

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 703 - BUILDINGS**

#### **Support - Other facilities**

#### **65GI – New Headquarters for the Electrical and Mechanical Services Department at Kai Tak**

Members are invited to recommend to Finance Committee the upgrading of **65GI** to Category A at an estimated cost of \$878.9 million in money-of-the-day prices for reprovisioning the facilities of the Electrical and Mechanical Services Department to the former Hong Kong Air Cargo Terminal 2 Building at Kai Tak.

### **PROBLEM**

We need to reprovision facilities of the Electrical and Mechanical Services Department<sup>1</sup> (EMSD) at three existing sites prior to releasing the sites for redevelopment. The EMSD facilities affected are the existing EMSD headquarters and workshops at Caroline Hill Road in Causeway Bay, a depot at Sung Wong Toi in To Kwa Wan, and a vehicle servicing station at Kowloon Bay.

**/PROPOSAL ....**

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<sup>1</sup> Where the Electrical and Mechanical Services Department is mentioned in the paper, it refers to the Department as a whole comprising the Regulatory Services Sector and the Trading Fund Sector.

## PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Works, proposes to upgrade **65GI** to Category A at an estimated cost of \$878.9 million in money-of-the-day (MOD) prices for reprovisioning the above EMSD facilities to the former Hong Kong Air Cargo Terminal 2 (ex-HACTL2) Building at Kai Tak. We also propose to take the opportunity to relocate three EMSD sub-offices<sup>2</sup> currently accommodated in other government/leased premises to the ex-HACTL2 Building to make full use of the available space.

## PROJECT SCOPE AND NATURE

3. The scope of works for the proposed new EMSD Headquarters, with a total gross floor area (GFA) of some 81 800 square metres ( $m^2$ ) for general and specialist accommodation for some 2 300 staff<sup>3</sup> and 168 carparking spaces<sup>4</sup> for EMSD's operational vehicle fleet, comprises -

- (a) conversion and refurbishment of the ex-HACTL2 Building, including -
  - (i) demolition of obsolete facilities that are not consistent with the proposed use;
  - (ii) enclosing and partitioning; and
  - (iii) provision of additional building services, such as power supply, lighting, air conditioning and exhaust system, fire fighting system and lifts;
- (b) conversion of the roof of the existing 7-storey Building into an additional storey;
- (c) ....

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<sup>2</sup> The three sub-offices are currently accommodated at the Public Works Central Laboratory Building at Kowloon Bay, the multi-centre adjacent to Pamela Youde Nethersole Eastern Hospital, and office accommodation at leased premises at 111 Leighton Road, Causeway Bay.

<sup>3</sup> As at 30 April 2001, the total establishment of EMSD was 5 033. 46% of the total staff (some 2 300) will be accommodated in the new Headquarters. The remainder are stationed at locations where they can conveniently provide maintenance services to clients.

<sup>4</sup> EMSD has a fleet size of 240 vehicles, i.e. parking spaces for 70% of the fleet will be provided in the new EMSD Headquarters.

- (c) construction of a covered workshop on a piece of open land adjoining the Building for maintenance of heavy vehicles;
- (d) provision of furniture and specialized equipment for offices, workshops and stores; and
- (e) construction of a covered footbridge across Kai Cheung Road linking the new EMSD Headquarters and the public transport facilities near the Hong Kong International Trademart.

Site plans showing the locations of the EMSD facilities affected and the location of the proposed new EMSD Headquarters at the former HACTL2 Building are at Enclosures 1 and 2 respectively. A comparison of the space provision in the existing facilities and the new EMSD Headquarters is summarised at Enclosure 3.

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4. We have completed the detailed design for the proposed conversion and refurbishment works. We plan to start works on site in January 2002 for completion in November 2003.

## **JUSTIFICATION**

### **Reprovisioning to Ex-HACTL2 Building**

5. The EMSD Headquarters site at Caroline Hill Road is under-utilised. The buildings and workshops were constructed in 1966. These consist of an office block, a vehicle maintenance workshop, small-scale electrical and mechanical maintenance workshops and ancillary supplies stores. In 1994, the Government decided to release the site for redevelopment in order to achieve more economical use of the land. In order to meet the target date for release (2004-05), EMSD Headquarters and workshops, as well as other users of the site, will have to be vacated and reprovisioned to alternative locations.

