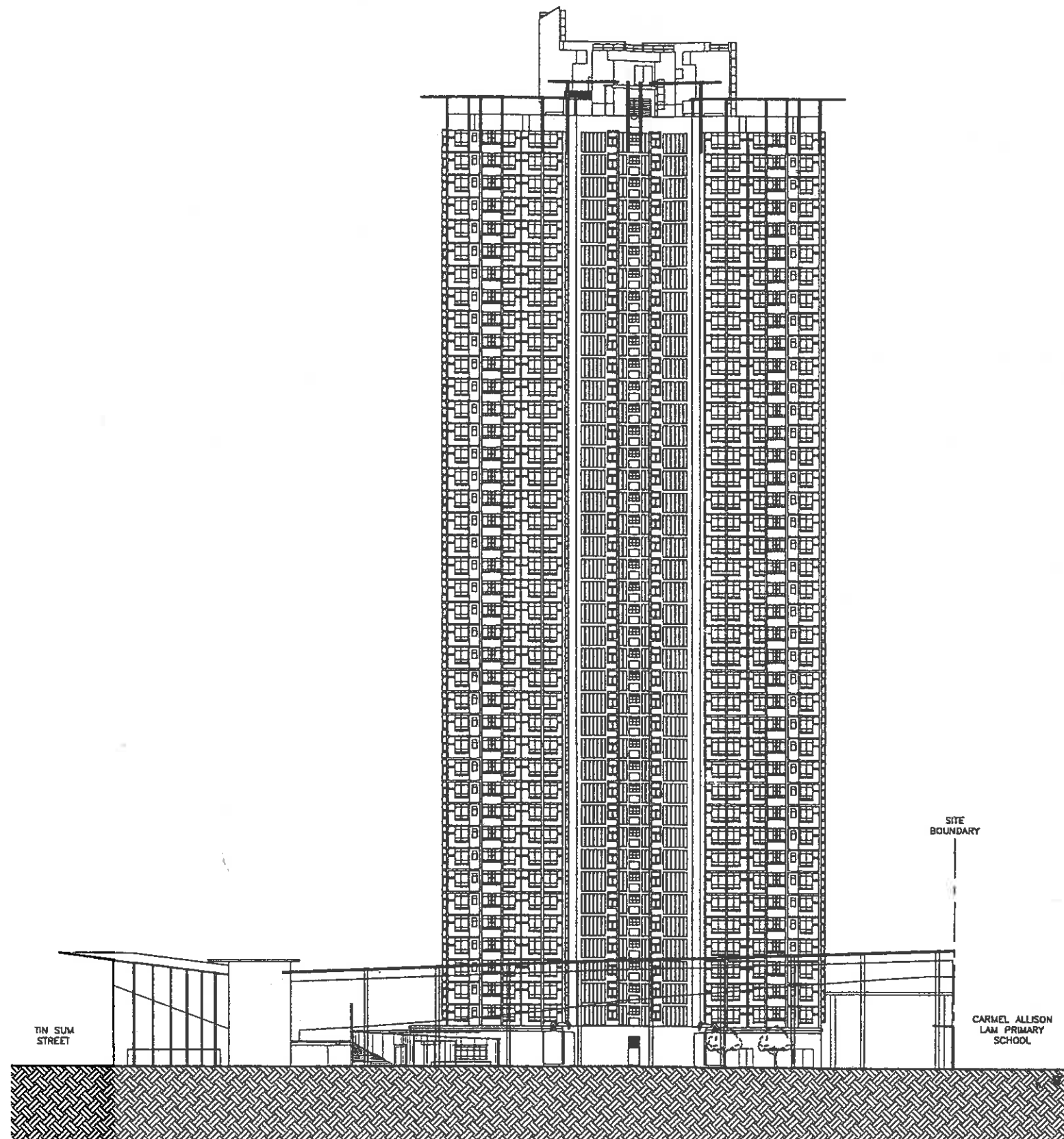
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DRAWING NO  
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SOURCE



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WEST ELEVATION

NOTES

REVISIONS

NO	DESCRIPTION AND DATE	OWN	CHK	AUTH

NAME AND DESIGNATION	INITIAL	DATE
APPROVED C.T. WONG CA/2 (A/C)	ORIGINAL SIGNED	02/00
CHECKED MARTIN MAGILL SA/14	ORIGINAL SIGNED	02/00
JIMMIE TAM A/107	ORIGINAL SIGNED	02/00
MARY CHAN A/14	ORIGINAL SIGNED	02/00
Y.B. CHAN STO(A)/13	ORIGINAL SIGNED	02/00
DRAWN T.H. LAM TO(A)/142	ORIGINAL SIGNED	02/00

PROJECT  
SHATIN AREA 2B  
HIN WO LANE

DRAWING TITLE  
WEST ELEVATION

SCALE 1:250/ 1:625 (A3 size)

DRAWING NO  
ST32/SITE/A/PLD-05/P02  
ACAD REF:ST32,SITE,A,PLD-05,P02.DWG

SOURCE



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NOTES

REVISIONS

NO	DESCRIPTION AND DATE	DWN	CKD	AUTH
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INITIAL AND DESIGNATION	
-------------------------	--

NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.T. WONG CA/2 (ATG.)	
CHECKED	MARTIN MAGILL SA/14	
	JIMMY TAM A/107	
	MARY CHAN AG/4	
	Y.W. CHAN STO(A)/13	
DRAWN	T.H. LAM TO(A)/142	

PROJECT

SHATIN AREA 2B  
HIN WO LANE

DRAWING TITLE

AXONOMETRIC VIEW  
FROM CHE KUNG MIU ROAD

SCALE N.T.S.

