Legislative Council Panel on Development

PWP Item No. 469CL
Kai Tak development – infrastructure at north apron area of Kai Tak Airport

Follow-up Issues of the Meeting held on 26 February 2019

At the meeting on 26 February 2019, the Panel on Development discussed one of the proposals[1] in the LC Paper No. CB(1)593/18-19(03) ("the Paper") on upgrading part of 469CL "Kai Tak development – infrastructure at north apron area of Kai Tak Airport" ("the proposed works") to Category A at an estimated cost of $1,720.1 million in money-of-the-date (MOD) prices for the construction of stage 5B infrastructure works essential for the continued developments at the former north apron area of Kai Tak Development (KTD). The Administration was requested to provide the following information:

(a) a breakdown of construction cost of the proposed works in Enclosure 1 of the Paper; and

(b) a comparison of construction cost for elevated walkways and pedestrian subways built by the Government over the past decade.

This paper sets out the Administration's responses.

Breakdown of construction cost of the proposed works

2. We estimate the cost of the proposed works to be $1,720.1 million in MOD prices, broken down as follows –

		$ million (in MOD prices)
A.	Road works	297.1
B.	Pedestrian subway	414.5
C.	Elevated walkway	354.0

[1] The Paper covered two proposals of funding application. The other proposal is to upgrade 50CG to Category A for "Provision of an additional District Cooling System at the Kai Tak Development". The supplementary information in relation to this proposal will be provided separately by the Environment Bureau.

			$ million (in MOD prices)
D.	Renovation and modification of existing subways		48.1
E.	Drainage, sewerage, water mains and ancillary works		253.5
F.	Landscaping works		14.6
G.	Environmental mitigation measures and EM&A programme		22.1
H.	Consultants' fees for		19.6
	(i) contract administration	6.9	
	(ii) management of resident site staff (RSS)	8.6	
	(iii) independent environmental checker services	4.1	
I.	Remuneration of RSS		140.4
J.	Contingencies		156.2
	Total		1,720.1

Comparison of construction cost for elevated walkways and pedestrian subways built by the Government over the past decade

3. The construction cost level of elevated walkways and pedestrian subways involves a lot of factors, for instance, the complexity of the works, the physical location and environment in the vicinity of the works sites, the economic conditions at the time of inviting tenders, the tendering strategy of individual tenderer, etc. all have influence on the costs. The factors are not exactly the same for each project. We now list out the construction costs of elevated walkways and pedestrian subways built under similar public works projects recently; and the construction costs of the proposed elevated walkway and pedestrian subway for reference. To facilitate

a suitable comparison, details of the estimated construction cost for the recent elevated walkways and pedestrian subways as provided in the relevant Public Works Subcommittee (PWSC) papers and their respective estimated construction cost adjusted to September 2018 prices[2] are tabulated below -

Elevated walkway

PWP Item (date upgraded to Category A)	Elevated walkway location, Length, Walkway clear width (Width) and Structural material	Estimated Cost[3]	Estimated Cost (in Sep 2018 prices)	
		Overall ($ million)	Overall ($ million)	Per square metre ($ million)
469CL(Part) (upgrading is currently sought from the PWSC)	Elevated walkway LW-02 across Kai Tak River near Trade and Industry Tower (i.e. the elevated walkway mentioned in Enclosure 1 paragraph 1(e) of the Paper) Length: about 150 metres (m) Width: about 9 m Structural material: Concrete	354.0 (in MOD prices)	285.3	0.21
822CL (part upgraded from PWP Item 702CL) (Nov 2018)	Elevated walkway across the future Trunk Road T2 near Kwun Tong Community Green Station Length: about 140 m Width: about 6 m Structural material: Concrete	193.0 (in MOD prices)	161.5	0.19
163TB (Jun 2018)	Footbridge across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street Length: about 58 m Width: about 4 to 6 m Structural material: Concrete	100.1 (in MOD prices)	87.1	0.30
797CL (part upgraded from PWP Item 469CL) (May 2016)	Elevated walkway across Prince Edward Road East (PERE) connecting San Po Kong and KTD Length: about 290 m Width: about 6 m Structural material: Concrete	229.8 (in Sep 2015 prices)	259.3	0.15

[2] The estimated costs in September 2018 prices are derived by using the Government's statistics on the trend rate of change in the prices of public sector building and construction output for the relevant periods.

