For discussion **PWSC(2016-17)5**
on 20 April 2016

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS
Transport – Footbridges and pedestrian tunnels
169TB – Lift and pedestrian walkway system at Cheung Hang Estate, Tsing Yi
175TB – Lift and pedestrian walkway system between Kwai Shing Circuit and Hing Shing Road, Kwai Chung
168TB – Lift and pedestrian walkway System at Waterloo Hill
164TB – Footbridge connecting Tsuen Wan Plaza, Skyline Plaza and adjacent landscaping area
158TB – Elevated walkway between Tong Ming Street and Tong Tak Street, Tseung Kwan O

Members are invited to recommend to the Finance Committee the upgrading of **169TB**, **175TB**, **168TB**, **164TB** and **158TB** to Category A at estimated cost of $222.7 million, $239.4 million, $116.7 million, $146.2 million and $221.6 million in money-of-the-day prices respectively.

PROBLEM

We need to construct lift and pedestrian walkway systems in Tsing Yi, Kwai Chung and Waterloo Hill, as well as to construct a footbridge and an elevated walkway respectively in Tsuen Wan and Tseung Kwan O, in order to enhance the accessibility of hillsides and urban area.

/ PROPOSAL …..

PROPOSAL

2. The Director of Highways proposes, with the support of the Secretary for Transport and Housing, to upgrade the following projects to Category A –

(a) Lift and pedestrian walkway system at Cheung Hang Estate, Tsing Yi. The estimated cost of the project is $222.7 million in money-of-the-day (MOD) prices (viz. **169TB**);

(b) Lift and pedestrian walkway system between Kwai Shing Circuit and Hing Shing Road, Kwai Chung. The estimated cost of the project is $239.4 million in MOD prices (viz. **175TB**);

(c) Lift and pedestrian walkway system at Waterloo Hill. The estimated cost of the project is $116.7 million in MOD prices (viz. **168TB**);

(d) Footbridge connecting Tsuen Wan Plaza, Skyline Plaza and adjacent landscaping area. The estimated cost of the project is $146.2 million in MOD prices (viz. **164TB**); and

(e) Elevated walkway between Tong Ming Street and Tong Tak Street, Tseung Kwan O. The estimated cost of the project is $221.6 million in MOD prices (viz. **158TB**).

Details of the above projects are at the Annexes 1 to 5.

Transport and Housing Bureau
April 2016

169TB – Lift and pedestrian walkway system at Cheung Hang Estate, Tsing Yi

PROJECT SCOPE AND NATURE

The proposed scope of works under the project includes –

(a) construction of a lift tower with two lifts and staircase of about 31 metres (m) in height at Tsing Yu Street;

(b) construction of a covered elevated walkway with a clear width of about 3.3 m and of about 60 m in length, connecting the above lift tower to the footpath along the southbound carriageway of Tsing Yi Road West;

(c) construction of a lift tower with single lift of about 13 m in height at the eastern side of the existing footbridge (No. NF230) across Tsing Yi Road West;

(d) widening of a section of footpath of about 30 m in length to about 3.5 m along the southbound carriageway of Tsing Yi Road West between the proposed elevated walkway and the existing footbridge (No. NF230) across Tsing Yi Road West; and

(e) ancillary works, including associated road, drainage, slope and geotechnical, utilities, public lighting, landscaping, electrical and mechanical (E&M) works, etc.

——— A layout plan and artist's impression of the proposed project are at Enclosure 1 to Annex 1.

2. Subject to the funding approval of the Finance Committee (FC) within this legislative session, the Highways Department (HyD) plans to commence the construction works in the fourth quarter of 2016 for completion in mid-2019.

/ JUSTIFICATION …..

JUSTIFICATION

3. At present, there is no direct pedestrian link between the Tsing Yi Cheung Hang Estate area (including Cheung Hang Estate, Cheung Wang Estate and Mount Haven) and the major community facilities near Tsing Yip Street and Tsing Luk Street. The public needs to walk along Tsing Yi Road West and Fung Shue Wo Road to Tsing Yip Street/Tsing Luk Street. As the existing pedestrian route is very indirect, the public depends largely on public transport to travel between the major community facilities and the Cheung Hang Estate area.

4. The area currently has a population of about 44 200 (including about 7 400 elderly). We plan to implement the project for the convenience of the public in particular the elderly and the disabled, and to encourage walking instead of using transport services for travelling to and from the Cheung Hang Estate area and the major community facilities on Tsing Yip Street/Tsing Luk Street. With the implementation of the proposed project, the walking distance from Cheung Hang Estate area to Tsing Yip Street will be shortened from about 950 m by about 400 m to about 550 m. The proposed project will provide a more convenient, comfortable and direct link for the public especially for the elderly and the disabled. The current pedestrian route and the pedestrian route after the completion of the proposed project are at Enclosure 2 to Annex 1.

5. We plan to widen from 2.7 m to about 3.5 m a section of footpath of about 30 m in length along the southbound carriageway of Tsing Yi Road West adjacent to the existing footbridge across Tsing Yi Road West (No. NF230) so as to meet the demand arising from the pedestrian flow and the number of persons waiting for buses during peak hours.

6. With a lift added to the existing footbridge across Tsing Yi Road West (No. NF230) under the proposed project, the existing footbridge, the proposed lift tower at Tsing Yu Street and the elevated walkway will form a lift and pedestrian walkway system connecting the Cheung Hang Estate area and Tsing Yu Street. At the same time, barrier-free access and facilities for the existing footbridge and for the entire pedestrian walkway system will be provided. We expect that the proposed project can attract about 3 000 pedestrian trips per day.

/ **FINANCIAL** …..

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be $222.7 million in money-of-the-day (MOD) prices (please see paragraph 9 below), with the following breakdown –

		$ million		
(a)	Lift tower at Tsing Yu Street		69.2	
	(i) tower and staircase structure	44.0		
	(ii) foundation	25.2		
(b)	Elevated walkway		37.7	
	(i) bridge structure	24.4		
	(ii) foundation	13.3		
(c)	Lift tower at the existing footbridge No. NF230		13.0	
	(i) tower structure	5.5		
	(ii) foundation	7.5		
(d)	Associated road, landscaping, drainage, public lighting works, etc.		5.7	
(e)	Geotechnical works		29.9	
(f)	E&M works		11.3	
	(i) lift car (3 nos.)	10.6		
	(ii) Electrical & Mechanical Services Trading Fund (EMSTF)[1]	0.7		
(g)	Consultants' fee		1.6	
(e)	Contingencies		16.8	
	Subtotal		185.2	(in September 2015 prices)
(k)	Provision for price adjustment		37.5	
	Total		222.7	(in MOD prices)

/ 8. …..

[1] Upon its establishment from 1 August 1996 under the Trading Fund Ordinance, the EMSTF charges government departments for design and technical consultancy services for E&M installations. The services rendered for the project include carrying out the design and site supervision on all E&M installations and providing technical advice to the Government on all E&M works and their impacts on the project.

8. HyD plans to engage consultants to provide advisory services for contract administration for the proposed project. A breakdown of the consultants' fees based on the estimated man-months is at Enclosure 3 to Annex 1.

9. Subject to funding approval, we will phase the expenditure as follows –

Year	$ million (Sept 2015)	Price adjustment factor	$ million (MOD)
2016 – 17	4.0	1.05775	4.2
2017 – 18	55.8	1.12122	62.6
2018 – 19	60.1	1.18849	71.4
2019 – 20	42.9	1.25980	54.0
2020 – 21	14.6	1.33539	19.5
2021 – 22	7.8	1.40549	11.0
	185.2		222.7

10. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2016 to 2022. The contract will provide for price adjustments.

11. We estimate the annual recurrent expenditure arising from the proposed project to be $2.38 million.

/ **PUBLIC** …..

PUBLIC CONSULTATION

12. The Government established in 2009 a set of comprehensive, objective and transparent scoring criteria for assessing proposals for hillside escalator links and elevator systems (hereafter referred to as "hillside escalator links") to determine the priority for conducting preliminary technical feasibility studies for the 20 proposals received at that time. On this, the Government consulted the Legislative Council (LegCo) Panel on Transport in May 2009. Upon completion of the assessment, the results were reported to the LegCo Panel on Transport in February 2010. Two proposals were screened out initially, and 18 others were ranked. The Government indicated at the time that preliminary technical feasibility studies would be conducted by batches for the proposals ranked top ten in the assessment, and that the remaining proposals would be followed up after the smooth implementation of the top ten proposals. The proposed project is ranked third. In fact, LegCo Members had written to and met with relevant government departments on various occasions, raising their concerns about the progress of the hillside escalator links and requesting that the Government should implement the projects (especially for the areas that are densely-populated with elderly) as early as possible.

13. HyD consulted the Traffic and Transport Committee (T&TC) of the Kwai Tsing District Council on 2 September 2014. The T&TC members supported the proposed project and requested for its early implementation.

14. We gazetted the proposed project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 18 and 27 February 2015. No objection was received during the statutory period. The project was subsequently authorised under the Ordinance.

15. HyD has consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS) [2] on the proposed aesthetic design of the lift towers, covered staircase and elevated walkway of the proposed project. The Committee accepted the proposed aesthetic design.

/ 16. …..

[2] ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, the Architectural Services Department, the Highways Department, the Housing Department, the Civil Engineering and Development Department, and an academic institution to be invited by the Chairman of ACABAS (such as an architectural school from a local institution), is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

16. We consulted the LegCo Panel on Transport on 23 March 2016. Members generally supported the proposed project.

ENVIRONMENTAL IMPLICATIONS

17. The Project is not a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term environmental impact. HyD will control construction noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. The required expenses of implementing the environmental mitigation measures have been included in the project estimates.

18. At the planning and design stages, HyD has considered measures to reduce the generation of construction waste where possible. Such measures include optimising the alignment of the proposed project, reducing the size of the foundations of the structures and adjusting the method of construction. In addition, HyD will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) on site or in other suitable construction sites as far as possible in order to minimise the disposal of inert construction waste at public fill reception facilities[3]. HyD will also encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork, to further minimise the generation of construction waste.

19. At the construction stage, HyD will require the contractor to submit for the Government's approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. HyD will ensure that the day-to-day operations on site comply with the approved plan. HyD will require the contractor to separate inert construction waste from non-inert construction waste on site to facilitate their transportation to appropriate facilities for disposal. HyD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively for disposal through a trip-ticket system.

/ 20. …..

[3] Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

20. HyD estimates that the proposed project will generate in total 27 000 tonnes of construction waste. Of these, we will reuse 5 000 tonnes (18.5%) of inert construction waste on site and deliver 21 200 tonnes (78.5%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of the remaining 800 tonnes (3.0%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about $670,000 for the project (the amount is based on a unit cost of $27 per tonne for disposal at public fill reception facilities and $125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

21. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

22. The project does not require land resumption.

TRAFFIC IMPLICATIONS

23. HyD has conducted a traffic impact assessment for the proposed project, covering the traffic impact during the construction period. According to the assessment findings, with the implementation of appropriate temporary traffic arrangements (TTA), the proposed project during its construction stage will not cause significant impact on the traffic network in the area concerned. To facilitate the related construction works, HyD will implement TTA and set up a traffic management liaison group to assess the effectiveness of the TTA. This group comprises representatives of the Hong Kong Police Force, the Transport Department and other concerned government departments. HyD will specify requirements for implementing the TTA in the works contract to minimise the traffic impact during construction. HyD will also display publicity boards on site, giving details of the TTA and the anticipated completion dates of individual sections of works. In addition, HyD will set up a telephone hotline for public enquiries or complaints.