DRAWING NO

SK/A/PLO-02 /PO2

SOURCE



CADAM V3R2 A3 297 X 420

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# NOTES

## REVISIONS

NO	DESCRIPTION AND DATE	DWN	CKD	AUTH

INITIAL AND DESIGNATION	

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.T. WONG CA/2 (ATG.)		
CHECKED	MARTIN MAGILL SA/14		
	JIMMY TAM A/107		
	MARY CHAN AG/4		
	Y.W. CHAN STO(A)/13		
DRAWN	T.H. LAM TO(A)/142		

## PROJECT

SHATIN AREA 2B  
HIN WO LANE

## DRAWING TITLE

AXONOMETRIC VIEW  
FROM HIN WO LANE

SCALE N.T.S.

## DRAWING NO

SK/A/PLO-03 /P01

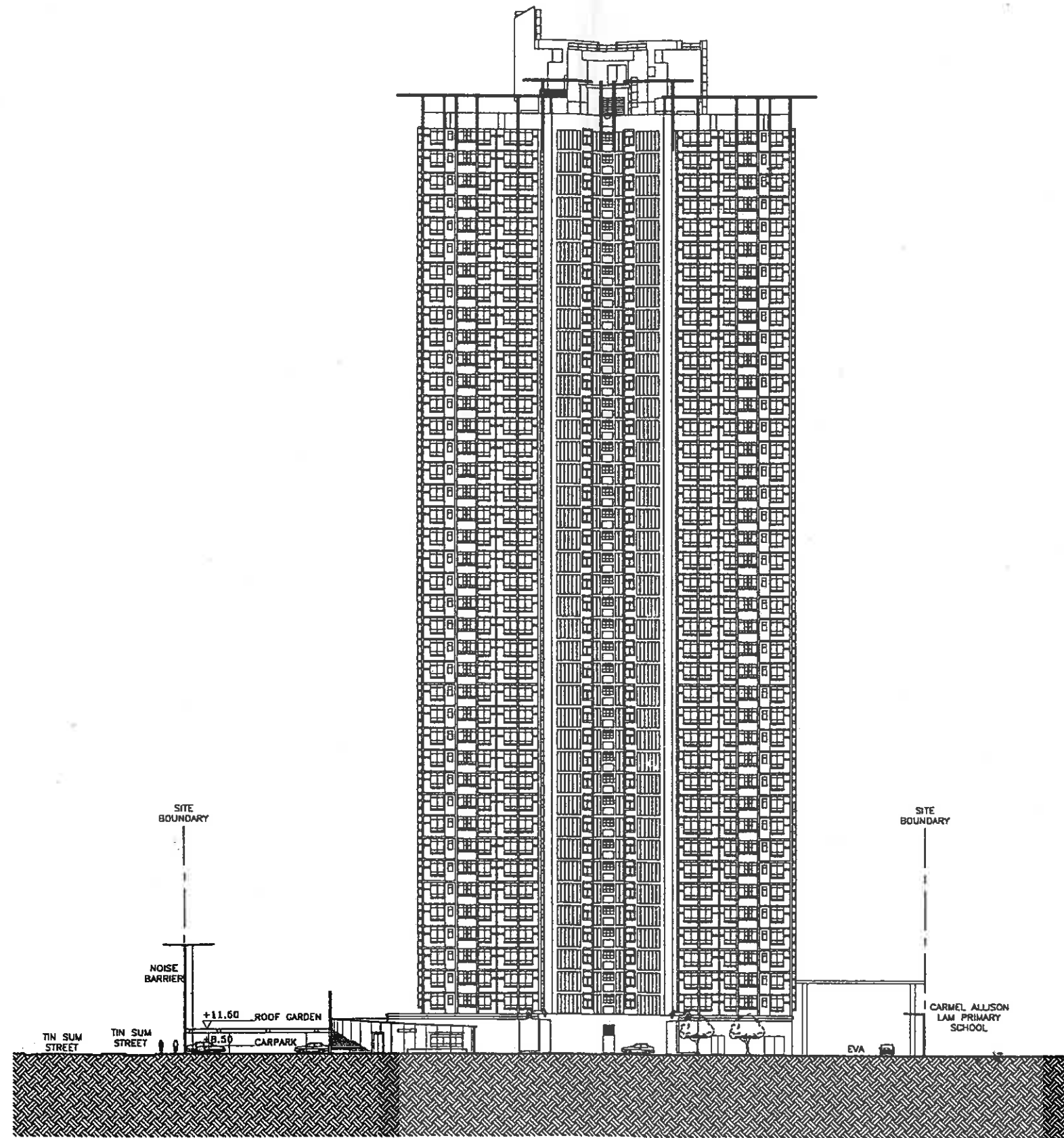
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WORKS GROUP  
HOUSING DEPARTMENT