[3] Information of the estimated costs provided in the relevant PWSC papers. Since December 2017, all public works projects will only provide MOD prices information in PWSC papers.

PWP Item (date upgraded to Category A)	Elevated walkway location, Length, Walkway clear width (Width) and Structural material	Estimated Cost[3]	Estimated Cost (in Sep 2018 prices)	
		Overall ($ million)	Overall ($ million)	Per square metre ($ million)
739CL (part upgraded from PWP Item 469CL) (May 2009)	Two footbridges across PERE near The Latitude and Rhythm Garden (i.e. FB1 and FB4) FB1 Length: about 175 m Width: about 9 m Structural material: Concrete FB4 Length: about 85 m Width: about 2.5 m Structural material: Steel	109.8 (in Sep 2008 prices)	172.9	0.10 (Note 1)

Note 1– 739CL was upgraded to Category A in May 2009. Facing the impact of the financial tsunami in 2008 to the global economy, competition in bidding construction works was very keen. The estimated construction cost was thus relatively low.

Pedestrian subway

PWP Item (date upgraded to Category A)	Pedestrian subway location, Length, Width and Structural material	Estimated Cost[4]	Estimated Cost (in Sep 2018 prices)	
		Overall ($ million)	Overall ($ million)	Per square metre ($ million)
469CL(Part) (upgrading is currently sought from the PWSC)	Pedestrian subway SB-01 across PERE near Kowloon City (i.e. the pedestrian subway mentioned in Enclosure 1 paragraph 1(d) of the Paper) Length: about 120 m Width: about 8 m Structural material: Concrete	414.5 (in MOD prices)	336.5	0.35 (Note 2)
797CL (part upgraded from PWP Item 469CL)	Pedestrian subways across PERE, Kwun Tong Bypass and Shing Kai Road connecting Choi Hung Estate (SW4); and across PERE connecting Shek Ku Lung	392.5 (in Sep 2015 prices)	442.9	0.31

[4] Information of the estimated costs provided in the relevant PWSC papers. Since December 2017, all public works projects will only provide MOD prices information in PWSC papers.

PWP Item (date upgraded to Category A)	Pedestrian subway location, Length, Width and Structural material	Estimated Cost[4]	Estimated Cost (in Sep 2018 prices)	
		Overall ($ million)	Overall ($ million)	Per square metre ($ million)
(May 2016)	Road Playground (SW6) SW4 Length: about 180 m Width: about 3.5 m Structural material: Concrete SW6 Length: about 120 m Width: about 6.5 m Structural material: Concrete			
761CL (part upgraded from PWP Item 469CL) (Jun 2013)	Extension of the existing pedestrian subway (SW3) across PERE near Kai Tak East Playground Length: about 60 m Width: about 4 m Structural material: Concrete	56.2 (in Sep 2012 prices)	73.4	0.31
	Pedestrian subway across PERE near King Tai Court (SW2) Length: about 205 m Width: about 6 m Structural material: Concrete	160.6 (in Sep 2012 prices)	209.7	0.17 (Note 3)

Note 2 – Pedestrian subway SB-01 will be constructed underneath the abutment of two existing flyovers at PERE and required implementing monitoring and protection measures during construction to ensure normal operation of the flyovers. Besides, implementation of complex temporary traffic arrangement is required to maintain the existing traffic of PERE and Sa Po Road in construction stage. The estimated construction cost is thus relatively high.

Note 3 – Pedestrian subway (SW2) was adjoining to and constructed in parallel with another vehicular subway under the same PWP item. The construction efficiency was benefited from the economies of scale. The estimated construction cost was thus relatively low.

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