/ **BACKGROUND** …..

BACKGROUND INFORMATION

24. The Government announced in the 2016 Policy Address that it will strive to take forward progressively from the fourth quarter of this year the construction of three lift and pedestrian walkway systems in Tsing Yi, Kwai Chung and Kowloon City.

25. We upgraded the project to Category B in September 2011. We engaged an engineering consultant to undertake the preliminary design, studies and ground investigation works in July 2012. The total cost of the above consultancy services and works is about $3.0 million. Funding has been obtained under block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". These consultancy services and investigation works have been completed. HyD has also completed the detailed design of the proposed project.

26. In order to make way for the proposed facilities, the proposed project will require removal of 42 trees. All trees to be removed are not important trees [4]. HyD will incorporate planting proposals into the proposed project, including the planting of about 54 trees and about 700 shrubs.

27. We estimate that the proposed project will create about 106 jobs (14 for professional/technical staff and 92 for labourers), providing a total employment of about 2 869 man-months.

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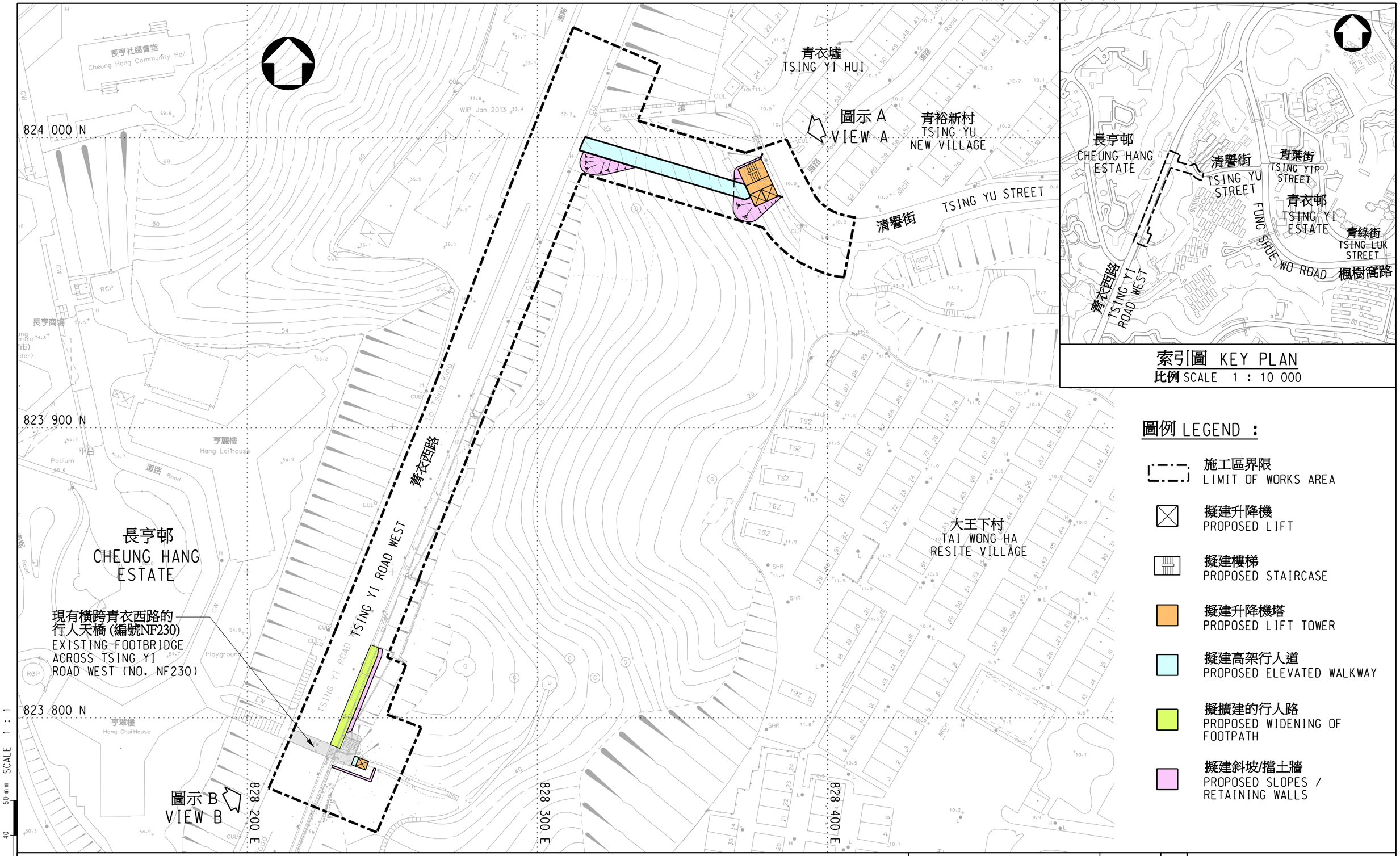
[4] "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

(a) trees of 100 years old or above;
(b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
(c) trees of precious or rare species;
(d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
(e) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25m.



索引圖 KEY PLAN
比例 SCALE 1 : 10 000

圖例 LEGEND :

- 施工區界限 LIMIT OF WORKS AREA
- 擬建升降機 PROPOSED LIFT
- 擬建樓梯 PROPOSED STAIRCASE
- 擬建升降機塔 PROPOSED LIFT TOWER
- 擬建高架行人道 PROPOSED ELEVATED WALKWAY
- 擬擴建的行人路 PROPOSED WIDENING OF FOOTPATH
- 擬建斜坡/擋土牆 PROPOSED SLOPES / RETAINING WALLS

圖則名稱 drawing title

工務計劃項目第169TB號
青衣長亨邨升降機及行人通道系統
- 平面圖
PWP ITEM NO. 169TB
LIFT AND PEDESTRIAN WALKWAY SYSTEM AT CHEUNG HANG ESTATE, TSING YI
- LAYOUT PLAN

比例 scale A3
1 : 1 200

圖則編號 drawing no.
HWDKS145A-SP0001

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 香港路政署

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A3 420x297

圖示A
VIEW A

圖示B
VIEW B

圖則名稱 drawing title

工務計劃項目第169TB號
青衣長亨邨升降機及行人通道系統
- 擬建行人通道系統構思圖
PWP ITEM NO. 169TB
LIFT AND PEDESTRIAN WALKWAY SYSTEM AT CHEUNG HANG ESTATE, TSING YI
- ARTIST'S IMPRESSION OF PROPOSED PEDESTRIAN WALKWAY SYSTEM

比例 scale A3
不適用
NA

圖則編號 drawing no.
HWDKS145A-SP0005

辦事處 office
工程部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 香港路政署

0 10 20 30 40 50 mm SCALE 1 : 1

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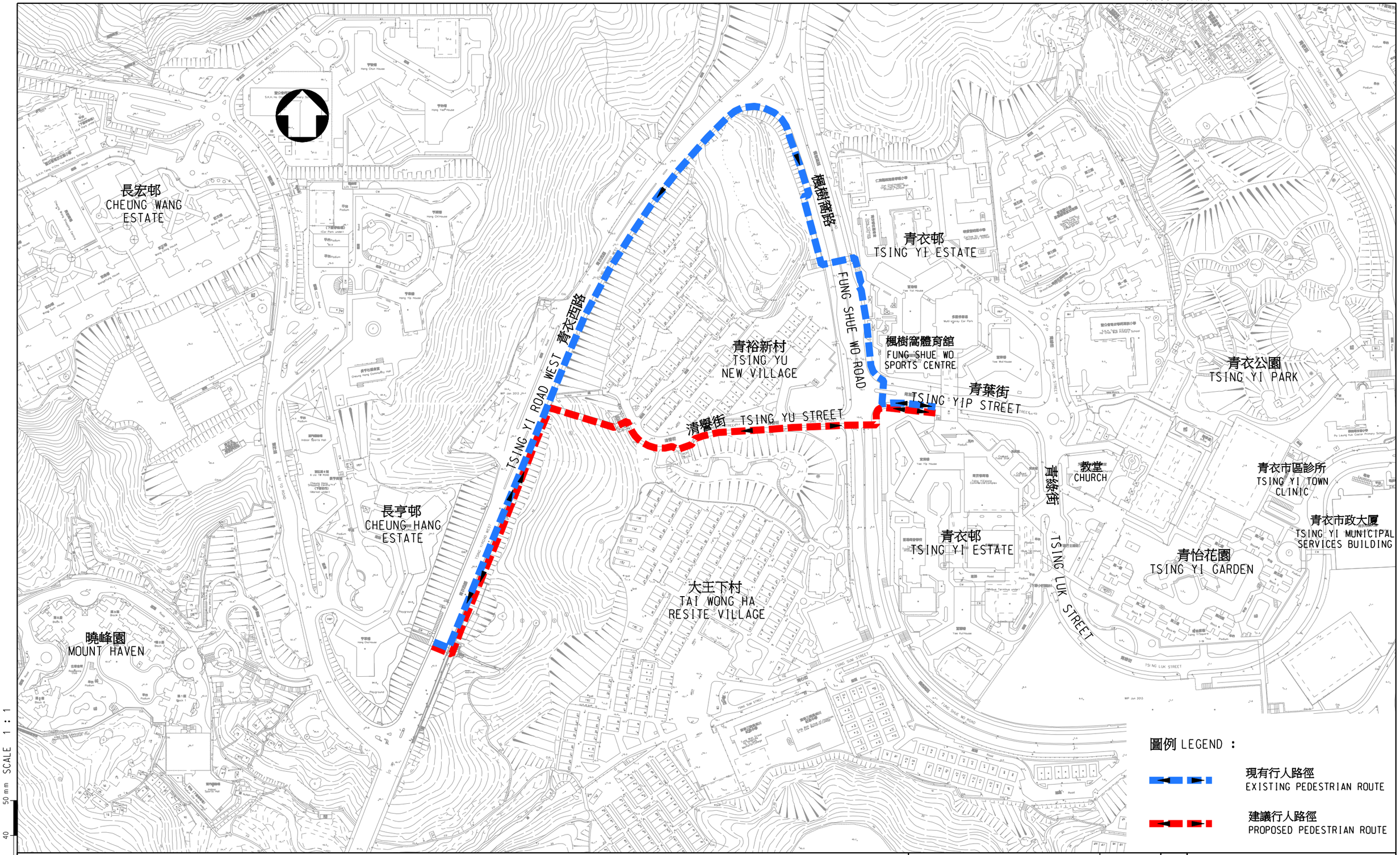
A3 420x297



0 10 20 30 40 50 mm SCALE 1 : 1

圖則名稱 drawing title

工務計劃項目第169TB號
青衣長亨邨升降機及行人通道系統
- 長亨邨、長宏邨及曉峰園居民往來青葉街/青綠街鄰近主要社區設施的行人路徑

PWP ITEM NO. 169TB
LIFT AND PEDESTRIAN WALKWAY SYSTEM AT CHEUNG HANG ESTATE, TSING YI
- PEDESTRIAN ROUTES BETWEEN CHEUNG HANG ESTATE, CHEUNG WANG ESTATE, MOUNT HAVEN AND THE MAIN COMMUNITY FACILITIES NEAR TSING YIP STREET / TSING LUK STREET

比例 scale A3
1 : 3 000

圖則編號 drawing no.
HWDKS145A-SP0008

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 路政署 香港

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A3 420x297

169TB - Lift and pedestrian walkway system at Cheung Hang Estate, Tsing Yi

Breakdown of the estimates for consultants' fees (in September 2015 prices)

		Estimated man-months	Average MPS* salary point	Multiplier (Note)	Estimated fee ($million)
Consultants' fees for contract administration advisory service[1]	Professional	10	38	2.0	1.5
	Technical	2	14	2.0	0.1
				Total	**1.6**

* MPS = Master Pay Scale

Note

A multiplier of 2.0 is applied to the average MPS salary point to arrive at the full staff costs including the consultants' overheads and profit (At present, MPS salary point 38 is equivalent to a monthly salary of $74,210 and MPS salary point 14 is equivalent to a monthly salary of $25,505).