SECTION A-A

NOTES

REVISIONS

NO.	DESCRIPTION AND DATE	OWN	CHK	AUTH

NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED C.T. WONG CA/2 (ATS)	ORIGINAL SIGNED	
MARTIN MAGILL SA/14	ORIGINAL SIGNED	
JIMMIE TAM A/107	ORIGINAL SIGNED	
CHECKED MARY CHAN AG/4	ORIGINAL SIGNED	
T.H. CHAN STQA/113	ORIGINAL SIGNED	
DRAWN T.H. LAM TQA/142	ORIGINAL SIGNED	

PROJECT  
SHATIN AREA 2B  
HIN WO LANE

DRAWING TITLE  
SECTION A-A

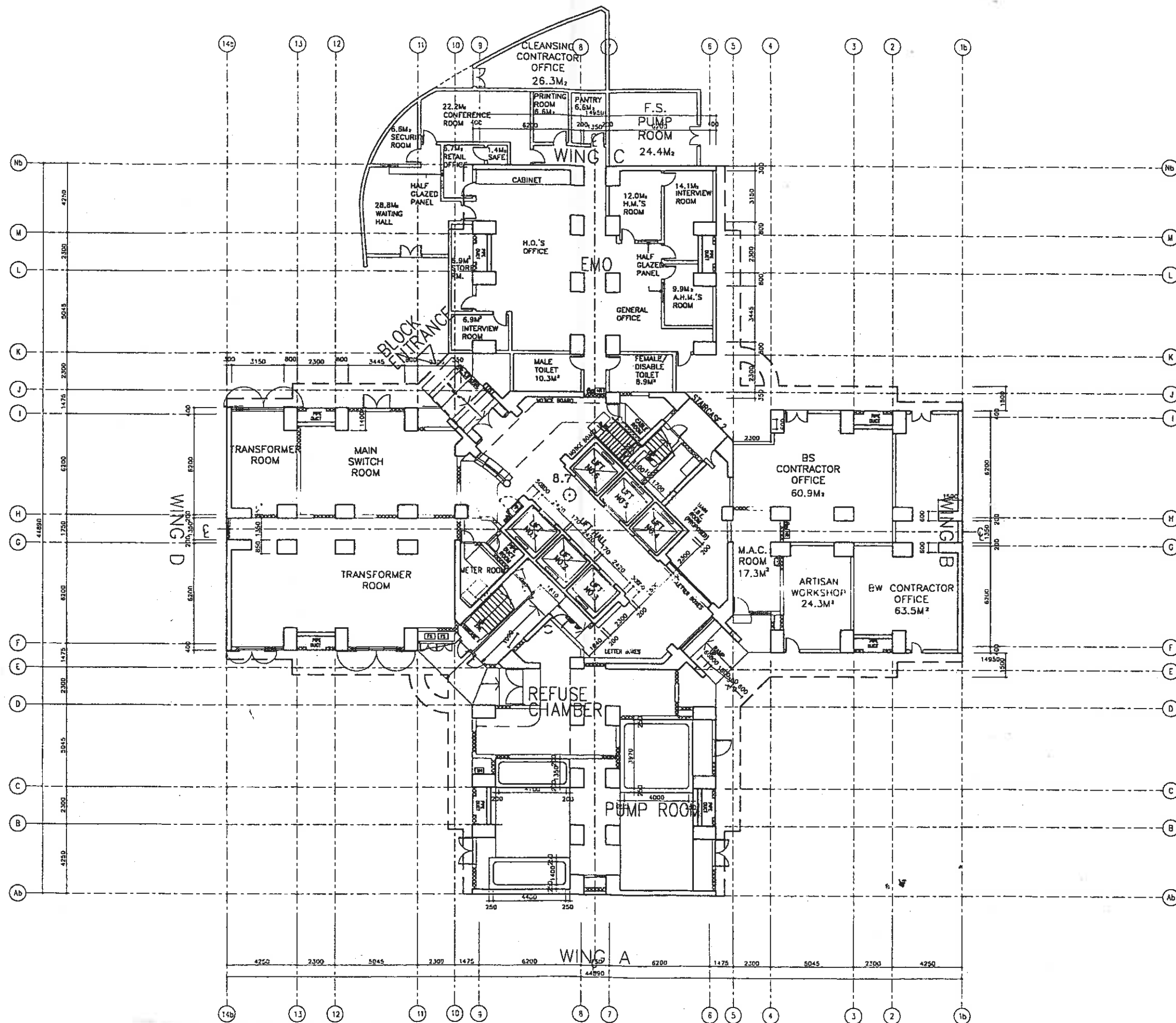
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SOURCE