6. The opportunity is also taken to reprovision EMSD's Sung Wong Toi Depot and the Kowloon Bay Vehicle Servicing Station. These two sites fall within the purview of the South East Kowloon Development Study and will need to be released for redevelopment eventually. Moving these facilities will maximise the use of the former Kai Tak site, obviate the need for separate site reservations and project planning, and centralise major service units.

7. Having conducted studies on a number of sites with the assistance of the Government Property Agency, we found the ex-HACTL2 Building to be the most suitable for reprovisioning the EMSD facilities on grounds of location, size and structural capacity as well as cost-effectiveness in converting and refurbishing the existing facilities for the intended use. The original cargo terminal building was only completed in the early nineties and is expected to have a long life span after conversion. By implementing the proposal, we are putting the ex-HACTL2 Building to a more economical and effective use.

8. We have studied other development options including demolition of the ex-HACTL2 Building and the construction of a new building on the site. This and other options were rejected because of higher costs and a longer lead time for completion.

9. As the existing structure of the ex-HACTL2 Building does not provide sufficient headroom for the maintenance of certain types of heavy vehicle (e.g. refuse trucks), we consider it necessary to construct a covered workshop on a piece of open land adjoining the Building.

10. The relocation of major service units in a single location at Kai Tak will allow the Electrical and Mechanical Services Trading Fund (EMSTF) to economise on administrative costs and provide more integrated services to clients. At the same time, EMSTF will continue to station staff at the Hong Kong International Airport, hospitals, cultural venues, major government offices, and satellite workshops to provide essential maintenance and fault repairs.

### **Footbridge across Kai Cheung Road**

11. We engaged consultants to carry out Traffic Impact Assessments (TIAs) to evaluate the impact on the vehicular and pedestrian traffic associated with the proposed EMSD Headquarters. The TIAs concluded that the existing road network would be able to cope with the additional vehicular traffic generated by the new headquarters but that a footbridge across Kai Cheung Road will be required to cater for the increase in pedestrian traffic. We therefore propose to construct a covered footbridge linking the first floor of the new EMSD Headquarters with the public transport facilities near the Hong Kong International Trademart. The footbridge will be open for use by the public.

## FINANCIAL IMPLICATIONS

12. We estimate the cost of the project to be \$878.9 million in MOD prices (see paragraph 13 below), made up as follows –

	\$ million	
(a) Site works for driveways and covered workshop	2.9	
(b) Demolition of obsolete facilities	10.5	
(c) Building	414.3	
(d) Building services	263.3	
(e) Drainage and external works	13.6	
(f) Footbridge	28.4	
(g) Furniture and equipment	84.1	
(h) Contingencies	73.3	
	<hr/>	
	Sub-total	890.4 (in September 2000 prices)
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(i) Provision for price adjustment	(11.5)	
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	Total	878.9 (in MOD prices)
	<hr/>	

The construction floor area (CFA) of **65GI** is 105 500 m<sup>2</sup>. Based on the cost items at (c) and (d) above, the conversion and refurbishment unit cost is \$6,423 per square metre of CFA in September 2000 prices. This is substantially lower than the construction unit cost for a new building of similar scope and nature.

13. Subject to approval, we will phase the expenditure as follows -

<b>Year</b>	<b>\$ million (Sep 2000)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2001 – 02	7.0	0.98000	6.9
2002 – 03	270.0	0.97976	264.5
2003 – 04	444.0	0.98759	438.5
2004 – 05	125.0	0.99549	124.4
2005 – 06	37.0	1.00346	37.1
2006 – 07	7.4	1.01149	7.5
	890.4		878.9

14. We derived the MOD estimates on the basis of the Government's forecast of trend labour and construction prices for the period 2001 to 2007. We will employ a term contractor to start demolition works in January 2002. We will tender the main works and the construction of the footbridge under two separate contracts on a fixed-price lump-sum basis because the contract period will not exceed 21 months and the scope of works can be clearly defined in advance, leaving little room for uncertainty.

15. The proposal will not give rise to any additional annually recurrent expenditure. The reprovisioning is being provided to EMSD on a cost neutral basis. There will be no adverse cost implications for the EMSTF.

16. The project will enable the release of three sites with a total site area of about 44 000 m<sup>2</sup> for redevelopment. The total value of three sites is estimated to be about \$4 billion. In addition, some 2 000 m<sup>2</sup> in either government or leased accommodation will be released. Relinquishing the leased accommodation will bring about rental savings of some \$3 million per annum.