[1] Highways Department (HyD) will adopt 'New Engineering Contract' form in the works contract of the Project. HyD will deploy in-house staff to supervise the construction of the proposed works. The fees above will be used for engaging consultants to provide professional advisory services for HyD's detailed arrangements for the administration of 'New Engineering Contract'.

175TB – Lift and Pedestrian Walkway System between Kwai Shing Circuit and Hing Shing Road, Kwai Chung

PROJECT SCOPE AND NATURE

The proposed scope of works under the project includes –

(a) construction of a lift tower with three lifts of about 30 metres (m) in height adjacent to Hing Shing Road;

(b) construction of a covered elevated walkway of about 60 m long and about 4.5 m clear width to connect the above lift tower and the southern footpath along Kwai Shing Circuit;

(c) widening of the southern footpath along Kwai Shing Circuit between Shing Fuk Street and Hing Shing Road to about 2.75 m;

(d) widening of the western footpath along Ko Fong Street to about 4.5 m; and

(e) ancillary works, including improvement on pedestrian facilities, geotechnical [1], drainage, public utilities, landscaping, public lighting, electrical and mechanical (E&M) works, and re-provisioning of playground facilities[2].

A layout plan and artist's impression of the proposed project are at Enclosure 1 to Annex 2.

2. Subject to funding approval of the Finance Committee (FC) within this legislative session, the Highways Department (HyD) plans to commence the construction works in the first quarter of 2017 for completion in 2020.

/ JUSTIFICATION …..

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[1] The works include the improvement/modification of the existing slopes within Hing Shing Road Playground being affected by those works mentioned in items (a) and (b) of this paragraph.

[2] The works include the re-provisioning of playground facilities including the fence wall, footpath and planters within Hing Shing Road Playground and Kwai Chung Sports Ground being affected by those works mentioned in items (a), (b) and (d) of this paragraph.

JUSTIFICATION

3. At present, residents in Kwai Shing area (Kwai Luen Estate, Kwai Shing West Estate and Kwai Shing East Estate), students of schools nearby and users of the nearby clinic mainly use the steep staircases of about 20 m in height inside Hing Shing Road Playground or public transportation facilities for travelling to and from the Kwai Fong area.

4. The Kwai Shing area has a population of about 23 800 (including about 4 100 elderly population). For the convenience of the public travelling to and from Kwai Shing and Kwai Fong (particularly the elderly, disabled, users of the South Kwai Chung Jockey Club Polyclinic and students of the nearby schools), and to encourage walking instead of taking transportation, we intend to take forward the project which will provide a convenient, direct and comfortable access connecting Kwai Shing Circuit and Hing Shing Road. We expect the proposed lift and pedestrian walkway system can attract about 16 200 pedestrian trips per day. Moreover, to facilitate the proposed lift and pedestrian walkway system, we will widen the section of southern footpath along Kwai Shing Circuit and a section of the western footpath along Ko Fong Street to serve the anticipated growth of pedestrian flow.

FINANCIAL IMPLICATIONS

5. We estimate the capital cost of the project to be $239.4 million in money-of-the-day (MOD) prices (please see paragraph 7 below), with the following breakdown –

		$ million	
(a)	Lift tower		57.4
	(i) tower structure	30.5	
	(ii) foundation	26.9	
(b)	Elevated walkway		41.4
	(i) bridge structure	26.8	
	(ii) foundation	14.6	
(c)	Re-provisioning of playground facilities		2.7
(d)	Geotechnical works		21.4

/ (e) …..

			$ million	
(e)	Associated road, landscaping, drainage, public lighting works, etc.		18.9	
(f)	Lift car (3 nos.) and associated E&M works		10.1	
(g)	Consultants' fee		3.4	
	(i) contract administration	2.5		
	(ii) management of resident site staff (RSS)	0.9		
(h)	Remuneration of RSS		19.3	
(e)	Contingencies		17.5	
	Subtotal		192.1	(in September 2015 prices)
(k)	Provision for price adjustment		47.3	
	Total		239.4	(in MOD prices)

6. HyD proposed to engage consultants to provide consulting services for contract management of the proposed project. A breakdown of the estimated consultant's fees and resident site staff costs by man-months is at Enclosure 2 to Annex 2.

7. Subject to funding approval, we will phase the expenditure as follows –

Year	**$ million (Sept 2015)**	**Price adjustment factor**	**$ million (MOD)**
2016 – 17	0.1	1.05775	0.1
2017 – 18	24.9	1.12122	27.9
2018 – 19	55.7	1.18849	66.2
2019 – 20	65.3	1.25980	82.3
2020 – 21	28.8	1.33539	38.5
2021 – 22	15.4	1.40549	21.6
2022 – 23	1.9	1.47577	2.8
	192.1		239.4

/ 8. …..

8. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2016 to 2023. The contract will provide for price adjustments.

9. We estimate the annual recurrent expenditure arising from the proposed project to be $2.54 million.

PUBLIC CONSULTATION

10. The Government established in 2009 a set of comprehensive, objective and transparent scoring criteria for assessing proposals for hillside escalator links and elevator systems (hereafter referred to as "hillside escalator links") to determine the priority for conducting preliminary technical feasibility studies for the 20 proposals received at that time. On this, the Government consulted the Legislative Council (LegCo) Panel on Transport in May 2009. Upon completion of the assessment, the results were reported to the LegCo Panel on Transport in February 2010. Two proposals were screened out initially, and 18 others were ranked. The Government indicated at the time that preliminary technical feasibility studies would be conducted by batches for the proposals ranked top ten in the assessment, and that the remaining proposals would be followed up after the smooth implementation of the top ten proposals. The proposed project is ranked fifth. In fact, LegCo Members had written to and met with relevant government departments on various occasions, raising their concerns about the progress of the hillside escalator links and requesting that the Government should implement the projects (especially for the areas that are densely-populated with elderly) as early as possible.

11. HyD consulted the Traffic and Transport Committee of the Kwai Tsing District Council (KwTDC) on 11 June 2015. The Committee expressed its support for the implementation of the proposed project. Over the years, KwTDC and the locals have been urging for the early implementation of the proposed project.

12. We gazetted the proposed project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 30 October and 6 November 2015. No objection was received during the statutory period. The project was subsequently authorised under the Ordinance.

/ 13. …..

13. HyD consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS) [3] on the aesthetic design of the lift tower and covered elevated walkway of the proposed project. The Committee accepted the proposed aesthetic design.

14. We consulted the LegCo Panel on Transport on 23 March 2016. Members generally supported the proposed project.

ENVIRONMENTAL IMPLICATIONS

15. The proposed project is not a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long term environmental impact. HyD will control construction noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. The required expenses of implementing the environmental mitigation measures have been included in the project estimates.

16. At the planning and preliminary design stages, HyD has considered measures to reduce the generation of construction waste where possible. Such measures include reducing the size of the foundations of the structures in order to minimise the quantity of construction waste generated from the proposed project. In addition, HyD will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) on site or in other suitable construction sites as far as possible in order to minimise the disposal of inert construction waste at public fill reception facilities[4]. HyD will also encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

/ 17. …..

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[3] ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, the Architectural Services Department, the Highways Department, the Housing Department, the Civil Engineering and Development Department, and an academic institution to be invited by the Chairman of ACABAS (such as an architectural school from a local institution), is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

[4] Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

17. At the construction stage, HyD will require the contractor to submit for the Government's approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. HyD will ensure that the day-to-day operations on site comply with the approved plan. HyD will require the contractor to separate inert construction waste from non-inert construction waste on site to facilitate their transportation to appropriate facilities for disposal. HyD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively for disposal through a trip-ticket system.

18. HyD estimates that the proposed project will generate in total 8 170 tonnes of construction waste. Of these, we will reuse 5 280 tonnes (64.6%) of inert construction waste on site and deliver 2 600 tonnes (31.8%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of the remaining 290 tonnes (3.6%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about $106,450 for the project (the amount is based on a unit cost of $27 per tonne for disposal at public fill reception facilities and $125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

19. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

20. The project does not require land acquisition

/ **TRAFFIC** …..

TRAFFIC IMPLICATION

21. HyD has conducted a traffic impact assessment on the proposed project, including assessing the impact on traffic during construction. Based on the assessment, with the implementation of appropriate temporary traffic measures, the construction works will not pose significant impact on the local transportation network. To facilitate the related construction works, HyD will implement temporary traffic arrangement (TTA) and setup a traffic management liaison group to assess the effectiveness of TTA. This group comprises representatives from the Hong Kong Police Force, Transport Department and other concerned government departments. HyD will specify requirements for implementing the TTA into the works contracts to minimise the traffic impacts during construction. HyD will also display publicity boards on site, giving details of the TTA and the anticipated completion dates of individual sections of works. In addition, HyD will set up a telephone hotline for public enquiries or complaints.

BACKGROUND INFORMATION

22. The Government announced in the 2016 Policy Address that it will strive to take forward progressively from the fourth quarter of this year the construction of three lift and pedestrian walkway systems in Tsing Yi, Kwai Chung and Kowloon City.

23. We upgraded the proposed project to Category B in September 2012. We engaged an engineering consultant to undertake the preliminary design, investigation and ground investigation works in June 2014. The total cost of the above consultancy services and works is about $3.9 million. Funding has been obtained under block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". These consultancy services and investigation works have been completed.

24. We will engage an engineering consultant in April 2016 to undertake detailed design and supervision of the construction. The estimated cost for these consultancy services is about $4.8 million, and will be paid for under **Subhead 6100TX** "Highway works, consultants' design fees and charges for items in Category D of the Public Works Programme".

25. Of the 129 trees within the project boundary, 89 trees will be preserved. In order to make way for the proposed facilities, the proposed project will require removal of about 40 trees, including about 37 trees to be felled and about 3 trees to be transplanted. All trees to be removed are not important trees[5]. HyD will incorporate planting proposals into the proposed project, including the planting of about 37 trees.