WORKS GROUP  
HOUSING DEPARTMENT



# NOTES

## REVISIONS

NO.	DESCRIPTION AND DATE	INITIAL AND DESIGNATION
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2		
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NAME AND DESIGNATION	INITIAL	DATE
APPROVED		
C.T. WONG CA/2 (A/E)		
CHECKED		
MARTIN WAGILL SA/14		
JOHNIE TAM A/107		
MARY CHAN AS/4		
Y.M. CHAN SQA/113		
DRAWN		
T.H. LIM TQA/142		

PROJECT  
SHATIN AREA 2B  
HIN WO LANE

DRAWING TITLE  
BLK 1 -  
GROUND FLOOR PLAN

SCALE 1:100/ 1:250 (A3 size)

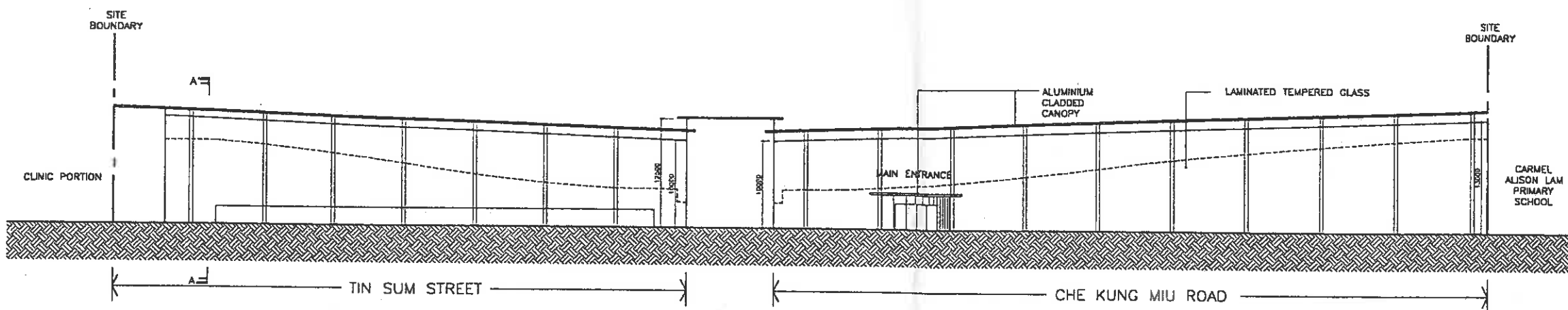
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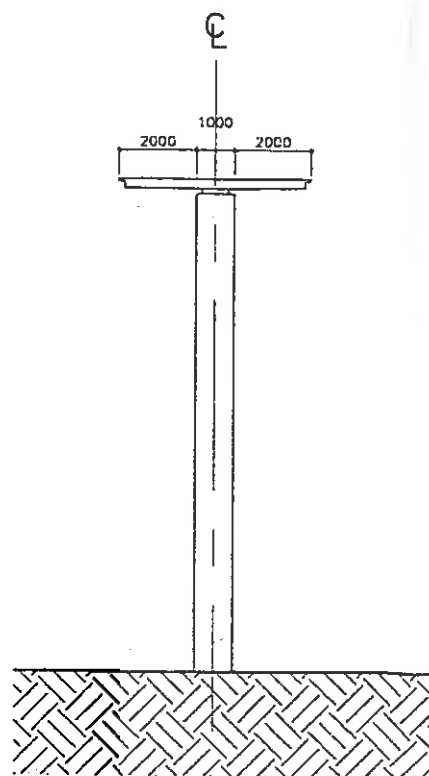








ELEVATION OF NOISE BARRIER  
SCALE 1:600



SECTION A-A  
SCALE 1:300

## NOTES

### REVISIONS

NO	DESCRIPTION AND DATE	INITIAL AND DESIGNATION		
		DWN	CKD	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.T. WONG CA/2 (ATG.)		
CHECKED	MARTIN MAGILL SA/14		
	JIMMY TAM A/107		
	MARY CHAN AG/4		
	Y.W. CHAN STO(A)/13		
DRAWN	T.H. LAM TO(A)/142		