## PUBLIC CONSULTATION

17. We consulted the Environment and Hygiene Committee of the Kwun Tong District Council on 13 March 2001. Members of the Committee had no objection to the project.

18. We consulted the Legislative Council Panel on Planning, Lands and Works on 23 April 2001. Members indicated no objection to the project, but requested the Administration to consider the feasibility and merit of extending the proposed footbridge under this project to link directly with the first floor of the new EMSD Headquarters so as to provide convenience to staff. We have given due consideration to the proposal and have decided, within the limitations of the site configuration, to extend the footbridge as proposed by Members. In so doing, the cost of the footbridge will increase from \$18.9 million (in September 2000 prices) by \$9.5 million to \$28.4 million.

## ENVIRONMENTAL IMPLICATIONS

19. D Arch S engaged a consultant to conduct a Preliminary Environmental Review (PER) for the project in July 2000 and the PER concluded that the project would have no long term environmental impact. The Director of Environmental Protection vetted the PER and agreed that an Environmental Impact Assessment would not be necessary.

20. During construction, we will control noise, dust and site run-off nuisance through the implementation of mitigation measures in the relevant contracts. This includes the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, as well as frequent cleaning and watering of the site. The cost of the mitigation measures has been included in the project estimate.

21. At the planning and design stages, we considered measures to reduce the generation of construction and demolition (C&D) materials. We have introduced more prefabricated building elements into project designs to avoid temporary formwork and construction waste. These include roof components, dry-wall partitioning and proprietary fittings and fixtures. We will use suitable excavated materials for filling within the site to minimize off-site disposal. In addition, we will require the contractor to use metal site hoardings and signboards so that these materials can be recycled or reused in other projects.

22. We will require the contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will ensure that the day-to-day operations on site comply with the approved WMP. We will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip-ticket system. The contractor will be required to separate public fill from C&D waste for disposal at appropriate facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes. We estimate that the project will generate about 36 000 cubic metres ( $m^3$ ) of C&D materials. Of these, we will reuse about  $300 m^3$  (0.8%) on site,  $29\,700 m^3$  (82.5%) as fill in public filling areas<sup>5</sup> and dispose of  $6\,000 m^3$  (16.7%) at landfills.

## LAND ACQUISITION

23. The project does not require land acquisition.

## BACKGROUND INFORMATION

24. Notwithstanding the relocation of the EMSD facilities from Caroline Hill Road to the new Headquarters, we see the need to retain a small-scale workshop on Hong Kong Island to provide essential and emergency services to clients. We will provide this under a separate minor works project in due course.

25. Apart from the EMSD facilities, we will reprovision the other occupants of the Caroline Hill Road site, including the Civil Aid Service to a new building to be constructed in the West Kowloon Reclamation scheduled for completion by mid-2004, the offices of the Drainage Services Department and Highways Department to either government owned or commercially leased premises, as appropriate, closer to the time of the Caroline Hill Road site release.

26. The site on which the ex-HACTL2 Building stands is zoned for Government, Institution or Community use under the draft Kai Tak (North) Outline Zoning Plan. The Revised Scheme of the South East Kowloon Development has already taken into account, and accepted, the use of the site for the proposed project. The ex-HACTL2 Building was formerly a cargo terminal and is currently being leased commercially.

/27. ...

<sup>5</sup>

A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

27. Our term contractor completed the ground investigation and structural investigation at a cost of \$160,000 and \$480,000 respectively in April 2000. We conducted a Preliminary Project Feasibility Study (PPFS) and engaged consultants to carry out a PER and TIAs for the project at a total cost of \$138,000. We have completed the PPFS, the PER and the TIAs and have charged this amount to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". We upgraded **65GI** to Category B in December 2000. D Arch S has completed the detailed design and is preparing the tender documents using in-house staff resources.