26. We estimate that the proposed project will create about 87 jobs (17 for professional/technical staff and 70 for labourers), providing a total employment of about 2 883 man-months.

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[5] "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

(f) trees of 100 years old or above;

(g) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;

(h) trees of precious or rare species;

(i) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

(j) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25m.

葵盛東邨
Kwai Shing East Estate

施工區界限
Limit of Works Area

葵聯邨
Kwai Luen Estate

葵盛西邨
Kwai Shing West Estate

葵盛圍 Kwai Shing Circuit

興盛路 Hing Shing Road

興芳路 Hing Fong Road

高芳街 Ko Fong Street

葵福路 Kwai Fuk Road

索引圖 Key Plan
比例 Scale 1 : 10 000

擬建有蓋高架行人通道(約60米長)
Proposed Elevated Pedestrian Walkway with Cover (about 60m Long)

平台 Podium

青年學院（葵芳） Youth College (Kwai Fong)

附圖"1" Inset "1"
比例 Scale 1 : 1 000

擬擴闊沿葵盛圍南邊的現有行人徑至約2.75米
Proposed Widening of Existing Footpath along South Side of Kwai Shing Circuit to about 2.75m

盛興樓 Shing Hing House
盛喜樓 Shing Hei House
盛富樓 Shing Fu House
盛賢樓 Shing Yin House
盛家樓 Shing Ka House
盛樂樓 Shing Lok House
聯欣樓 Luen Yan House
聯悅樓 Luen Yuet House
聯逸樓 Luen Yat House

圖示 "B"
View "B"

葵盛遊樂場 Kwai Shing Playground
興盛路遊樂場 Hing Shing Road Playground
葵盛圍遊樂場 Kwai Shing Circuit Playground

香港專業教育學院（葵涌） Hong Kong Institute of Vocational Education (Kwai Chung)

佛教善德英文中學 Buddhist Sin Tok College

葵涌消防局 Kwai Chung Fire Station

工商管理學院 VTC School of Business and Information System

葵涌蘇浙公學 Kiangsu-Chekiang College (Kwai Chung)

現有行人樓梯
Existing Staircases

林士德體育館 Osman Ramju Sadick Memorial Sports Centre

興芳路遊樂場 Hing Fong Road Playground

榮芳街街市 Wing Fong Street Market

盛芳街休憩花園 Shing Fong Street Rest Garden

葵芳社區會堂 Kwai Fong Community Centre

圖示 "A"
View "A"

附圖 "1"
Inset "1"

葵盛西邨
Kwai Shing West Estate

葵聯路

Kwai Luen Road

民政事務總署葵盛社區會堂 Kwai Shing Community Hall, Home Affairs Department

順德聯誼總會李兆基中學 Shun Tak Fraternal Association Lee Shau Kee College

葵盛圍

樂善堂顧超文中學 Lok Sin Tong Ku Chin Man Secondary School

三水同鄉會劉本章學校 Sam Shui Natives' Association Lau Pun Cheung School

第九座 Block 9

第十座 Block 10

賽馬會葵盛圍休憩處 Jockey Club Kwai Shing Circuit Sitting-out Area

保良局葵涌綜合復康中心 Po Leung Kuk Kwai Chung Integrated Rehabilitation Centre

南葵涌賽馬會分科診療所 South Kwai Chung Jockey Club Polyclinic

中華傳道會李賢喜紀念中學 CNEC Lee I Yao Memorial Secondary School

盛福街 Shing Fuk Street

葵福路 Kwai Fuk Road

興盛路

高芳街 Ko Fong Street

路德會啟聾學校 Lutheran School for the Deaf

香港四邑商工總會陳南昌紀念學校 HKSYCNA Chan Nam Chong Memorial School

興芳路

擬向葵涌運動場方向擴闊高芳街西邊的現有行人徑至約4.5米及重置現有遊樂設施包括圍牆、花槽和行人徑等
Proposed Widening of Existing Footpath along West Side of Ko Fong Street towards Kwai Chung Sports Ground to about 4.5m and Reprovisioning of the Existing Playground Facilities including Fence Wall, Planters and Footway etc.

葵涌運動場 Kwai Chung Sports Ground

米 0 50 100 m
比例尺 SCALE BAR

圖例 Legend:

- 施工區界限 Limit of Works Area
- 擬建升降機 Proposed Lift
- 擬建有蓋高架行人通道 Proposed Elevated Pedestrian Walkway with Cover
- 擬建行人通道 Proposed Pedestrian Walkway
- 擬擴闊的現有行人徑 Proposed Widening of Existing Footpath

圖則名稱 drawing title

工務計劃項目第6175TB號 - 葵涌葵盛圍至興盛路升降機及行人通道系統

PWP Item No. 6175TB - Lift and Pedestrian Walkway System between Kwai Shing Circuit and Hing Shing Road, Kwai Chung

圖號 drawing no. HRW6175TB-SK0016

比例 scale 1 : 2 500 or As Shown

A3

路政署 HIGHWAYS DEPARTMENT

A3 297X420

.../dms02009/HRW6175TB-SK0016.dgn 08-04-2016

圖示 "A"
View "A"

圖示 "B"
View "B"

圖則名稱 drawing title

工務計劃項目第6175TB號 - 葵涌葵盛圍至興盛路升降機及行人通道系統

PWP Item No. 6175TB - Lift and Pedestrian Walkway System between Kwai Shing Circuit and Hing Shing Road, Kwai Chung

圖號 drawing no.
HRW6175TB-SK0018

路 政 署
HIGHWAYS DEPARTMENT

A3 297X420

.../dms02009/HRW6175TB-SK0018.dgn 08-04-2016

Enclosure 2 to Annex 2

175TB – Lift and pedestrian walkway system between Kwai Shing Circuit and Hing Shing Road, Kwai Chung

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2015 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($million)
(a)	Consultants' fee for contract administration (Note 2)	Professional	–	–	–	2.0
		Technical	–	–	–	0.5
					Sub-total	2.5
(a)	Resident site staff (RSS) costs (Note 3)	Professional	54	38	1.6	6.4
		Technical	338	14	1.6	13.8
					Sub-total	20.2
	Comprising -					
	(i) Consultants' fees for management of RSS				0.9	
	(ii) Remuneration of RSS				19.3	
					Total	**22.7**

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultant (as at now, MPS salary point 38 = $74,210 per month and MPS salary point 14 = $25,505 per month).

2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of the **175TB**. The construction phase of the assignment will only be executed subject to FC's approval to upgrade **175TB** to Category A.

3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Highways. The actual man-months and actual costs will be ascertained after completion of the construction works.

168TB – Lift and Pedestrian Walkway System at Waterloo Hill

PROJECT SCOPE AND NATURE

The proposed scope of works under the project includes –

(a) construction of a lift tower with two lifts of about 28 metres (m) in height at Waterloo Road;

(b) construction of an elevated walkway of about 3.5 m in clear width and about 19 m in length connecting the above lift tower to Man Fuk Road Garden; and

(c) ancillary works, including associated road, drainage, public utilities, public lighting, landscaping, electrical and mechanical (E&M) works, etc.

A layout plan and artist's impression of the proposed project are at Enclosure 1 to Annex 3.

2. Subject to the funding approval of the Finance Committee (FC) within this legislative session, the Highways Department (HyD) plans to commence the construction works in the fourth quarter of 2016 for completion in mid-2019.

JUSTIFICATION

3. At present, to travel between Waterloo Road and Man Fuk Road, the public usually take the following routes –

(a) take the staircase with some 130 steps connecting Waterloo Road and Man Fuk Road. The staircase is located adjacent to Man Fuk Road Garden (as indicated at Enclosure 1 to Annex 3);

(b) walk via Pui Ching Road and Pui Ching Road Playground to Man Fuk Road, with a walking distance of about 230 m and a gradient of about 1:10; or

(c) take green minibus.

/ 4. …..

4. Several residential buildings, schools and guesthouses are located near Man Fuk Road. This area currently has a population of about 19 300 (including about 3 700 elderly). To provide convenience for the public (especially the elderly and the disabled) to travel to and from the Waterloo Hill area, and to encourage walking instead of taking public transport, we plan to implement the project.

5. A pedestrian link with two lifts will be constructed under the proposed project so as to provide a convenient and barrier-free access between Waterloo Road and Man Fuk Road to the residents, especially the elderly and the disabled. We expect that the proposed lift and pedestrian link will attract about 10 000 pedestrian trips per day.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be $116.7 million in money-of-the-day (MOD) prices (please see paragraph 7 below), with the following breakdown–

		$ million	
(a)	Lift tower		51.4
	(i) tower structure	27.6	
	(ii) foundation	23.8	
(b)	Elevated walkway		21.7
	(i) bridge structure	13.4	
	(ii) foundation	8.3	
(c)	E&M works		8.5
	(i) lift car (2 nos.)	8.1	
	(ii) Electrical & Mechanical Services Trading Fund (EMSTF)[1]	0.4	

/ (d) …..

[1] Upon its establishment from 1 August 1996 under the Trading Fund Ordinance, the EMSTF charges government departments for design and technical consultancy services for E&M installations. The services rendered for the project include carrying out the design and site supervision on all E&M installations and providing technical advice to the Government on all E&M works and their impacts on the project.

		$ million	
(d)	Associated road, landscaping, drainage, public lighting works, etc.	6.6	
(e)	Contingencies	8.8	
	Subtotal	97.0	(in September 2015 prices)
(f)	Provision for price adjustment	19.7	
	Total	116.7	(in MOD prices)

7. Subject to funding approval, we will phase the expenditure as follows –

Year	**$ million (Sept 2015)**	**Price adjustment factor**	**$ million (MOD)**
2016 – 17	4.8	1.05775	5.1
2017 – 18	28.2	1.12122	31.6
2018 – 19	32.0	1.18849	38.0
2019 – 20	14.6	1.25980	18.4
2020 – 21	12.5	1.33539	16.7
2021 – 22	4.9	1.40549	6.9
	97.0		116.7

8. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2016 to 2022. The contract will provide for price adjustments.

9. We estimate the annual recurrent expenditure arising from the proposed project to be $1.62 million.

PUBLIC CONSULTATION

10. The Government established in 2009 a set of comprehensive, objective and transparent scoring criteria for assessing proposals for hillside escalator links and elevator systems (hereafter referred to as "hillside escalator links") to determine the priority for conducting preliminary technical feasibility studies for the 20 proposals received at that time. On this, the Government consulted the Legislative Council (LegCo) Panel on Transport in May 2009. Upon completion of the assessment, the results were reported to the LegCo Panel on Transport in February 2010. Two proposals were screened out initially, and 18 others were ranked. The Government indicated at the time that preliminary technical feasibility studies would be conducted by batches for the proposals ranked top ten in the assessment, and that the remaining proposals would be followed up after the smooth implementation of the top ten proposals. The proposed project is ranked ninth. In fact, LegCo Members had written to and met with relevant government departments on various occasions, raising their concerns about the progress of the hillside escalator links and requesting that the Government should implement the projects (especially for the areas that are densely-populated with elderly) as early as possible.