### PROJECT

SHATIN AREA 2B  
HIN WO LANE

### DRAWING TITLE

ELEVATION & SECTION OF  
NOISE BARRIER

SCALE AS SHOWN

DRAWING NO

SK/A/PLO-01/P02

SOURCE



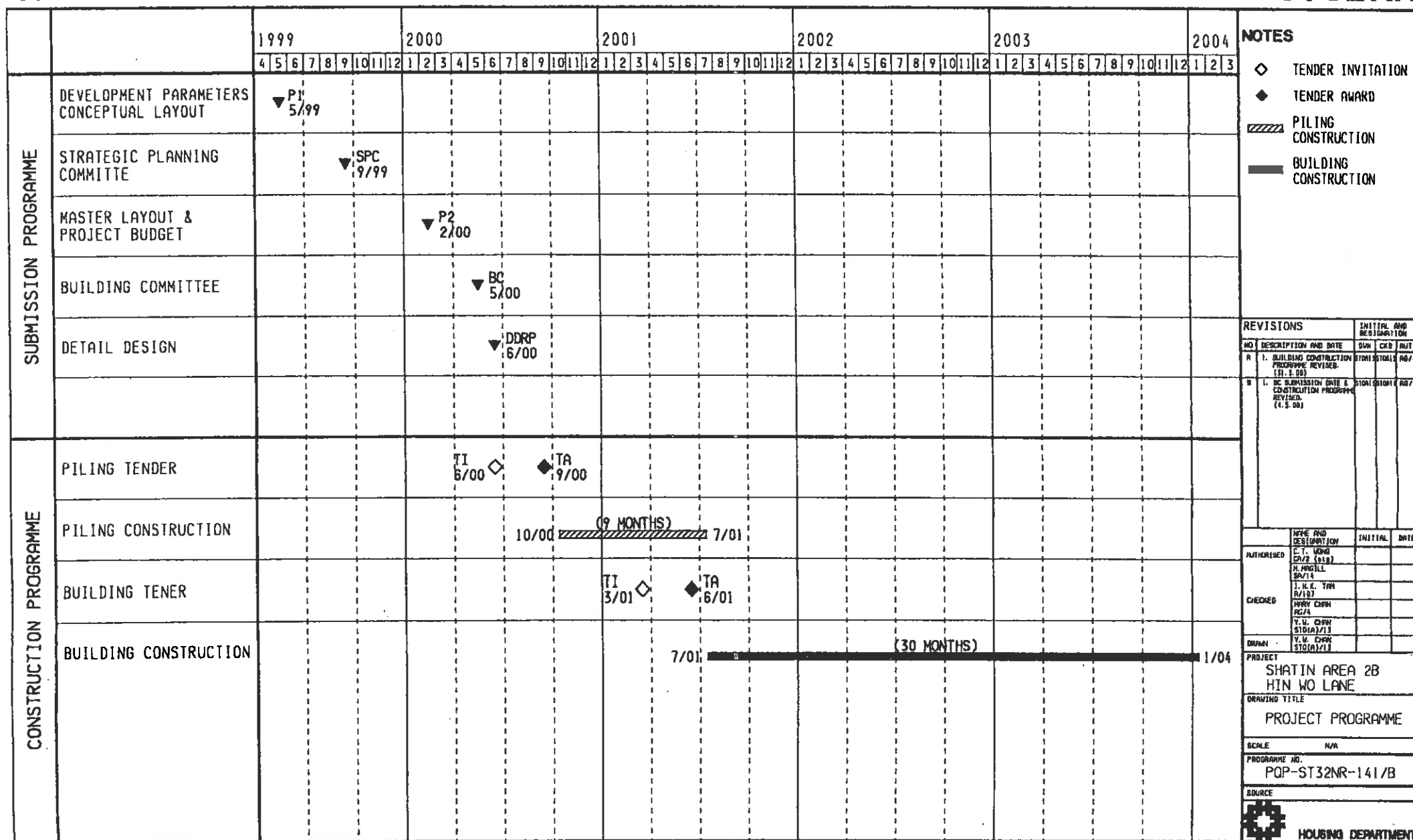
CADAM V3R2 A3 297 X 420

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HOUSING DEPARTMENT



# SHATIN AREA 2B

# ST32NR



## **4 DEVELOPMENT COST BUDGET**



**SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 5**

**PHASE**

**PROJECT :** Shatin Area 3B **PHASE :** - **PHDP Code :** \_\_\_\_\_

				COST PORTIONS						Common Items		Total				
	PRH	HOB	CC	CP (PC)	WEL	UN	GN	OCP(LGV)	TE	EW						
CFA of Cost Portions (m2)				36,014	-	-	1,367	23	509	-	-	-	-	37,913		
COST ITEMS				Estimated Cost in \$,000										Fluctuation Provisions		
A. Site Development & Construction Cost Budget At June 1999 (Excluding Fluctuations & Tender Price Inflation)																
1.0 Site Development Costs																
1.1 Site Formation Contract				-	-	-	-	-	-	-	-	-	-	-		
1.2 Demolition Contract				-	-	-	-	-	-	-	-	-	-	-		
2.0 Construction Costs																
2.1 Foundation Contract																
2.11 Building Foundations				18,933	-	-	1,062	13	280	-	-	-	-	20,277	-	
2.12 External Works for Specific Businesses				5,688	-	-	216	4	80	-	-	-	-	5,988	-	
2.2 Building Contract																
2.21 Building Works (excl. building services)				156,294	-	-	2,474	129	1,839	-	194	-	-	161,950	7,912	
2.22 Building Services				38,506	-	-	277	10	214	-	-	-	-	39,007	-	
2.23 Transfer Structures				-	-	-	-	-	-	-	-	-	-	-	-	
2.24 Public Transport Interchange				-	-	-	-	-	-	-	-	-	-	-	-	
2.25 External Works for commonly shared elements				-	-	-	-	-	-	-	-	-	-	-	-	
2.26 External Works for Specific Businesses				38,991	-	-	1,481	27	550	-	-	-	-	41,049	2,218	
2.27 Automated Refuse Collection System				-	-	-	-	-	-	-	-	-	-	-	-	
2.3 Other Separate Contracts (incl. Softlandscape)				830	-	-	31	1	12	-	-	-	-	883	-	
Cost Budget At June 1999 Price Level				(A)	259,239	-	-	5,542	184	1,995	-	194	-	-	269,154	10,130
B. Cost Estimate Projected To Respected Dates of Tenders / Cost in Item (A) when Cost is (v), (w), (y) or (z)																
1.0 Site Development Costs																
1.1 Site Formation Contract				\$ -	-	-	-	-	-	-	-	-	-	-	-	-
1.2 Demolition Contract				\$ -	-	-	-	-	-	-	-	-	-	-	-	-
2.0 Construction Costs																
2.1 Foundation Contract																
2.11 Building Foundations				19,639	-	-	1,102	13	291	-	-	-	-	21,045	-	-
2.12 External Works for Specific Businesses				5,904	-	-	224	4	83	-	-	-	-	6,215	-	-
2.2 Building Contract																
2.21 Building Works (excl. building services)				166,779	-	-	2,640	138	3,051	-	207	-	-	172,815	8,443	-
2.22 Building Services				41,089	-	-	296	11	228	-	-	-	-	41,624	-	-
2.23 Transfer Structures				-	-	-	-	-	-	-	-	-	-	-	-	-
2.24 Public Transport Interchange				-	-	-	-	-	-	-	-	-	-	-	-	-
2.25 External Works for commonly shared elements				-	-	-	-	-	-	-	-	-	-	-	-	-
2.26 External Works for Specific Businesses				41,607	-	-	1,580	29	587	-	-	-	-	43,803	2,367	-
2.27 Automated Refuse Collection System				-	-	-	-	-	-	-	-	-	-	-	-	-
2.3 Other Separate Contracts (incl. Softlandscape)				\$ 894	-	-	34	1	13	-	-	-	-	942	-	-
Cost Budget To Respected Dates Of Tenders				(B)	275,912	-	-	5,976	196	4,253	-	207	-	-	286,444	10,810