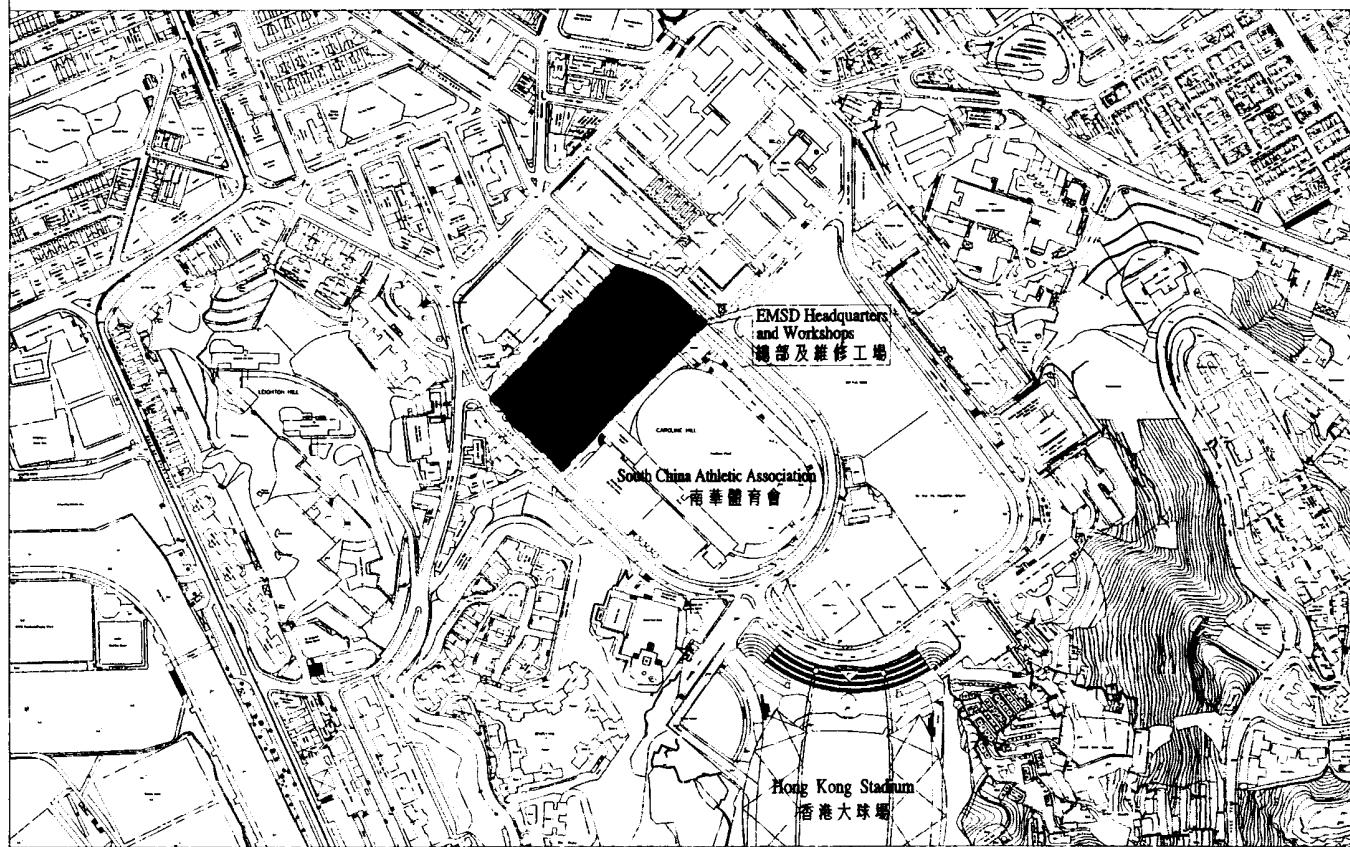
28. We estimate that the project will create some 1 050 jobs during the construction period. These will comprise 50 professional/technical staff, 1 000 labourers, totalling about 19 000 man-months.