11. HyD consulted the Traffic and Transport Committee (T&TC) of the Kowloon City District Council (KCDC) on 28 March and 5 December 2013. The T&TC members supported the proposed project. KCDC members and the locals have been expecting the early implementation of the Project.

12. We gazetted the proposed project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 16 and 23 May 2014. No objection was received during the statutory period. The project was subsequently authorised under the Ordinance.

/ 13. …..

13. HyD has consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS) [2] on the aesthetic design of the lift tower and elevated walkway of the proposed project. The Committee accepted the proposed aesthetic design.

14. We consulted the LegCo Panel on Transport on 23 March 2016. Members generally supported the proposed project.

ENVIRONMENTAL IMPLICATIONS

15. The proposed project is not a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term environmental impact. HyD will control construction noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. The required expenses of implementing the environmental mitigation measures have been included in the project estimates.

16. At the planning and design stages, HyD has considered measures to reduce the generation of construction waste where possible. Such measures include optimising the alignment of the proposed project, reducing the size of the foundations of the structures and adjusting the method of construction. In addition, HyD will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) on site or in other suitable construction sites as far as possible in order to minimise the disposal of inert construction waste at public fill reception facilities[3]. HyD will also encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork, to further minimise the generation of construction waste.

/ 17. …..

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[2] ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, the Architectural Services Department, the Highways Department, the Housing Department, the Civil Engineering and Development Department, and an academic institution to be invited by the Chairman of ACABAS (such as an architectural school from a local institution), is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

[3] Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

17. At the construction stage, HyD will require the contractor to submit for the Government's approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. HyD will ensure that the day-to-day operations on site comply with the approved plan. HyD will require the contractor to separate inert construction waste from non-inert construction waste on site to facilitate their transportation to appropriate facilities for disposal. HyD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively for disposal through a trip-ticket system.

18. HyD estimates that the proposed project will generate in total 4 150 tonnes of construction waste. Of these, we will reuse 420 tonnes (10.1%) of inert construction waste on site and deliver 3 390 tonnes (81.7%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of the remaining 340 tonnes (8.2%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about $134,030 for the project (the amount is based on a unit cost of $27 per tonne for disposal at public fill reception facilities and $125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

19. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

20. The project does not require land resumption.

/ **TRAFFIC** …..

TRAFFIC IMPLICATIONS

21. Parts of the southbound slow lane of Waterloo Road will be temporarily closed during the construction stage of the project causing impact on the local traffic. HyD will implement temporary traffic arrangements (TTA) and set up a traffic management liaison group to assess the effectiveness of the TTA. This group comprises representatives of the Hong Kong Police Force, the Transport Department and other concerned government departments. HyD will specify requirements for implementing the TTA in the works contract to minimise the traffic impact during construction. HyD will also display publicity boards on site, giving details of the TTA and the anticipated completion dates of individual sections of works. In addition, HyD will set up a telephone hotline for public enquiries or complaints.

BACKGROUND INFORMATION

22. The Government announced in the 2016 Policy Address that it will strive to take forward progressively from the fourth quarter of this year the construction of three lift and pedestrian walkway systems in Tsing Yi, Kwai Chung and Kowloon City.

23. We upgraded the proposed project to Category B in September 2011, and allocated a total of about $0.5 million under block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme" for ground investigation works. HyD completed the ground investigation works in December 2013, and has completed the detailed design of the proposed project.

24. In order to make way for the proposed facilities, the proposed project will require removal of about 7 trees. All trees to be removed are not important trees[4]. HyD will incorporate planting proposals into the proposed project, including the planting of about 10 trees and about 342 shrubs.

/ 25. …..

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[4] "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

(k) trees of 100 years old or above;

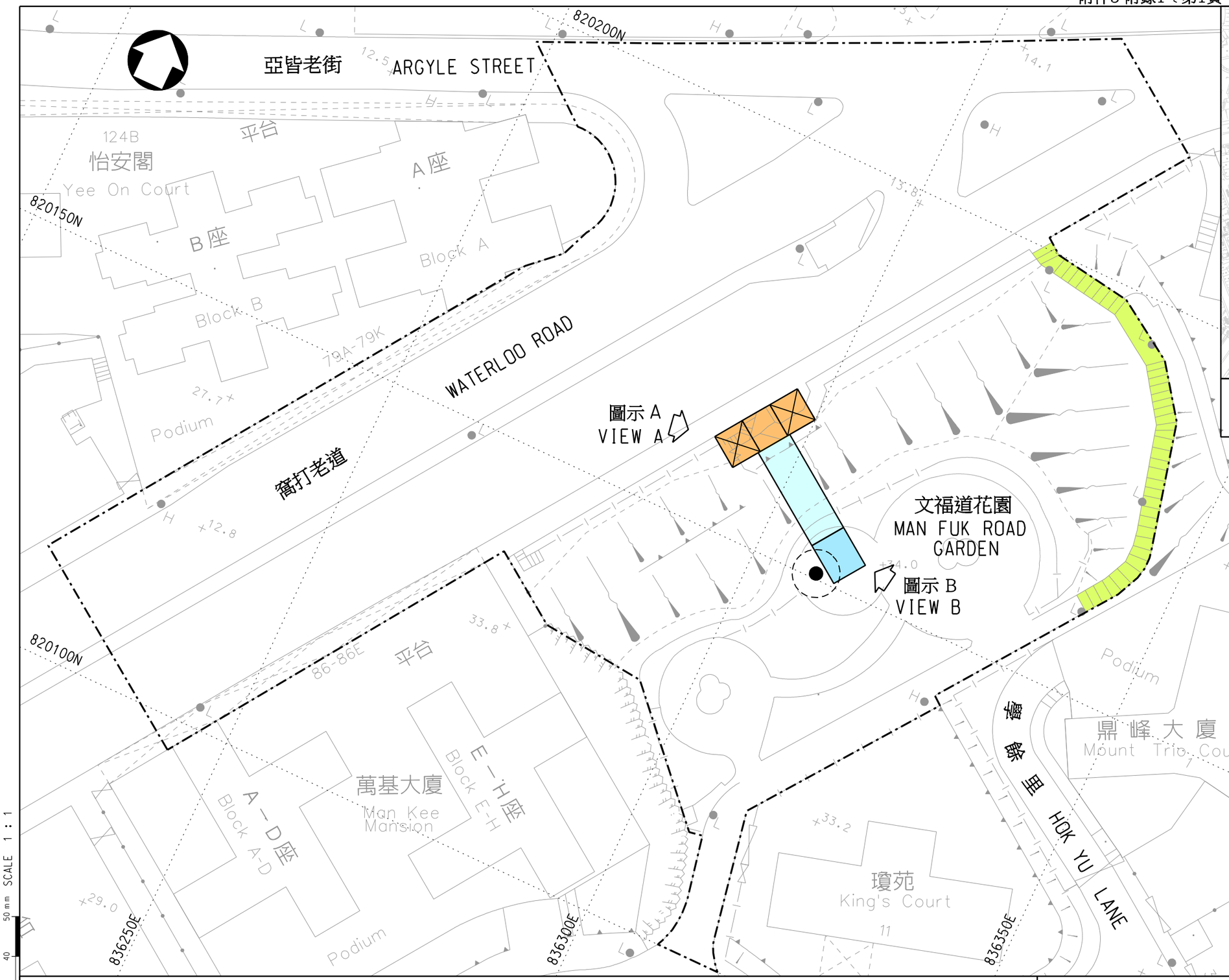
(l) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;

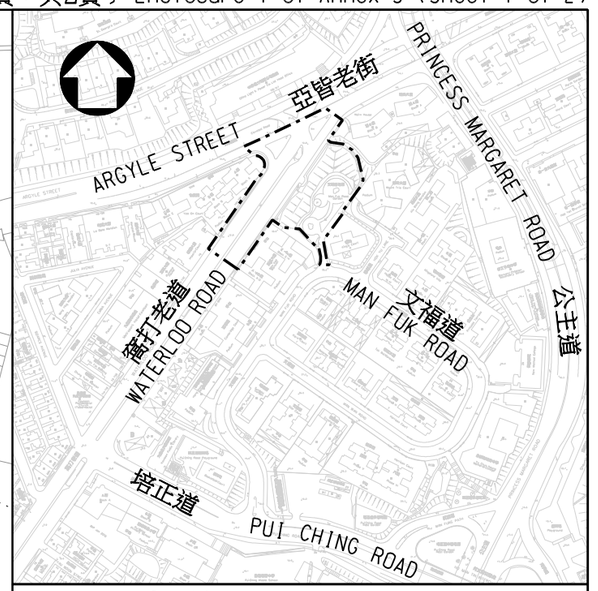
(m) trees of precious or rare species;

(n) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

(o) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25m.

25. We estimate that the proposed project will create about 56 jobs (seven for professional/technical staff and 49 for labourers), providing a total employment of about 1 525 man-months.





索引圖 KEY PLAN

比例 SCALE 1 : 5000

圖例 LEGEND :

- 施工區界限 LIMIT OF WORKS AREA
- 擬建升降機 PROPOSED LIFT
- 擬建升降機塔 PROPOSED LIFT TOWER
- 擬建有蓋高架行人道 PROPOSED ELEVATED WALKWAY WITH COVER
- 擬建行人道 PROPOSED WALKWAY
- 現有樓梯連接窩打老道和文福道花園 EXISTING STAIRWAY CONNECTING WATERLOO ROAD AND MAN FUK ROAD GARDEN
- 現有涼亭將拆除 EXISTING SHELTER TO BE DEMOLISHED

0 10 20 30 40 50 mm SCALE 1 : 1

圖則名稱 drawing title

工務計劃項目第168TB號
窩打老道山升降機及行人通道系統
- 平面圖
PWP ITEM NO. 168TB
LIFT AND PEDESTRIAN WALKWAY SYSTEM AT WATERLOO HILL
- LAYOUT PLAN

