For discussion **PWSC(2002-03)8**
on 17 April 2002

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS
Support – Immigration control
72KA – Improvement works at Lo Wu Terminal Building

Members are invited to recommend to Finance Committee the upgrading of **72KA** to Category A at an estimated cost of $108.0 million in money-of-the-day prices for improvement works at Lo Wu Terminal Building.

PROBLEM

The existing passageway and Departure Hall of Lo Wu Terminal Building are extremely congested and the situation has become unacceptable during weekends and festive periods when the passenger flow is very heavy.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Security, proposes to upgrade **72KA** to Category A at an estimated cost of $108.0 million in money-of-the-day (MOD) prices for implementing improvement works at Lo Wu Terminal Building.

/**PROJECT** .....

PROJECT SCOPE AND NATURE

3. The scope of the project comprises modification and expansion of Lo Wu Terminal Building to improve the passenger circulation and queuing areas. The improvement works include –

(a) demolition of offices and resumption of certain shop areas on the ground and first floors;

(b) expansion of the Departure Hall on the ground floor to provide additional buffer for passenger circulation and space for reprovisioning the shop areas displaced (see (a) above));

(c) modification of 12 existing immigration counters and provision of a maximum of 14 additional immigration counters at the eastern end of the Departure Hall on the ground floor;

(d) expansion of the non-resident Arrival Hall on the first floor to accommodate the offices displaced from the ground and first floors (see (a) above) and improvement to the existing ambulance and Port Health Office facilities; and

(e) modification and diversion of existing building services, such as power plant rooms to make way for the improvement works and to enhance air conditioning services.

4. A site plan and sketches showing details of the proposed works are at Enclosure 1. Since the Lo Wu Terminal is vested in the Kowloon Canton Railway Corporation (KCRC), we intend to entrust the detailed design and construction of the project to KCRC. As the building owner, KCRC is in overall management control of the Terminal Building, and is therefore in the best position to plan and monitor construction activities at the Terminal, taking into account day-to-day operational procedures, crowd control requirements and the interest of their passengers. In addition, KCRC is planning its own improvement works at the Terminal, entrusting the proposed works to KCRC will help avoid interface problem and minimise disruption to train service and inconvenience to passengers. Subject to funding approval of the Finance Committee, we will proceed with the detailed design of the project immediately, taking about eight months. We plan to start the proposed works in May 2003 for completion in February 2005.

/**JUSTIFICATION** .....

JUSTIFICATION

5. Cross boundary passenger traffic has increased significantly in recent years. The passenger throughput at Lo Wu control point reached over 89.5 million in 2001, nearly 87% higher than the 47.9 million recorded in 1996. We expect this to continue to surge in 2002.

6. The rapid growth in passenger traffic has caused serious congestion in the existing passageway and Departure Hall of the Lo Wu Terminal Building. The situation has become unacceptable during weekends and festive periods when passenger traffic is extremely heavy. In 2001, the average daily passenger recorded during weekends and festive periods was 271 711 with records for individual days hitting 326 614, among which 231 472 were departing passengers. The hourly passenger throughput at peak time during weekends and festive periods reaches 15 000 – 16 000 passengers and the continual heavy flow of passengers often makes the passageway and the Departure Hall fully cramped. The proposed improvement works will bring relief to the present congestion in the passageway and Departure Hall of Lo Wu Terminal Building. It will also improve the overall environment of the Terminal Building.

7. Through implementation of the proposed improvement works, we will be able to acquire an extra 1 100 square metres of space at the Departure Hall. It will provide an additional buffer for circulation and queuing of up to 3 800 passengers, which is tantamount to enlarging the existing waiting capacity inside the Departure Hall by 2 times.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be $108.0 million in MOD prices (see paragraph 10 below), made up as follows –

			$ million
(a)	Piling		19.8
(b)	Building		35.6
	(i) Alteration and addition to the Departure Hall on ground floor	21.9	
	(ii) New transformer/generator rooms	2.5	
	(iii) Alteration and addition to	11.2	

/(ii) .....

		$ million	
	the Arrival Hall on first floor		
(c)	Building services works	25.5	
(d)	External works	2.2	
(e)	Furniture and equipment[1]	4.0	
(f)	Entrustment fee	12.7	
(g)	Contingencies	9.9	
	Sub-total	109.7	(in September 2001 prices)
(h)	Provision for price adjustment	(1.7)	
	Total	108.0	(in MOD prices)

We propose to entrust the detailed design, supervision and construction works of the proposed improvement works to KCRC. The Government's intention is to reimburse KCRC the consultancy fees for the detailed design on an actual cost basis. As regards project supervision and administrative overhead, we intend to apply a fee in the range of 7% to 7.5% of the construction cost. The entrustment fee indicated above is the ceiling and will be subject to further negotiation with KCRC.

