

THE HONG KONG HOUSING AUTHORITY

Memorandum for the Building Committee

**Proposed Revised Scheme Design and
Project Development Budget for
Tin Shui Wai Area 101 Phase 2**

PURPOSE

To seek Members' approval to the Revised Scheme Design and Revised Project Development Budget for the proposed change from Vertical Interim Housing (VIH) to Rental Development at Tin Shui Wai Area 101 Phase 2 with the proposed arrangement of the current piling contract.

BACKGROUND

2. By way of Paper No. SPC 60/2000 dated 14 September 2000, Strategic Planning Committee (SPC) agreed to suspend VIH development in Tin Shui Wai Area 101 Phase 2 based on the latest demand and supply assessment on VIH. SPC subsequently approved the change of VIH to Rental Development with revised development parameters and development cost ceilings vide Paper No. SPC 63/2000 on 7 November 2000. A copy of the revised development parameters is attached at **Annex I**.

3. Driving of H-piles for Phase 2 by K.H. Foundations Ltd. has almost been completed. Pile cap construction is due for commencement in late November 2000 upon contractor's submission of RSE's report, piling record and RSE's certificate.

4. Past approvals which are relevant to this project are as follows –

Date	Event
(a) 12 March 1998	Development Parameters, Conceptual Layout and Project Estimates for Phase 1,

- 2 & 3 approved by the SPC (Paper No. SPC 11/98).
- (b) 10 August 1999 Scheme Design and Project Development Budget for Phase 2 approved by the Building Committee (BC) (Paper No. BC 136/99)
A copy of the approved Scheme Design for Phase 2 is at **Annex II**.
- (c) 23 December 1999 Tender for the Foundation of VIH at Phase 2 approved by BC (Paper No. BCT 139/99).
- (d) 14 September 2000 Suspension of VIH development at Phase 2 approved by SPC (Paper No. SPC 60/2000)
- (e) 7 November 2000 Revised Development Parameters and Project Development Cost Ceilings approved by SPC (Paper No. SPC 63/2000)

REVISED SCHEME DESIGN PROPOSALS

5. Major considerations of the proposed revised scheme design for the site are –

- (a) to make use of piles already driven as much as possible;
- (b) to minimize delay to the overall project completion; and
- (c) to absorb the possible increase in population, hence pressure on the infrastructures in Tin Shui Wai Reserve Zone, arising from recent transfer of Area 106 and Area 110 from HOS to PRH.

6. The Revised Scheme Design of Phase 2 complies with the Revised Development Parameters and comprises –

- (a) four nos. 34-storey site-specific Rental Blocks adopted from the original VIH Block footprint with 2,112 nos. rental flats comprising

528 nos. 2P/3P flats and 1, 584 nos. 1B flats;

- (b) a standard 30-classroom primary school (PWP item 264EP);
- (c) an integrated Carpark / Social Welfare Facilities Block accommodating 137 nos. private carparking spaces and social welfare facilities including Residential Care Home for the Elderly (RCHE), Hostel for Severely Mentally Handicapped (HSMH) and Day Activities Centre (DAC) for the Mentally Handicapped; and
- (d) an Estate Management Office at G/F of Block 6, a Workshop for Maintenance Contractor at G/F of Block 7, and a Family Services Centre at G/F of Block 8.

7. Explanatory notes and drawings are attached at **Part II of the Annex III**. The main features of the proposed Revised Scheme Design for Phase 2 are as follows –

- (a) the 4 nos. Rental Blocks, remained in the same location (Block Nos. 6, 7, 8 and 9) of the original VIH Blocks, allowing maximum usage of the existing driven H-piles and minimizing the need for additional piling and pile cap modification;
- (b) the typical floor plan of the site-specific rental block is adapted from the original VIH typical floor plan to allow for maximum utilization of the existing driven pile. The internal layout is specifically designed, with minor amendment to the existing structural frame, to meet rental flat size standard and to achieve the desirable flat mix as agreed by the Management Branch. The typical floor plan of this site-specific rental block is attached at **Part II of Annex III**;
- (c) the integrated carpark / welfare block is strategically placed next to a newly added separate vehicular entrance to minimize traffic conflict between Phase 1 and Phase 2. This integrated block also makes use of the majority of the existing driven H-piles at the location of the original VIH Block No. 5. The design drawings of the integrated block are attached at **Part II of Annex III**;
- (d) the location of the primary school remains unchanged to allow pile cap construction to be continued without disruption from other part

of the project; therefore, meeting the committed completion date of 3/03 under the PWP programme; and

- (e) more than 80% of the existing driven piles in Phase 2 can be utilized and less than 10% of additional piles are required, hence the adverse time and cost implication to the project is substantially minimized.

8. The impact of the revised Scheme Design on sewage, traffic, water supply capacity have been checked with relevant Departments and found to be acceptable. The result of Traffic Noise Impact Assessment indicates that all residential units comply with the HKPSG acceptable limit. The new separate vehicular entrance to the Phase 2 rental development has been agreed in principle by Transport Department.