比例 scale 1 : 500 A3

圖則編號 drawing no. HWDYM105A-SP0005

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 香港政府路政署

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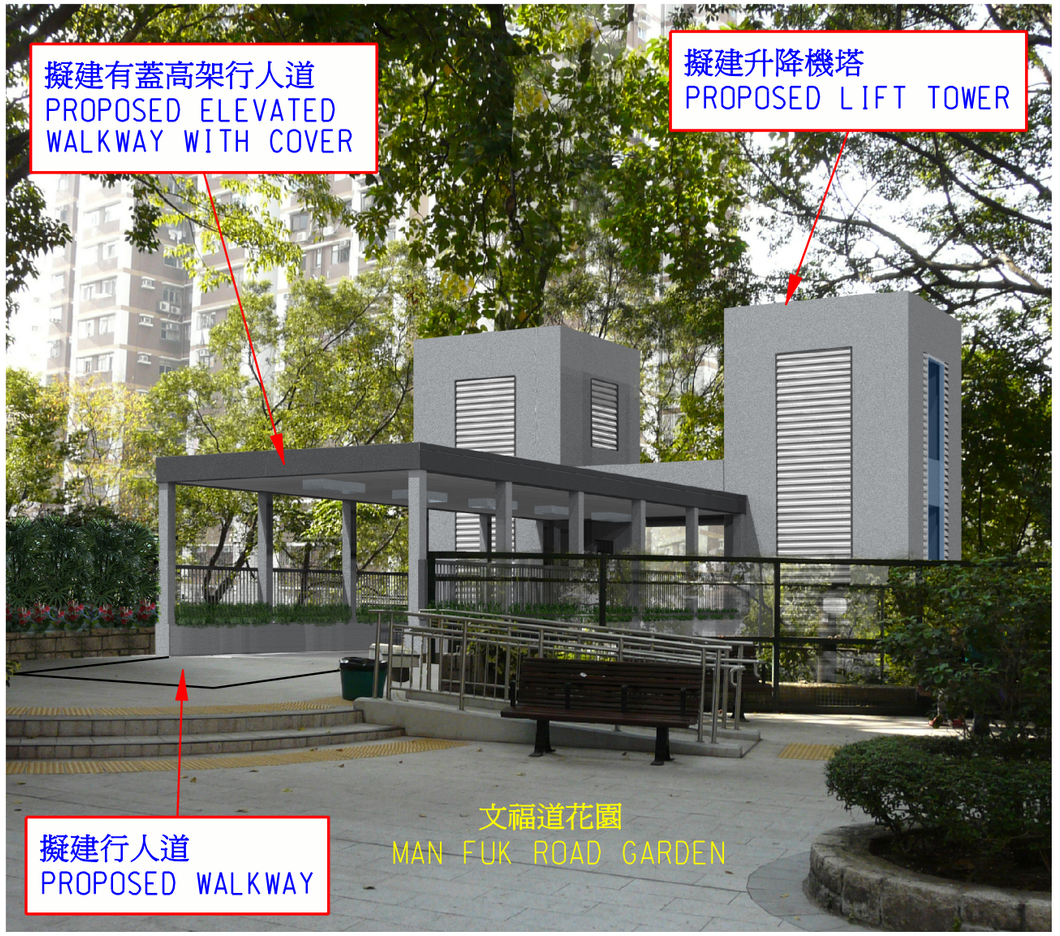
A3 420x297

圖示A
VIEW A



圖示B
VIEW B

圖則名稱 drawing title

工務計劃項目第168TB號
窩打老道山升降機及行人通道系統
- 擬建行人通道系統構思圖
PWP ITEM NO. 168TB
LIFT AND PEDESTRIAN WALKWAY SYSTEM AT WATERLOO HILL
- ARTIST'S IMPRESSION OF PROPOSED PEDESTRIAN WALKWAY SYSTEM

比例 scale A3
不適用
NA

圖則編號 drawing no.
HWDYM105A-SP0008

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 路政署 香港

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A3 420x297

0 10 20 30 40 50 mm SCALE 1 : 1

164TB – Footbridge connecting Tsuen Wan Plaza, Skyline Plaza and adjacent landscaping area

PROJECT SCOPE AND NATURE

The proposed scope of works under the project includes –

(a) construction of a covered footbridge of about 66 metres (m) in length and about 3.5 m in clear width connecting Tsuen Wan Plaza, Skyline Plaza and adjacent landscaping area;

(b) construction of a lift and covered staircase at Hoi Shing Road;

(c) reconstruction of the existing lay-by at Hoi Shing Road; and

(d) ancillary works including associated road, drainage, public utilities, public lighting, landscaping, electrical and mechanical (E&M) works, etc.

A layout plan, and artist's impression of the proposed project are at Enclosure 1 to Annex 4.

2. Subject to the funding approval of the Finance Committee (FC) within this legislative session, the Highways Department (HyD) plans to commence the construction works in the fourth quarter of 2016 for completion in end-2019.

/ JUSTIFICATION …..

JUSTIFICATION

3. There are a number of residential estates, shopping centres, commercial buildings and landscaping area in the Hoi Shing Road area. This area currently has a population of about 46 000 (including about 6 100 elderly) and a working population of about 26 000. At present, pedestrians need to walk across Hoi Shing Road and Yuen Tun Circuit to and from Tsuen Wan Plaza, Skyline Plaza and landscaping area managed by the Leisure and Cultural Services Department (LCSD). According to the survey conducted by Transport Department (TD), the flow of pedestrian crossing located at Hoi Shing Road is currently about 4 000 pedestrian trips per hour during peak hours, which is close to the design capacity of that crossing. In addition, there is no footbridge system which is directly connected to Tsuen Wan Plaza, Skyline Plaza and adjacent landscaping area managed by LCSD, hereby affecting the accessibility by pedestrians in the district.

4. The proposed footbridge is a direct and elevated passage to connect the existing pedestrian walkway system in the area, enhancing the existing local footbridge network and strengthening the connection between the northern and southern parts of the area. It can facilitate the public (especially the elderly) to commute between the northern and southern parts of Tsuen Wan, major public transport facilities and streets, hence encouraging walking instead of taking transportation.

5. The proposed footbridge can relieve the congestion at the existing pedestrian crossing at Hoi Shing Road and cater for the future pedestrian flow arising from the development project at Tsuen Wan West Station. The proposed footbridge can also alleviate the high pedestrian flow at local interchanges. Pedestrian safety can be improved as the public do not need to cross the pedestrian crossing at grade, which in turn minimise potential risks due to a shared use of the same road by both pedestrians and vehicles. After the completion of the proposed project, TD anticipates that the proposed footbridge would attract about 4 300 pedestrian trips per hour during peak hours on holidays, as well as in mornings and evenings. In addition, to facilitate the construction of the relevant facilities, HyD will relocate the lay-by at Hoi Shing Road and reconstruct the planter in the landscaping area managed by LCSD.

/ **FINANCIAL** …..

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be $146.2 million in money-of-the-day (MOD) prices (please see paragraph 7 below), broken down as follows –

		$ million		
(a)	Footbridge and covered staircase		80.1	
	(i) bridge and staircase structure	39.0		
	(ii) foundation	41.1		
(b)	Lift tower		17.0	
	(i) tower structure	3.9		
	(ii) foundation	13.1		
(c)	E&M works		3.5	
	(i) lift car (1 no.)	3.1		
	(ii) Electrical & Mechanical Services Trading Fund (EMSTF)[1]	0.4		
(d)	Associated road, landscaping, drainage, public lighting works, etc.		10.4	
(e)	Contingencies		11.0	
	Subtotal		122.0	(in September 2015 prices)
(f)	Provision for price adjustment		24.2	
	Total		146.2	(in MOD prices)

/ 7. …..

[1] Upon its establishment from 1 August 1996 under the Trading Fund Ordinance, the EMSTF charges government departments for design and technical consultancy services for E&M installations. The services rendered for the project include carrying out the design and site supervision on all E&M installations and providing technical advice to the Government on all E&M works and their impacts on the project.

7. Subject to funding approval, we will phase the expenditure as follows –

Year	$ million (Sept 2015)	Price adjustment factor	$ million (MOD)
2016 – 17	0.1	1.05775	0.1
2017 – 18	38.1	1.12122	42.7
2018 – 19	44.3	1.18849	52.7
2019 – 20	30.4	1.25980	38.3
2020 – 21	5.5	1.33539	7.3
2021 – 22	3.6	1.40549	5.1
	122.0		146.2

8. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2016 to 2022. The contract will provide for price adjustments.

9. We estimate the annual recurrent expenditure arising from the proposed project to be $0.47 million.

PUBLIC CONSULTATION

10. HyD consulted the Tsuen Wan District Council (TWDC) on 8 May 2007 and the Traffic and Transport Committee of TWDC on 6 July 2015. TWDC and the Committee supported the implementation of the proposed project.

11. We gazetted the proposed project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 23 and 30 October 2015. No objection was received during the statutory period. The project was subsequently authorised under the Ordinance.

/ 12. …..

12. HyD has consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)[2] on the aesthetic design of the footbridge, covered staircase and lift tower of the proposed project. The Committee accepted the proposed aesthetic design.

13. We consulted the Legislative Council Panel on Transport on 23 March 2016. Members generally supported the proposed project.

ENVIRONMENTAL IMPLICATIONS

14. The proposed project is not a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term environmental impact. During construction, HyD will control construction noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. The required expenses of implementing the environmental mitigation measures have been included in the project estimates.

15. At the planning and design stages, HyD has considered measures to reduce the generation of construction waste where possible. Such measures include optimising the alignment of the Project, reducing the size of the foundations of the structures and adjusting the method of construction. In addition, HyD will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities[3]. HyD will also encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork, to further minimise the generation of construction waste.

/ 16. …..

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[2] ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, the Architectural Services Department, the Highways Department, the Housing Department, the Civil Engineering and Development Department, and an academic institution to be invited by the Chairman of ACABAS (such as an architectural school from a local institution), is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

[3] Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

16. At the construction stage, HyD will require the contractor to submit for the Government's approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. HyD will ensure that the day-to-day operations on site comply with the approved plan. HyD will require the contractor to separate inert construction waste from non-inert construction waste on site to facilitate their transportation to appropriate facilities for disposal. HyD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively for disposal through a trip-ticket system.

17. HyD estimates that the proposed project will generate in total 2 350 tonnes of construction waste. Of these, we will reuse 448 tonnes (19.1%) of inert construction waste on site and deliver 1 880 tonnes (80.0%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of the remaining 22 tonnes (0.9%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about $53,510 for the project (the amount is based on a unit cost of $27 per tonne for disposal at public fill reception facilities and $125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

18. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

19. The project does not require any land acquisition.

/ 20. …..

TRAFFIC IMPLICATIONS

20. The project will not cause any significant traffic impact during construction. HyD will implement temporary traffic arrangements (TTA) when temporary lane closure is required to facilitate the implementation of the relevant works. HyD will also set up a traffic management liaison group comprising representatives of the Hong Kong Police Force, TD and other concerned government departments to assess the effectiveness of TTA. HyD will specify requirements for implementing the TTA in the works contract to minimise the traffic impact during construction. HyD will also display publicity boards on site, giving details of the TTA and the anticipated completion dates of individual sections of works. In addition, HyD will set up a telephone hotline for public enquiries or complaints.

BACKGROUND INFORMATION

21. We upgraded the proposed project to Category B in September 2009, and allocated a total of about $0.38 million under block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme" for ground investigation works. HyD has completed the ground investigation works in January 2016, and has substantially completed the detailed design of the proposed project.

22. There are about 30 trees within the project boundary and there are no old and valuable trees. To make way for the proposed facilities, the proposed project will require removal of 29 trees, including 20 trees to be felled and 9 trees to be transplanted. All trees to be removed are not important trees[4]. HyD will incorporate planting proposals into the Project, including the planting of about 20 trees and about 1 500 shrubs.

23. We estimate that the proposed project will create about 65 jobs (eight for professional / technical staff and 57 for labourers), providing a total employment of about 1 762 man-months.

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[4] "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

(p) trees of 100 years old or above;

(q) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;

(r) trees of precious or rare species;

(s) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

(t) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25m.