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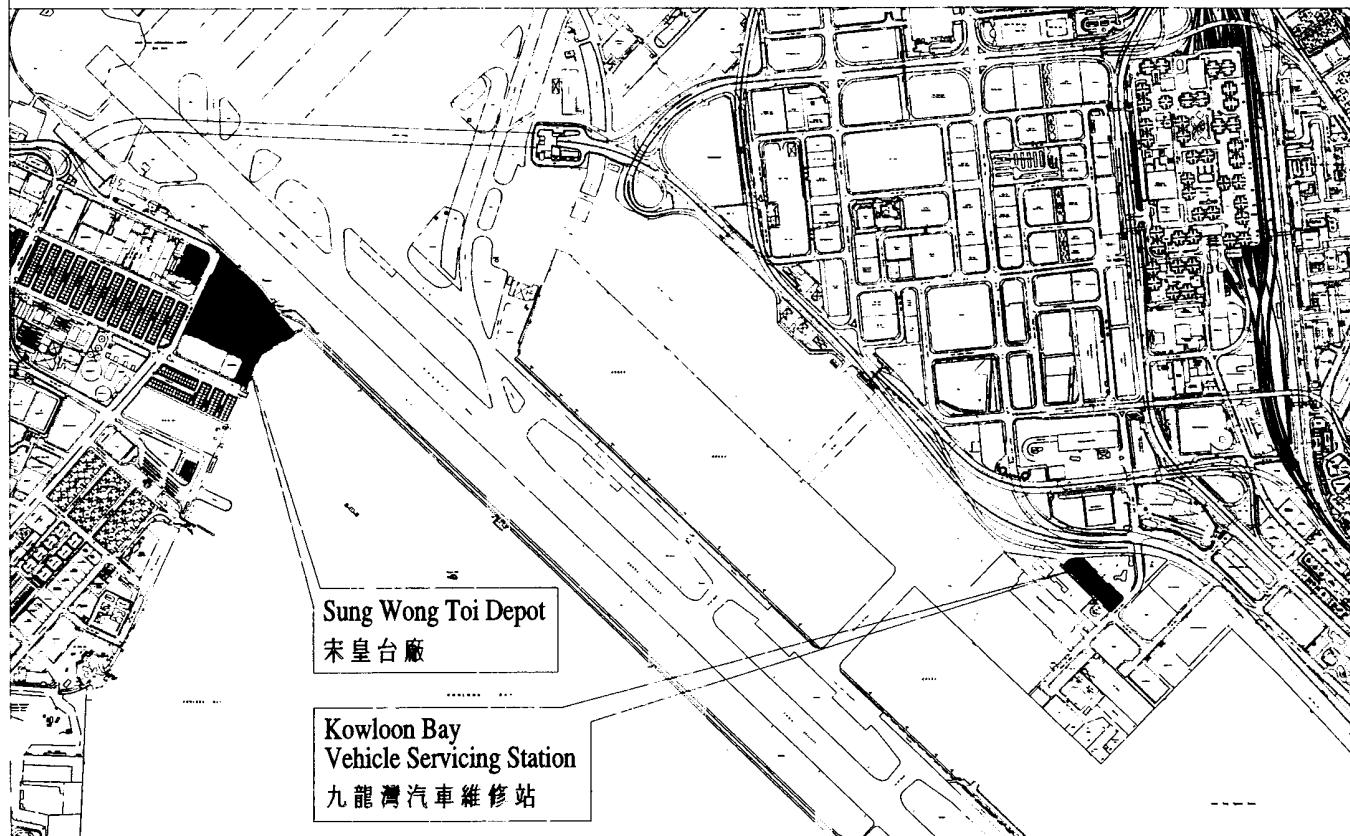
Works Bureau  
May 2001

## EMSD Headquarters and Workshops at Caroline Hill Road

機電工程署加路連山道總部及工場



## EMSD Sung Wong Toi Depot and Kowloon Bay Vehicle Servicing Station 機電工程署宋皇台廠及九龍灣汽車維修站



title 65 GI

機電工程署啓德新總部

NEW HEADQUARTERS  
FOR THE EMSD AT KAI TAK

drawn by

W.S. Chan

date

5-2-2001

drawing no.