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[1] Calculation of the estimated cost for furniture and equipment is based on an indicative list of items required, including computer equipment for immigration clearance i.e., workstations and optical character recognition readers as well as standard office furniture and equipment items.

9. The construction floor area (CFA) of **72KA** is 4 001 square metres. The construction unit cost, represented by building and building services costs, is estimated to be $15,270 per square metre of CFA in September 2001 prices. Due to the need to undertake much of the work outside normal operation hours, the construction unit cost for this project is higher than that for the improvement works being carried out at the Lok Ma Chau control point.

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

Year	$ million (Sept 2001)	Price adjustment factor	$ million (MOD)
2002 – 2003	3.0	0.98625	3.0
2003 – 2004	30.0	0.98378	29.5
2004 – 2005	37.0	0.98378	36.4
2005 – 2006	39.7	0.98378	39.1
	109.7		108.0

11. We have derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2002 to 2006. We propose to tender the works under a fixed-price lump-sum contract because the contract period will be less than 21 months and we can clearly define the scope of works in advance.

12. We estimate that the additional recurrent expenditure arising from this project is $1,210,000 per annum, broken down into $410,000 being maintenance service for workstations and optical character recognition readers installed at the clearance counters and $800,000 being management fees for the additional accommodation. The annual recurrent expenditure will be absorbed respectively by the Immigration Department and the Government Property Agency from their existing resources.

/PUBLIC .....

PUBLIC CONSULTATION

13. We consulted the Legislative Council Panel on Security on 7 March 2002. Members supported the proposal but were of the view that the Administration should endeavour to minimise disruption to the travelling public during implementation of the proposed works. Members also urged the Administration to consider the feasibility of advancing the proposed works and to initiate other improvement measures to help alleviate the congestion at Lo Wu control point in the interim. Taking into account the views of Members, we will ensure that the proposed works will commence no later than mid 2003 for completion in phases by February 2005. We expect expansion of the concourse between the ticket turnstile and the Departure Hall to be completed by early 2004, and expansion of the Departure Hall and installation of additional departure counters to be completed by mid 2004.

14. In parallel, we will proceed with two minor works projects[2] to bring early relief to the present congestion at Lo Wu Terminal Building. These two projects will commence in the third quarter of this year and will be completed by early 2003 and early 2004 respectively.

ENVIRONMENTAL IMPLICATIONS

15. The project will not cause long-term environmental impact and the Director of Environmental Protection has agreed that an Environmental Impact Assessment would not be necessary. We have included in the project estimates the costs to implement suitable mitigation measures to control short-term environmental impacts. During construction, the contractors will control noise, dust and site run-off nuisances through implementation of mitigation measures in the relevant contracts. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

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[2] The two minor works projects are the replacement of 46 side-facing counters by 48 front-facing counters at the Arrival Hall, and the relocation of the Police Reporting Centre from the passageway to the Departure Hall on ground floor to a newly-built mezzanine deck. These two projects are funded under the block allocation **Suhead 3101GX** "Minor building works for items in Category D of the Public Works Programme".

16. At the planning and detailed design stages, we will consider measures to reduce the generation of construction and demolition (C&D) materials. We will introduce more prefabricated building elements into the project design to reduce temporary formwork and construction waste wherever practicable. These include dry-wall partitioning and proprietary fittings and fixtures. We will also use suitable excavated materials for filling within the site to minimise off-site disposal. In addition, we will require the contractor to use metal site hoardings and signboards. These materials can be recycled or reused in other projects.

17. 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. We will require the contractor 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 about 2 000 cubic metres (m^3) of C&D materials will be generated by the project. Of these, about 16 m^3 (0.8%) will be reused on site, 1 650 m^3 (82.5%) will be reused as fill in public filling areas[3] and 334 m^3 (16.7%) will be disposed of at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be $41,750 for this project (based on a notional unit cost[4] of $125/$m^3$).

LAND ACQUISITION

18. The project does not require any land acquisition.

/BACKGROUND .....

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[3] 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.

[4] This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at $90 per m^3), nor the cost to provide new landfills (which are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

BACKGROUND INFORMATION

19. As mentioned in the Chief Executive's Policy Address 2001, the Administration is committed to speeding up the flow of people across the boundary at Lo Wu control point. The proposed project is one of our initiatives in this area. In parallel, we will carry out other improvement works at Lo Wu control point to facilitate cross boundary passenger flow. Separately, several improvement projects to be implemented by KCRC at Lo Wu Terminal Building are also in the pipeline. Details of these improvement works are set out at Enclosure 2.

20. We upgraded **72KA** to Category B in February 2002. We employed a term contractor in October 2001 to carry out ground investigation at a cost of $170,000. We 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 completed the ground investigation in January 2002. The D of Arch S completed the conceptual and schematic design in March 2002 using in-house resources.