現有海盛路之行人過路處
EXISTING PEDESTRIAN CROSSING AT HOI SHING ROAD

荃灣廣場
TSUEN WAN PLAZA

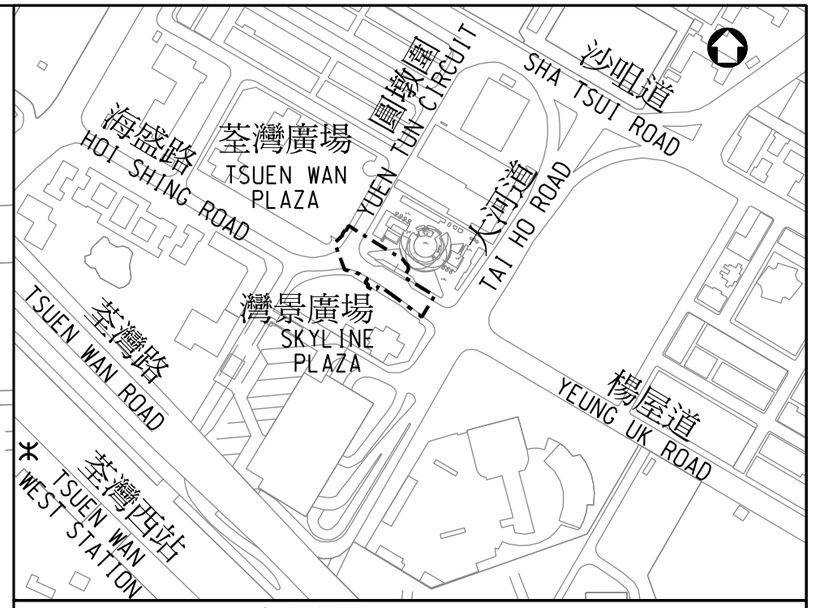
灣景廣場
SKYLINE PLAZA

圓墩圍 YUEN TUN CIRCUIT

圖示 A
VIEW A

海盛路 HOI SHING ROAD

康樂及文化事務署
環境美化地帶
LEISURE AND CULTURAL SERVICES DEPARTMENT'S LANDSCAPING AREA



索引圖 KEY PLAN

比例 SCALE 1 : 5000

圖例 LEGEND

- 施工區界限 LIMIT OF WORKS AREA
- 擬建升降機 PROPOSED LIFT
- 擬建樓梯 PROPOSED STAIRCASE
- 擬建行人天橋 PROPOSED FOOTBRIDGE
- 擬重建花槽 PROPOSED RECONSTRUCTED PLANTER
- 擬重置停車處 PROPOSED RELOCATED LAY-BY
- 現有花槽 EXISTING PLANTER
- 現有停車處 EXISTING LAY-BY

50 mm SCALE 1 : 1

0 10 20 30 40 50 mm SCALE 1 : 1

圖則名稱 drawing title

工務計劃項目第164TB號
連接荃灣廣場、灣景廣場及毗鄰環境美化地帶之行人天橋 - 平面圖

PWP ITEM NO. 164TB
FOOTBRIDGE CONNECTING TSUEN WAN PLAZA, SKYLINE PLAZA AND ADJACENT LANDSCAPING AREA - LAYOUT PLAN

比例 scale A3
1 : 500
或如圖示
OR AS SHOWN

圖則編號 drawing no.
HWDTW061A-SP0001

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 路政署

\STO_1\TW061A\HWDTW061A-SP0001.dgn

A3 420x297

圖示 A
VIEW A

0 10 20 30 40 50 mm SCALE 1 : 1

圖則名稱 drawing title

工務計劃項目第164TB號
連接荃灣廣場、灣景廣場及毗鄰環境美化地帶之行人天橋
- 擬建行人天橋構思圖
PWP ITEM NO. 164TB
FOOTBRIDGE CONNECTING TSUEN WAN PLAZA, SKYLINE PLAZA AND ADJACENT LANDSCAPING AREA
- ARTIST'S IMPRESSION OF PROPOSED FOOTBRIDGE

比例 scale A3
不適用 NA

圖則編號 drawing no.
HWDTW061A-SP0002

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 路政署

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A3 420x297

158TB – Elevated walkway between Tong Ming Street and Tong Tak Street, Tseung Kwan O

PROJECT SCOPE AND NATURE

The proposed scope of works under the project includes—

(a) construction of an elevated walkway of about 180 metres (m) in length and about 5 m in clear width, connecting the existing footbridge across Tong Ming Street to the shopping mall above Tseung Kwan O (TKO) MTR Station;

(b) construction of a lift at the end of the proposed elevated walkway near Tong Tak Street;

(c) reconstruction and expansion of the existing cycle parking area; and

(d) ancillary works, including associated road, drainage, public utilities, public lighting, landscaping, electrical and mechanical (E&M) works, etc.

——— A layout plan and artist's impression of the proposed project are at Enclosure 1 to Annex 5.

2. Subject to the funding approval of the Finance Committee within this legislative session, the Highways Department (HyD) plans to commence the construction works in the fourth quarter of 2016 for completion in mid-2019.

JUSTIFICATION

3. At present, residents of Sheung Tak Estate, Kwong Ming Court and Po Ming Court, as well as students of the nearby schools who wish to access to TKO MTR Station mainly use the at-grade signalized crossing facilities at Tong Chun Street to cross Tong Ming Street and Tong Tak Street. According to the survey conducted by Transport Department (TD), there are about 8 500 pedestrian trips per hour cross Tong Ming Street at the junction of Tong Chun Street in morning peak hours. In view of heavy pedestrian flow at that junction, TD has extended the duration of the pedestrian traffic lights and implemented arrangements to restrict vehicles from turning at that junction. However, these measures are insufficient to address the capacity issue of the pedestrian crossing at Tong Ming Street.

/ 4. …..

4. The area (including Sheung Tak Estate, Kwong Ming Court, Po Ming Court and the development projects in TKO South) has a population of about 92 000 (including about 9 900 elderly and about 17 000 students) and a working population of about 14 000. The proposed elevated walkway forms part of the integrated grade-separated pedestrian walkway system in TKO. This elevated walkway will connect the aforementioned residential areas, schools and shopping centres with TKO MTR Station and public transport interchange. The proposed elevated walkway will provide a comfortable and convenient access for residents (especially the elderly) of TKO town centre.

5. The proposed elevated walkway can divert existing pedestrian flow from the at-grade road-crossing facilities at the junction of Tong Ming Street and Tong Chun Street, relieve congestion and enhance road safety. After completion of the proposed project, TD anticipates that about 3 000 pedestrian trips per hour in morning peak hours. Besides, the reconstruction and expansion of cycle parking area will be implemented under the proposed project in order to increase the numbers of cycle parking spaces for use by the residents of the area.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be $221.6 million in money-of-the-day (MOD) prices (please see paragraph 7 below), broken down as follows –

		$ million	
(a)	Elevated walkway		139.6
	(i) bridge structure	46.7	
	(ii) foundation	92.9	
(b)	Lift tower		15.7
	(i) tower structure	6.2	
	(ii) foundation	9.5	

/ (c) …..

		$ million	
(c)	E&M works	3.7	
	(i) lift car (1 no.)	3.3	
	(ii) Electrical & Mechanical Services Trading Fund (EMSTF)[1]	0.4	
(d)	Associated road, landscaping, drainage, public lighting works, etc.	7.1	
(e)	Contingencies	16.6	
	Subtotal	182.7	(in September 2015 prices)
(k)	Provision for price adjustment	38.9	
	Total	221.6	(in MOD prices)

7. Subject to funding approval, we will phase the expenditure as follows –

Year	**$ million (Sept 2015)**	**Price adjustment factor**	**$ million (MOD)**
2016 – 17	5.5	1.05775	5.8
2017 – 18	49.3	1.12122	55.3
2018 – 19	56.6	1.18849	67.3
2019 – 20	34.7	1.25980	43.7
2020 – 21	27.4	1.33539	36.6
2021 – 22	9.2	1.40549	12.9
	182.7		221.6

/ 8. …..

[1] Upon its establishment from 1 August 1996 under the Trading Fund Ordinance, the EMSTF charges government departments for design and technical consultancy services for E&M installations. The services rendered for the project include carrying out the design and site supervision on all E&M installations and providing technical advice to the Government on all E&M works and their impacts on the project.

8. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2016 to 2022. The contract will provide for price adjustments.

9. We estimate the annual recurrent expenditure arising from the proposed project to be $0.7 million.

PUBLIC CONSULTATION

10. HyD consulted the Traffic and Transport Committee (T&TC) of the Sai Kung District Council (SKDC) on 31 July 2008. T&TC expressed its support to the implementation of the proposed project. Subsequently, the SKDC has repeatedly requested for the early implementation of the project.

11. We gazetted the proposed project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 24 and 30 April 2009. During the statutory period, one objection was received. The concerns were mainly related to the necessity of the proposed project, the utilisation rate of the elevated walkway and the impact on the safety of students of schools nearby. In response to the issues raised in the objection, HyD amended the design of the elevated walkway.

12. Having considered the unresolved objection and the amendments by HyD, the Chief Executive-in-Council authorised the implementation of the proposed project under the Ordinance in March 2010.

13. HyD has consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)[2] on the aesthetic design of the elevated walkway and the lift tower of the proposed project. The Committee accepted the proposed aesthetic design.

/ 14. …..

[2] ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, the Architectural Services Department, the Highways Department, the Housing Department, the Civil Engineering and Development Department, and an academic institution to be invited by the Chairman of ACABAS (such as an architectural school from a local institution), is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

14. We consulted the Legislative Council Panel on Transport on 23 March 2016. Members generally supported the proposed project.

ENVIRONMENTAL IMPLICATIONS

15. The proposed project is not a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term environmental impact. During construction, HyD will control construction noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. The required expenses of implementing the environmental mitigation measures have been included in the project estimates.

16. At the planning and design stages, HyD has considered measures to reduce the generation of construction waste where possible. Such measures include optimising the alignment of the proposed project, reducing the size of the foundations of the structures and adjusting the method of construction. In addition, HyD will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities[3]. HyD will also encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork, to further minimise the generation of construction waste.

17. At the construction stage, HyD will require the contractor to submit for the Government's approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. HyD will ensure that the day-to-day operations on site comply with the approved plan. HyD will require the contractor to separate inert construction waste from non-inert construction waste on site to facilitate their transportation to appropriate facilities for disposal. HyD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively for disposal through a trip-ticket system.

/ 18. …..

[3] Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

18. HyD estimates that the proposed project will generate in total 3 876 tonnes of construction waste. Of these, we will reuse 906 tonnes (23.4%) of inert construction waste on site and deliver 2 955 tonnes (76.2%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of the remaining 15 tonnes (0.4%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about $81,660 for the project (the amount is based on a unit cost of $27 per tonne for disposal at public fill reception facilities and $125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

19. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

20. The project does not require any land acquisition.

TRAFFIC IMPLICATIONS

21. The project will not cause any significant traffic impact during construction. HyD will implement temporary traffic arrangements (TTA) when temporary lane closure is required to facilitate the implementation of the relevant works. HyD will also set up a traffic management liaison group comprising representatives of the Hong Kong Police Force, TD and other concerned government departments to assess the effectiveness of TTA. HyD will specify requirements for implementing the TTA in the works contract to minimise the traffic impact during construction. HyD will also display publicity boards on site, giving details of the TTA and the anticipated completion dates of individual sections of works. In addition, HyD will set up a telephone hotline for public enquiries or complaints.