AB/5955/3/X05

scale

NTS

approved

Jane Au Yeung

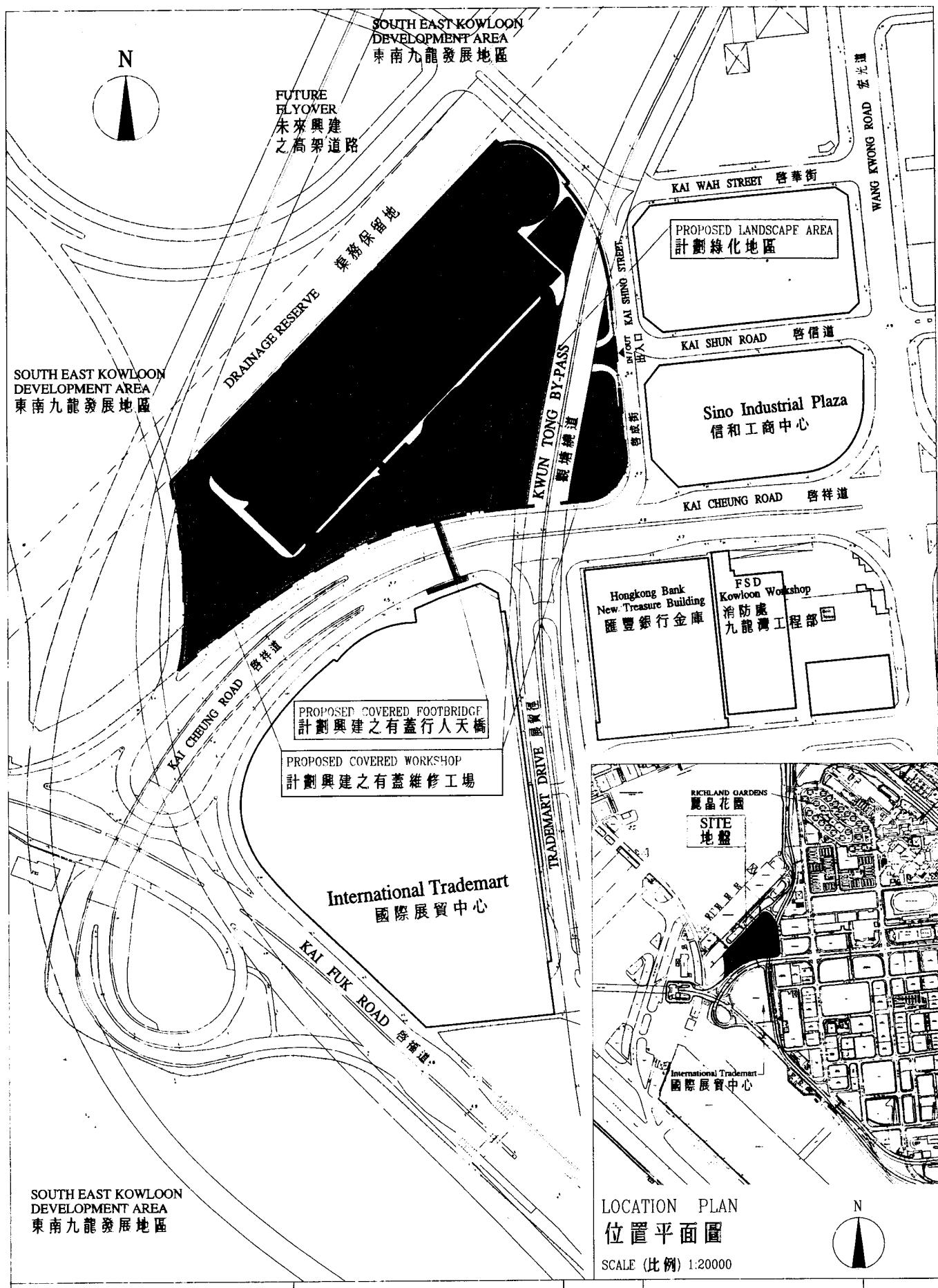
date

5-2-2001

office

ARCHITECTURAL BRANCH

ARCHITECTURAL  
SERVICES  
DEPARTMENT



title 65 GI  
機電工程署啟德新總部  
NEW HEADQUARTERS  
FOR THE EMSD AT KAI TAK

drawn by W.S. Chan	date 5-2-2001	drawing no. AB/5955/3/X04	scale 1:2500
approved Jane Au Yeung	date 5-2-2001		
office ARCHITECTURAL BRANCH			



建築署  
ARCHITECTURAL  
SERVICES  
DEPARTMENT

**65GI - New Headquarters for the  
Electrical and Mechanical Services Department at Kai Tak**

**Comparison of the Provisions of Existing and Future Accommodation**

<b><u>Existing Accommodation</u></b>	<b><u>Gross Floor Area (m<sup>2</sup>)</u></b>
(a) Caroline Hill Headquarters	29 329
(b) Sung Wong Toi Depot	47 100
(c) Kowloon Bay Vehicle Servicing Station	4 525
(d) Public Works Central Laboratory Building	686
(e) Multi-centre adjacent to Pamela Youde Nethersole Eastern Hospital	778
(f) 111 Leighton Road	624
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	<b>83 042</b>

**Proposed New Headquarters for EMSD at Kai Tak**

General Accommodation (including offices and common facilities such as staff canteen, lecture theatre and visitor centre)	26 800
Specialist Accommodation (including workshops, storehouses, etc.)	55 000
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	<b>81 800*</b>

\* Including 3 800 m<sup>2</sup> for heavy vehicle maintenance workshop on a piece of land adjoining the former HACTL2 Building.