**Types of Contract**

Site Formation

Demolition

Foundation

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

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

**Tender-in Dates**

7/2000

5/2001

**Adjustment for months after June 1999**

-	Months x # % / 12 =	(v)
-	Months x # % / 12 =	(w)
13	Months x 3.5 % / 12 =	0.037912 (y)
21	Months x 3.5 % / 12 =	0.067083 (z)

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. 5 (cont'd)

PROJECT : Shatin Area 2B PIIASE : PIIHP Code : \_\_\_\_\_

Legend for Cost Portions :

PRH - Public Rental Housing  
 HOS - Home Ownership Scheme  
 CC - Commercial (Shopping) Centre

CP - Carpark  
 WEL - Welfare & Community Facilities  
 GN - Government Non-reimbursable

UN - Unallocable  
 TS - Transfer Structure  
 EW - External Works

Notes :

- (1) All prices are at June 1999 price level and adjusted for tender price inflation to tender in dates of contracts based on 3.5 % per annum.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in relevant DCMBI.
- (3) Reasons for Cost Difference from Standard Cost Yardsticks shall be highlighted.
- (4) The costs for softlandscaping, utilities connections, etc. shall be grouped under Other Separate Contracts.
- (5) The fluctuation provisions shall be worked out based on the formula as shown on the Guidance Notes for Standard Cost Yardsticks.

Inclusions :

- (1) .....

Exclusions :

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees, etc.
- (2) Other Project Costs, eg. 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.

Assumptions :

- (1) Common architectural finishes and fittings are allowed for external areas including Podium Garden.

Basis of the Budget :

- (1) Project information included in Memorandum for the Strategic Planning Committee and Drawing No. KL23/6/BLKHH/S/EF001 issued on 9th February 2000 Letter ref. B241/29.
- (2) Drawings issued on 16 February 2000 under cover of AG/4's letter ref. HD(AR)55/693/1.
- (3) SE/69's memo ref. HD(SE2)55/693/1.

Prepared by :

Daniel Tsui

(PQS's Name)

Bridgewater & Coulton Ltd.

(Name of Consultant Firm)

Date :

4th May 2000

Construction Cost Budget No. 5 ( Domestic Blocks: Public Rental Housing Portion)

Project : Shatin Area 2B Phase - (PHDP Code:       )