21. We estimate that the project will create some 120 jobs comprising 12 professional/technical staff and 108 labourers, totalling 1 440 man-months.

Security Bureau
April 2002

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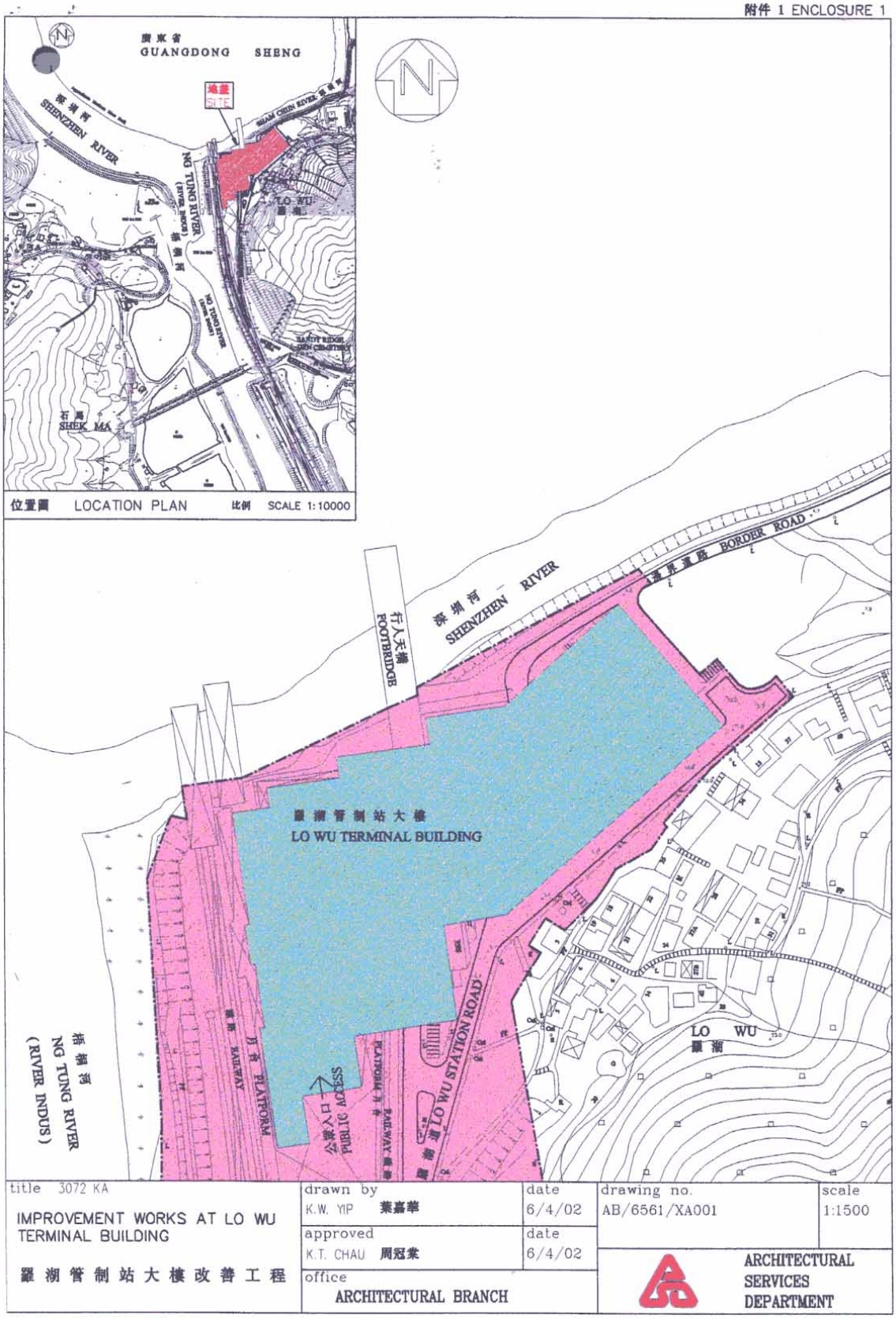