PROPOSED REVISED PROJECT DEVELOPMENT BUDGET

9. Based on the proposed Revised Scheme Design, the Revised Project Development Budget for Phase 2 is estimated to be \$996.909M, which is within the original PDB of \$1,214.26M as approved by BC via Paper No. BC 136/99. The Breakdown of the budget calculations is given in **Part III of Annex III**.

10. 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)
		Unit Cost of Proposed Development Budget	SPC' s Approved Project Development Unit Cost Ceiling (SPC Paper No. 63/00)
	Total CFA/m ²	(\$/m ² CFA)	(\$/m ² CFA)
Domestic	111,646	7,797	7,797
Welfare	4,917	15,131	15,131
Private Carpark	5,497	8,630	8,630

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

11. The unit construction cost of the proposed site specific rental block (excluding external works and others) in comparison to that of the original VIH Block is as follow –

	Unit cost/m ² CFA	Difference
Original VIH Block in Phase 2 (Adjusted to revised tender-in date)	\$5,437	0%
Proposed site specific rental block	\$5,695	+4.7%

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

Flat Type	(a) Proposed Development Cost per Flat (\$)	(b) Overall Construction Cost per Flat Included in (a) (Excluding External Works and Others) (\$)	(c) June 2000 Cost Yardstick Adjusted to Tender-in-Date (\$)
1B	458,821	335,091	315,000*
2P/3P	272,348	198,905	187,226*

* *No direct comparison could be made since this site-specific rental block is being adapted from an existing VIH block footprint. However, June 2000 cost yardstick for New Harmony 1 Option 6 with adjustment to comparable flat size is being chosen for reference purpose.*

AVAILABILITY OF FUNDS

13. The estimated yearly expenditure based on the Site Development and Construction Cost portion of the proposed Budget is shown below and would be included in the next capital budget updating of the Authority –

	Estimated Expenditure (\$M)				
	up to 31/3/2000	2000/2001	2001/2002	Post 31.3.2002	Total
Estimate	21.787	54.573	97.530	718.078	891.968
Allowed in FC 2/00	30.501	143.897	356.568	458.351	989.317

Note : The above figures only include construction cost, fees and others but exclude other project cost etc. as indicated in the Proposed Development Cost Budget.

14. Provision in the Housing Authority's Capital Budget for the year 2000/2001 is \$143.897M (Paper No. FC 2/2000 refers) and is adequate to meet the estimated expenditure.

15. Funding for the primary school is under Public Works Programme Funds (PWD item 264EP upgrading to Category A was approved by the Public Works Sub-committee of the Finance Committee, Legislative Council on 16 June 1999).

PROPOSED CONTRACTUAL ARRANGEMENT

16. It is recommended that a Supplementary Agreement will be entered with K.H. Foundations Ltd. to modify the piling and pile cap work to suit the revised scheme. This will ensure maintaining clear-cut responsibility in the design and construction of the piling works as well as minimum disruption to site progress.

17. The cost implication for the additional piles, modification of pile caps and associated prolongation cost is estimated to be \$13,822,000 by the Department's Consultant Quantity Surveyor, Messrs. Bridgewater & Coulton Ltd. (Original Piling Contract Sum is \$74,930,000).

18. An allowance of \$2,370,000 is also required to cover previous variation due to enhanced quality initiatives on Piling Works.

19. Building tenders based on the revised scheme will be prepared for tender out in April 2001 to match the piling works. Meanwhile, tenders already received for the original VIH development will be called off.

PROPOSED REVISED DEVELOPMENT PROGRAMME

20. Details of the proposed revised development programme for Phase 2 are at **Part IV of the Annex III**. The key dates are as follow -

Revised loading schedule to piling contractor	12/2000
Completion of revised piling and pile cap work	8/2001
Building Contract - Tender Out	4/2001
Tender Award	7/2001
Commencement	8/2001
Completion	12/2003*
PHDP Completion	2/2004

* 28 months' contract period (with phased completion for standard Primary School in 3/2003) is allowed.

21. The above programme represents a 6 month delay of the completion of Phase 2 development as compared to the original VIH development.

RECOMMENDATION

22. It is recommended that –

- (i) Revised Scheme Design as described in paragraph 6 above and Revised Project Development Budget of \$996.909M be approved;
- (ii) HD to enter a Supplementary Agreement with K.H. Foundation to carry out additional piles and revised pile caps; and
- (iii) the approved piling contract sum of \$74.93M be increased to \$91.122M to cover the estimated additional cost of \$16.192M for the required revision of piling and pile cap work.

DISCUSSION

23. At the next meeting of the Building Committee to be held on 23 November 2000, Members will be invited to approve the recommendation in Paragraph 22 above.

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Date : 17 November 2000