Cost at June 1999 Price Level	No. of Flats	Cost per Flat		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
<b>1.0 Standard Blocks</b>				
(a) New Harmony Block (Type 1 Option 6 , Block No. 1 , 41 Storeys)				
- 1 B Flat	160	21,900	258,660	280,560
- 2 B Flat	160	28,780	339,910	368,690
- 1P/2P Flat	159	12,810	151,240	164,050
- 2P/3P Flat	320	16,490	194,750	211,240
	799			
Cost per Flat x Flat No. = Sub-Total (A) (Total CFA = <u>36,546</u> m2)		15,422	182,138	197,560 (\$ 5,406 /m2 CFA) (\$ 247,259 per flat)
<b>2.0 Adjustments to Item 1.0 Above</b>				
(a) Adjust for foundation to domestic block based on preliminary design		3,644	-	3,644
(b) Ddt. Basic carcass of ancillary/welfare facilities in domestic block = 532 m2 )		-293	-1,570	-1,863
(c) Add allowance for single block project		-	9,028	9,028
(d) Add for provision of street hydrant tank and pump room		149	559	708
(e) Add for upgrading of window glazing from 5mm to 6mm		-	68	68
(f) Add for provision of window A/C units and R.C. hoods		-	4,577	4,577
Sub-Total (B)  (Total CFA = <u>36,014</u> m2)		3,500	12,662	16,162 (\$ 449 /m2 CFA) (\$ 20,228 per flat) 8.18 % over that calculated based on Standard Yardsticks *
<b>3.0 Non-standard Domestic Blocks</b>				
Cost per Flat x Flat No. = Sub-Total (C) (Total CFA = <u>      </u> m2)		-	-	- (\$ - /m2 CFA) (\$ - per flat)
Total Cost of Domestic Block - Public Rental Housing Portion at June 1999 Price Level = (A) + (B) + (C) (excluding Provisions for Contract Fluctuations)		18,922	194,800	213,722 (\$ 5,934 /m2 CFA) (\$ 267,487 per flat)

**Remark**

\* Standard Yardsticks for the project are calculated on the basis of standard yardsticks for each flat type adjusted to the tender-in-date.

**Construction Cost Budget No. 5 (Welfare Portion)**

**Project :** Shatin Area 2B **Phase -** (PHDP Code :       )

Cost at June 1999 Price Level	CFA (m2)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building ( Excl Caps)	
		←—————\$'000—————→		
<b>1.0 <u>Welfare Facilities</u> <u>in Domestic Block )</u> <u>(G/F or Upper Floors)</u></b>				
(a) Welfare facilities (no fitting out included)	23	11	68	79
(b) Fitting Out for Welfare Facilities (Total area to be fitted out = 23 m2 GFA)		-	64	64
<b>2.0 <u>Other Adjustments for Item 1.0 Above</u></b>				
(a) Adjust for Foundation to domestic block based on preliminary design		2	-	2
(b) Add allowance for single block project		-	7	7
<b>Total Cost of Welfare Portion at June 1999 Price Level = Total of Items in 1.0 to 2.0 (excluding Provisions for Contract Fluctuations)</b>		13	139	152  (\$ 6,609/m2 CFA)

**Remarks**

- Welfare Portion includes the following :  
MAC 23 m2 CFA

Construction Cost Budget No. 5 ( Unallocable Portion)

Project : Shatin Area 2B Phase - (PHDP Code :       )

Cost at June 1999 Price Level	CFA (m2)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building ( Excl Caps)	
<div>\$'000</div>				
<b>1.0 <u>Ancillary Facilities in Domestic Block ) (G/F or Upper Floors)</u></b>				
(a) Ancillary facilities (no fitting out included)	509	229	1,502	1,731
(b) Fitting Out for Ancillary Facilities (Total area to be fitted out = 509 m2 GFA)		-	1,425	1,425
<b>2.0 <u>Other Adjustments for Item 1.0 Above</u></b>				
(a) Adjust for Foundation to domestic block based on preliminary design		51	-	51
(b) Add allowance for single block project		-	146	146
<b>Total Cost of Unallocable Portion at June 1999 Price Level = Total of Items in 1.0 to 2.0 (excluding Provisions for Contract Fluctuations)</b>		280	3,073	3,353 (\$ 6,587/m2 CFA)

**Remarks**

1. Unallocable Portion includes the following :
- |                             |            |
|-----------------------------|------------|
|                             | m2 CFA     |
| Estate Management Office    | 303        |
| Artisan Workshop            | 24         |
| BS & BW Contractor Office   | 139        |
| Cleansing Contractor Office | 43         |
|                             | <u>509</u> |

# Construction Cost Budget No. 5 (Carpark Portion)

Project : Shatin Area 2B Phase - (PHDP Code : \_\_\_\_\_)

Cost at June __99__ Price Level	Space (No.)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
<b>1.0 <u>Freestanding Carpark Building based on Actual Design</u></b>		←-----\$'000-----→		
(a) Carpark Portion Private ( 27.34 m2 CFA per space)	50	2,125	4,949	7,074
(b) Building Services		-	553	553
(c) Ddt for construction cost apportioned to Roof Garden of External Works		-1,063	-2,751	-3,814
<b>Sub-total (A) :- (excluding Provisions for Contract Fluctuations)</b>		←-----\$'000-----→		
(Total CFA based on Actual Design = 1,367 m2 & Average CFA per carparking space = 27.34 m2)		1,062	2,751	3,813
		(\$ 2,789/m2 CFA) (\$ 76,260 / space)  45.88 % under that calculated based on Standard Yardsticks		

<b>2.0 Difference between Actual Design (item 1.0 above) and Cost Yardsticks due to the following :-</b>	Foundation (Incl Caps)	Building (Excl Caps)	TOTAL
	←-----\$'000-----→		
(a) Ddt for adjustment to efficiency ratio of car space	-	-181	-181
(b) Add for adjustment on cost of foundation based on preliminary design	499	-	499
(c) Add allowance for single block project	-	263	263
(d) Ddt for construction costs apportioned to Roof Garden of External Works	-1,063	-2,751	-3,814

## Remarks

- To be in line with the SPC paper, 50% of construction costs of carpark was apportioned to Roof Garden of External Works.