/ **BACKGROUND** …..

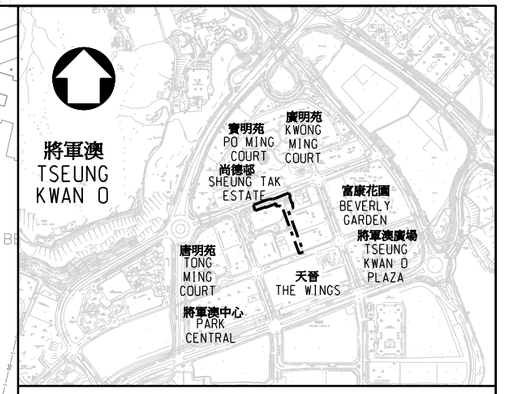
BACKGROUND INFORMATION

22. We upgraded the proposed project to Category B in March 2006, and allocated a total of about $0.53 million under block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme" for ground investigation works. HyD has completed the ground investigation works in November 2006, and has completed the detailed design of the proposed project.

23. The proposed project does not require tree removal. HyD will incorporate planting proposals into the proposed project, including the planting of about 6 trees and 6 150 shrubs.

24. We estimate that the proposed project will create about 105 jobs (14 for professional/technical staff and 91 for labourers), providing a total employment of about 2 840 man-months.

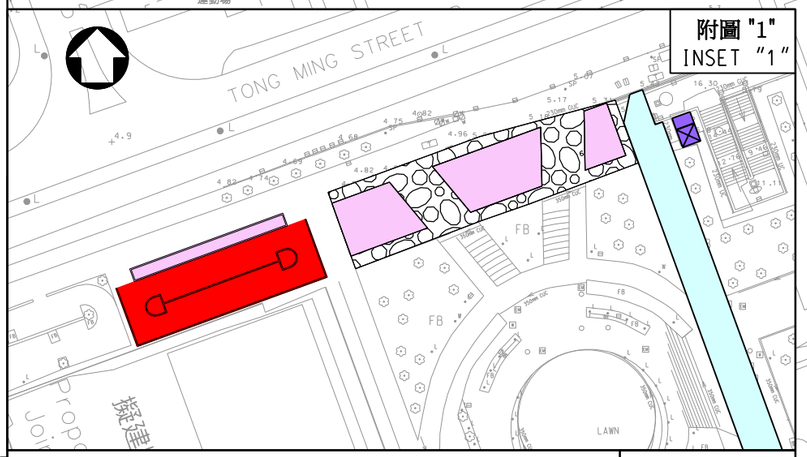
尚德邨 SHEUNG TAK ESTATE
尚德商場 SHEUNG TAK SHOPPING CENTRE
唐明街 TONG MING STREET
尚智樓 SHEUNG CHI HOUSE
尚信樓 SHEUNG SHUN HOUSE
尚明樓 SHEUNG MING HOUSE
附圖 "1" INSET "1"
圖示 A VIEW A
唐明街休憩處 TONG MING STREET SITTING-OUT AREA
唐明街公園 TONG MING STREET PARK
興建中之科大及浸大學生宿舍 THE JOINT STUDENT HOSTEL FOR SHARED USE BY HKUST AND HKBU UNDER CONSTRUCTION
唐賢街 TONG YIN STREET
唐賢里 TONG YIN LANE
唐俊街 TONG CHUN STREET
富康花園 FU HONG GARDEN
佛教志蓮小學 CHI LIN BUDDISH PRIMARY SCHOOL
仁愛堂田家炳小學 YAN OI TONG TIN KA PING PRIMARY SCHOOL
基督教宣道會宣基中學 C & MA SUN KEI SECONDARY SCHOOL
仁濟醫院王華湘中學 YAN CHAI HOSPITAL WONG WHA SAN SECONDARY SCHOOL
5米淨闊 5m CLEAR WIDE
約180米長 APPROX. 180m LONG
唐德街 TONG TAK STREET
港鐵將軍澳站及公共交通交匯處 TSEUNG KWAN O MTR STATION AND PUBLIC TRANSPORT INTERCHANGE
君傲灣 THE GRANDIOSE
天晉 THE WINGS
鄧肇堅醫院王華湘中學 TANG YING HEI COLLEGE



索引圖 KEY PLAN
比例 SCALE 1 : 20 000

圖例 LEGEND :

- 施工區界限 LIMIT OF WORKS AREA
- 擬建升降機 PROPOSED LIFT
- 擬建高架行人道 PROPOSED ELEVATED WALKWAY
- 擬建的花圃 PROPOSED PLANTER
- 擬重建 / 擴建的現有單車停泊處 PROPOSED RECONSTRUCTION/ EXPANSION OF CYCLE PARKING AREA
- 現有橫跨唐明街的行人天橋 EXISTING FOOTBRIDGE ACROSS TONG MING STREET
- 現有橫跨唐德街並通往港鐵將軍澳站上蓋商場的園景平台 EXISTING LANDSCAPE DECK ACROSS TONG TAK STREET CONNECTING TO THE SHOPPING CENTRE ON TOP OF TSEUNG KWAN O MTR STATION
- 現正在興建中的連接現有行人天橋的升降機 (由土木工程拓展署執行) LIFT CONNECTING TO EXISTING FOOTBRIDGE UNDER CONSTRUCTION (BY CEDD)
- 將被拆卸的現有行人天橋斜路 (由土木工程拓展署執行) EXISTING FOOTBRIDGE RAMP TO BE DEMOLISHED (BY CEDD)
- 現有行人天橋斜路底的園景地帶將改建為行人路 (由土木工程拓展署執行) EXISTING LANDSCAPE AREA UNDERNEATH FOOTBRIDGE RAMP TO BE CONVERTED TO FOOTPATH (BY CEDD)



現有行人天橋斜路拆卸後之擬建地面設施
PROPOSED ANCILLARY WORKS AT GROUND LEVEL AFTER DEMOLITION OF EXISTING FOOTBRIDGE RAMP

比例 : 示意
SCALE : DIAGRAMMATIC

0 10 20 30 40 50 mm SCALE 1 : 1

圖則名稱 drawing title

工務計劃項目第158TB號
將軍澳唐明街與唐德街之間的高架行人道
- 平面圖

PWP ITEM NO. 158TB
ELEVATED WALKWAY BETWEEN TONG MING STREET AND TONG TAK STREET, TSEUNG KWAN O
- LAYOUT PLAN

比例 scale A3
1 : 1500

圖則編號 drawing no.
HWDSK055D-SP0002

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 香港路政署

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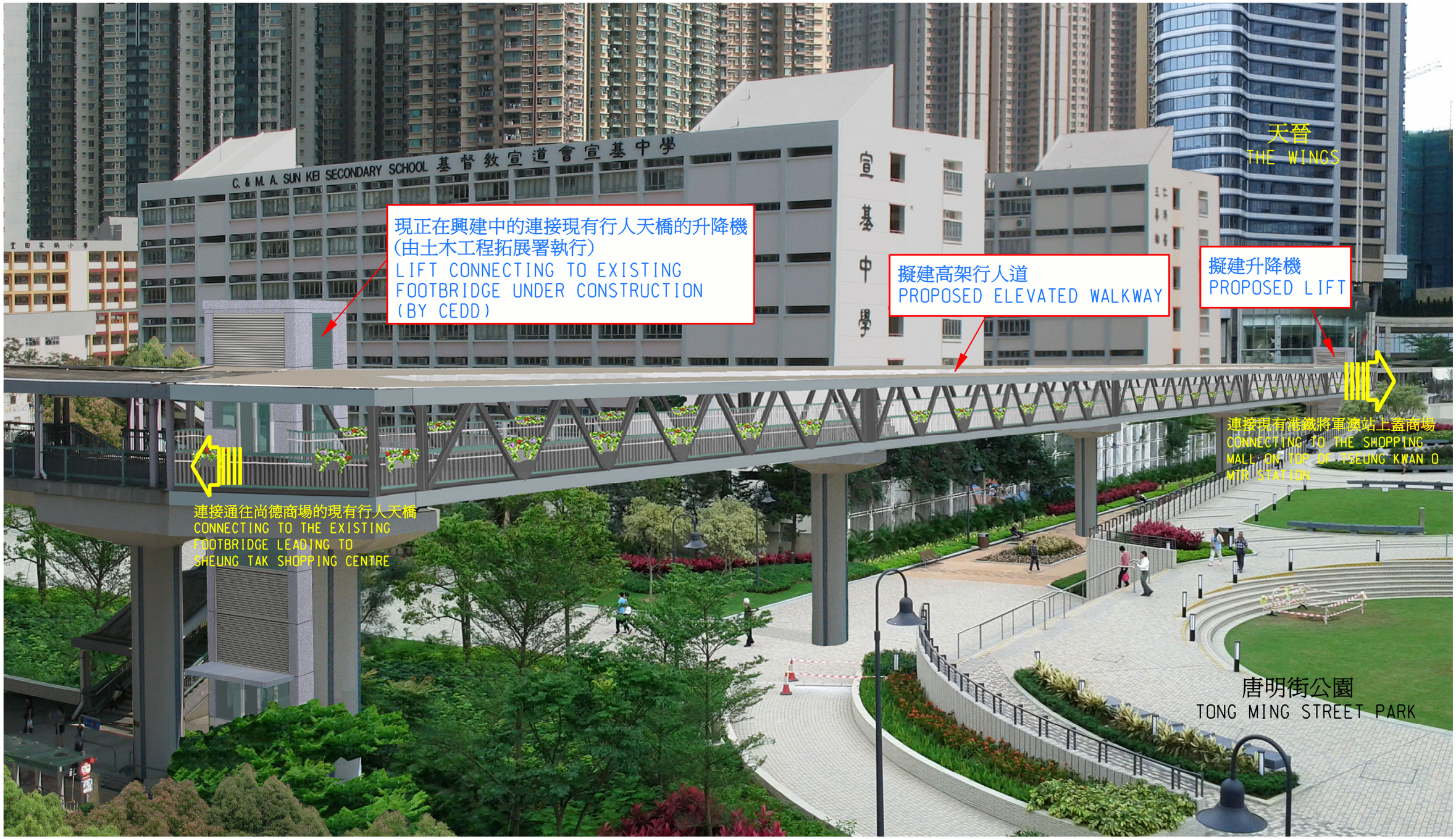
A3 420x297



圖示A
VIEW A

50 mm SCALE 1 : 1

圖則名稱 drawing title

工務計劃項目第158TB號
將軍澳唐明街與唐德街之間的高架行人道
- 擬建高架行人道構思圖

PWP ITEM NO. 158TB
ELEVATED WALKWAY BETWEEN TONG MING STREET AND TONG TAK STREET, TSEUNG KWAN O
- ARTIST'S IMPRESSION OF PROPOSED ELEVATED WALKWAY

比例 scale A3
不適用
NA

圖則編號 drawing no.
HWDSK055D-SP0003

辦事處 office
工 程 部
WORKS DIVISION

HIGHWAYS DEPARTMENT HONG KONG 香港路政署

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A3 420x297

0 10 20 30 40 50 mm SCALE 1 : 1