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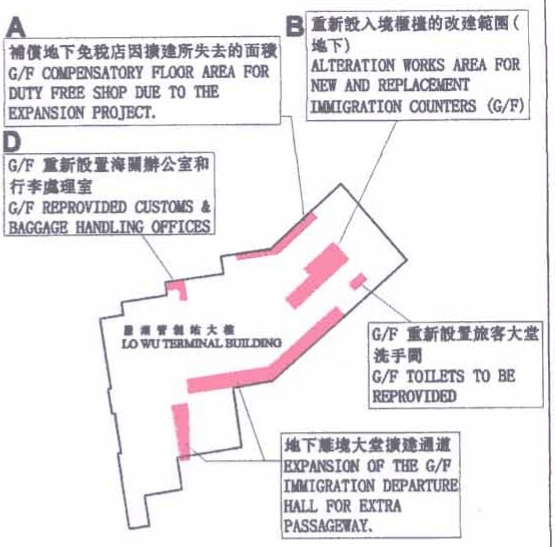
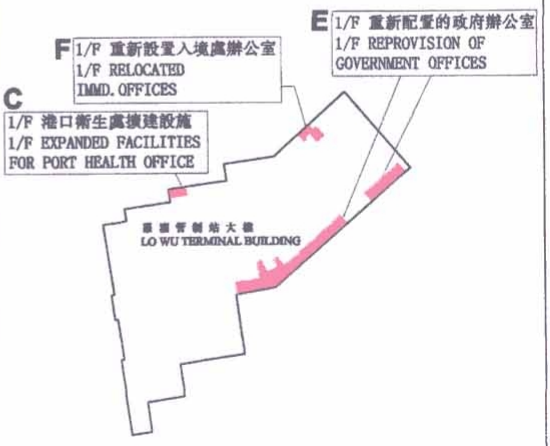
	approved K.T. CHAU 周冠棠	date 6/4/02		
	office ARCHITECTURAL BRANCH		ARCHITECTURAL SERVICES DEPARTMENT	

建議移拆計劃(地下)
PROPOSED DEMOLITION PLAN (G/F)



建議平面圖(地下)
PROPOSED FLOOR PLAN (G/F)

建議移拆計劃(一樓)
PROPOSED DEMOLITION PLAN (1/F)



建議平面圖(一樓)
PROPOSED FLOOR PLAN (1/F)

Other improvement works projects
carried out/to be carried out at Lo Wu control point

(I) Improvement works undertaken/to be undertaken by the Government

(a) Widening of passenger lanes and installation of jet fans on Lo Wu Footbridge (completed)

This is a short-term improvement project jointly conducted with the Shenzhen authorities. The works covered widening of passenger lanes, replacement of floor tiles and ceilings and installation of 72 jet fans on Lo Wu Footbridge. The works were completed in early February 2002.

(b) Widening of the passageway to the Departure Hall of Lo Wu Terminal Building

The works cover widening of the passageway to the Departure Hall of Lo Wu Terminal Building by relocating the Police Reporting Centre on the ground floor to a mezzanine deck to be built above the northern end of Platform 3. The works, to be carried out under a separate minor works project, are expected to start in the third quarter of 2002 for completion in early 2004.

(c) Replacement of existing immigration clearance counters

The works involve the replacement of 46 side-facing counters with 48 front-facing counters at the Arrival Hall of Lo Wu Terminal Building so as to provide 3 metres of additional circulation space for each counter. The works, to be carried out under a separate minor works project, are expected to start in the third quarter of 2002 for completion by phases in early 2003.

(d) Installation of air-conditioning on Lo Wu Footbridge

Agreement in principle has been reached with the Shenzhen authorities to install air-conditioning on Lo Wu Footbridge. The project would require the construction of independent structures to support the curtain walls which will be used to enclose the Footbridge. Discussions with the Shenzhen authorities on implementation details are on-going.

(II) Improvement works to be undertaken by KCRC

(a) Implementation of new boarding and alighting scheme at train platforms

A new boarding and alighting scheme will be implemented at the platform level to segregate northbound and southbound passengers. A new Platform 4 will be constructed and the existing Platform 1 will be upgraded. Southbound passengers will board the trains at these two dedicated side platforms while northbound passengers will alight from the trains at the existing Platforms 2 and 3, which will be widened to provide more waiting area. These works are tentatively scheduled for completion in 2004. Detailed implementation timetable is subject to adjustment by KCRC.

(b) Widening of passageway at the station concourse

The works involve widening of the key passageway at the station concourse which leads to the Departure Hall by relocating the staff mess room, store rooms and toilets on either side of the corridor. These works are tentatively scheduled for completion in 2004. Detailed implementation timetable is subject to adjustment by KCRC.

(c) Expansion of waiting area at the arrival concourse

The works involve enlargement of the arrival concourse on the second floor of the Terminal Building. Link bridges with new escalators and a lift will be constructed to connect the arrival concourse with the platforms to provide more convenience to passengers. These works are tentatively scheduled for completion in 2004. Detailed implementation timetable is subject to adjustment by KCRC.

(d) Replacement of ticket gates

The works involve the replacement of all turnstile ticket gates by flap gates by 2003. The barrier-free gates will allow speedier passenger movement and provide more convenience to passengers who carry bulky luggage, thereby improving passenger flow by 50%.

(e) Replacement of escalators and lift connecting the arrival footbridge and the Arrival Hall

The works involve replacement of all escalators and the lift connecting the arrival footbridge and the Arrival Hall by 2003. An additional escalator connecting the arrival footbridge and the Arrival Hall will also be installed.