# Construction Cost Budget No. 5 (Open Parking Spaces in External Work)

Project : Shatin Area 2B Phase - (PHDP Code : \_\_\_\_\_)

Cost at June __99__ Price Level	Space (No.)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
<b>1.0 <u>Open Parking Spaces in External Areas Based on Actual Design</u></b>		←-----\$'000-----→		
(a) Light Goods Vehicle Parking at Open Area	8		194	194
<b>Sub-total (A) :- (excluding Provisions for Contract Fluctuations)</b>		←-----\$'000-----→		
(Total CFA based on Actual Design = 196 m2 & Average CFA per carparking space = 24.5 m2)			194	194  (\$ 990/m2 CFA) (\$ 24,250 / space)

**Construction Cost Budget No. 5 ( External Works - Commonly Shared Across Phases of the Development and Amongst Various HA Businesses)**

Project : Shatin Area 2B Phase - (PHDP Code :       )

Total GEA = 5,730 m2; Total CFA 37,913 m2; Total LAA =       

Cost at June 1999 Price Level	Estimated Cost		TOTAL
	Foundation (Incl Caps)	Building (Excl Caps)	
<b>1.0 External Works based on Actual Design (excl. Contract Price Fluctuation)</b>	← \$,000.00 →		
(a) Hard Landscape Works (Amenities)	-	9,614	9,614
(b) Underground Drainage	-	4,212	4,212
<b>Sub-total (A)</b>	-	13,826	13,826 (\$ 365 /m2 CFA) (\$ 2,413 /m2 GEA)
<b>2.0 Special External Works based on Actual Design (excl. Contract Price Fluctuation)</b>	← \$,000.00 →		
(a) Footbridges/staircases/ramps	-	197	197
(b) Noise barrier	4,925	14,965	19,890
(c) Aluminium Canopy	-	6,521	6,521
(d) Shoring and alignment for drainage reserve	-	2,789	2,789
(e) Add for partial construction costs of carpark apportioned to Roof Garden of External Works	1,063	2,751	3,814
<b>Sub-total (B)</b>	5,988	27,223	33,211 (\$ 876 /m2 CFA) (\$ 5,796 /m2 GEA)
<b>Total Cost of Commonly Shared External Works at June 1999 Price Level = (A) + (B) (excluding Provisions for Contract Fluctuations)</b>	5,988	41,049	47,037 (\$ 1,241/m2 CFA) (\$ 8,209 /m2 GEA)

Cost of Automated Refuse Collection System at June _____ Price Level (excluding Provisions for Contract Fluctuations)	-	-	- (\$ _____/m2 CFA) (\$ _____/m2 GEA)
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Cost at June 1999 Price Level	Estimated Cost		TOTAL
	Soft Landscape	Fees & Others	
<b>Cost of Other Separate Contracts (incl. Softlandscaping Work) at June 1999 Price Level (excluding Provisions for Contract Fluctuations)</b>	418	465	883 (\$ 23 /m2 CFA) (\$ 154 /m2 GEA)

**Remarks**

- To be in line with SPC paper, 50% construction costs of carpark was apportioned to Roof Garden of External Works.
- Allowance has been made for drainage diversion works to be carried out by separate contracts.



Construction Cost Budget No. 5 ( External Works - Charged to Specific HA Businesses)

Project : Shatin Area 2B Phase - (PHDP Code:       )

Cost at June 1999 Price Level	COST PORTIONS						TOTAL
	PRH	HOS	CC	CP	UN	WEL	
<b>1.0 External Works based on Actual Design (excl. Contract Fluctuation)</b>	\$,000.00						
(a) Hard Landscape Works (Amenities)	9,132	-	-	347	129	6	9,614
(b) Underground Drainage	4,001	-	-	152	56	3	4,212
(c) Soft Landscape & others	838	-	-	32	12	1	883
<b>Sub-total (A)</b>	13,971	-	-	531	197	10	14,709
<b>2.0 Special External Works based on Actual Design (excl. Contract Fluctuation)</b>	\$,000.00						
(a) Footbridges/staircases/ramps	187	-	-	7	2	1	197
(b) Noise barrier - Foundation costs	4,678	-	-	178	66	3	4,925
(c) Noise barrier	14,215	-	-	540	201	9	14,965
(d) Aluminium Canopy	6,194	-	-	235	88	4	6,521
(e) Shoring and alignment for drainage reserve	2,649	-	-	101	37	2	2,789
(f) Add for partial construction costs of carpark - Foundation costs	1,010	-	-	38	14	1	1,063
(g) Add for partial construction costs of carpark	2,613	-	-	99	37	2	2,751
<b>Sub-total (B)</b>	31,546	-	-	1,198	445	22	33,211
<b>Total Cost of External Works Charged to Specified HA Businesses at June 1999 Price Level (excluding Provisions for Contract Fluctuations)</b>	\$,000.00						
	45,517	-	-	1,729	642	32	47,920