

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

Transport – Footbridges/pedestrian tunnels

163TB – Kwun Tong Town Centre redevelopment – provision of grade-separated pedestrian linkages

Members are invited to recommend to the Finance Committee the upgrading of part of **163TB**, entitled “Kwun Tong Town Centre redevelopment – provision of grade-separated pedestrian linkages (footbridge across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street)”, to Category A at an estimated cost of \$153.5 million in money-of-the-day prices.

PROBLEM

We need to construct the footbridge across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street as part of the public road network to improve the overall pedestrian flow and connectivity of the new town centre area in Kwun Tong with its neighbourhood.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **163TB** to Category A, at an estimated cost of \$153.5 million in money-of-the-day (MOD) prices, for the construction of the footbridge across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street.

/PROJECT

PROJECT SCOPE AND NATURE

3. The part of **163TB** which we propose to upgrade to Category A (the proposed footbridge) comprises –

- (a) construction of a 4 to 6-metre wide footbridge, with an about 39-metre long curved main deck, and two arms of about 6 and 13-metre long respectively;
- (b) construction of a lift and a staircase; and
- (c) ancillary works including footpath construction, drainage and utilities works, landscaping works, and related electrical and mechanical works.

—— A plan showing the proposed works is at Enclosure 1.

4. Subject to the approval of the Finance Committee (FC), we plan to commence the proposed works in the fourth quarter of 2018 for completion in the fourth quarter of 2022.

JUSTIFICATION

5. In March 2007, the Urban Renewal Authority (URA) commenced the Kwun Tong Town Centre (KTTC) Redevelopment Project, which would holistically regenerate the whole town centre of Kwun Tong and provide a better living environment and new community facilities for the local community. The KTTC Redevelopment Project comprises the Yuet Wah Street Site located at the junction of Yuet Wah Street and Hip Wo Street, and the Main Site bounded by Mut Wah Street to the north, Hip Wo Street to the east, Kwun Tong Road to the south and Hong Ning Road to the west. During public consultation exercises conducted by URA for the KTTC Redevelopment Project, there were repeated requests for Government to take the opportunity to improve the pedestrian access of the whole district and to provide additional pedestrian linkages with a view to improving access by existing residents of the Kwun Tong district to the new town centre area and the community facilities therein.

/6.

6. In order to enhance the connectivity of the new town area in Kwun Tong and to improve traffic circulation in the area, we informed the Panel on Development on 27 November 2012 that we had planned public infrastructure works with a view to constructing three grade-separated pedestrian linkages¹ under **163TB** in phases to tie in with the programme of the KTTC Redevelopment Project. The first phase of the project, the Yuet Wah Street Pedestrian Linkage, was completed and opened for public use in October 2015.

7. For the second phase of the project, it was originally planned to provide a standalone footbridge connecting Hip Wo Street with Mut Wah Street. Subsequently, the “New Links • New Kwun Tong Design Ideas Competition” was jointly organised by Government and the URA in September 2009. The winning design, which proposed linking up the proposed footbridge with another footbridge to be provided by the URA between the Yuet Wah Street Site (presently the Park Metropolitan) and the Main Site of the KTTC Redevelopment Project to form an integrated footbridge system for enhanced connectivity, was adopted. The design capacity of the proposed footbridge will be able to cope with the estimated peak 2-way pedestrian flow in 2026 of about 1 900 pedestrians per hour.

8. The proposed footbridge will bring the following benefits to the Kwun Tong community –

- (a) as the proposed footbridge will be connected with a pedestrian link which is situated at the podium of the Park Metropolitan and is open to the public 24 hours a day, it will enhance the connectivity between Yuet Wah Street, Hip Wo Street, Mut Wah Street and the neighbouring areas;

/(b)

¹ The three grade-separated pedestrian linkages under **163TB** comprise (i) the Yuet Wah Street Pedestrian Linkage, (ii) the footbridge system across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street, and (iii) a subway across Hong Ning Road at the junction with Ngau Tau Kok Road (to be pursued as the last phase of the project at a later stage to tie in with the development programme of the Main Site of the KTTC redevelopment).

- (b) it will provide the Kwun Tong community with a more convenient access to the Kwun Tong Community Health Centre Building (Government, Institution and Community facilities situated at the podium of the Park Metropolitan). In particular, the proposed footbridge system will provide a barrier-free and grade-separated access for elderly, disabled and other users of the General Out-patient Clinic, Maternal and Child Health Centre, and Occupational Health Clinic facilities at the Kwun Tong Community Health Centre Building; and
- (c) the new footbridge would help divert part of the pedestrians using the existing at-grade crossings and accommodate the increase in pedestrian flow in the area in particular when the new town centre is taking shape.

FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the proposed works to be \$153.5 million in MOD prices (please see paragraph 11 below), broken down as follows –

| | \$ million (in MOD prices) |
|---|---------------------------------------|
| (a) Footbridge – | 87.7 |
| (i) deck and columns | 71.5 |
| (ii) foundation | 16.2 |
| (b) Lift and staircase | 12.4 |
| (c) Ancillary works including footpath construction, drainage and utilities works, landscaping works, and related electrical and mechanical works | 15.9 |
| (d) Associated environmental mitigation measures for items (a) to (c) | 2.5 |

/\$ million

| | | \$ million (in MOD prices) |
|-------|--|---------------------------------------|
| (e) | Consultants' fees for | 1.1 |
| | (i) contract administration | 0.7 |
| | (ii) management of resident site staff (RSS) | 0.4 |
| (f) | Remuneration of RSS | 19.1 |
| (g) | Contingencies | 14.8 |
| Total | | 153.5 |

10. A breakdown of the estimate for the consultants' fees and RSS costs by man-months is at Enclosure 2.

11. Subject to funding approval, we plan to phase the expenditure as follows –

| Year | \$ million (MOD) |
|-------------|-----------------------------|
| 2018 – 2019 | 3.9 |
| 2019 – 2020 | 30.6 |
| 2020 – 2021 | 46.5 |
| 2021 – 2022 | 43.4 |
| 2022 – 2023 | 12.1 |
| 2023 – 2024 | 12.1 |
| 2024 – 2025 | 3.3 |
| 2025 – 2026 | 1.6 |
| 153.5 | |

12. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2018 to 2026. Subject to funding approval, we will deliver the works under standard re-measurement contract because the quantities of works will vary depending on actual ground conditions. The contract will provide for price adjustments.

13. We estimate the annual recurrent expenditure arising from the proposed works to be about \$1.6 million.

PUBLIC CONSULTATION

14. On 3 September 2013, we consulted the Kwun Tong District Council on the proposed footbridge. Members supported the implementation of the proposed works.

15. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 22 April 2016 and received four objections. The objectors expressed concerns about the arrangement for the existing pedestrian crossing, residual space along the footpath concerned, lift tower location and footprint, and disruption during construction. Upon receipt of the objections, we carefully studied the objectors' concerns and alternative proposals. We considered that the present design was an optimal one having due regard to the existing pedestrian crossing, footpath space and lift tower design. We explained to the objectors that appropriate mitigation measures to minimise environmental nuisance and inconvenience would be implemented during construction. On 25 April 2017, the Chief Executive-in-Council authorised the scheme without modification. The authorisation notice was gazetted on 9 June 2017.

16. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)² on the aesthetic appearance of the proposed works on 21 November 2017. The ACABAS accepted the design in principle.

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² ACABAS is responsible for vetting the design of bridges and other structures associated with the highway system, from the aesthetic and visual impact points of view. It comprises representatives of the Hong Kong Institute of Architects, Hong Kong Institute of Engineers, Hong Kong Institute of Planners, academic institutions, Architectural Services Department, Highways Department, Housing Department, and Civil Engineering and Development Department.

17. We consulted the Legislative Council Panel on Development on 20 December 2017 on the proposed works. While some Members raised issues about the costing and design of the footbridge, some Members gave explicit support for the proposed works.

ENVIRONMENTAL IMPLICATIONS

18. The proposed footbridge is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environmental Review (PER) for the proposed footbridge in May 2017. The PER concluded, as agreed by the Director of Environmental Protection, that the proposed footbridge would not cause long-term adverse environmental impacts. We included in the project estimate the cost to implement suitable mitigation measures during construction to control short-term environmental impacts.

19. For short-term impacts caused by the proposed footbridge during construction, we will control dust, noise and site run-off nuisances to within established standards and guidelines through implementation of mitigation measures in the works contract. These measures include frequent watering of the site and provision of wheel-washing facilities to reduce emission of fugitive dust, use of movable noise barriers or enclosures and silenced plant to reduce noise generation, and installation of temporary drains to discharge site run-off.

20. At the planning and design stages, we have considered various options with different alignments, design level and construction methods of the proposed works to reduce generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil) 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 facilities³. We will encourage the contractor to maximise the use of recycled and recyclable inert construction waste and the use of non-timber formwork to further reduce the generation of construction waste.

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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 licence issued by the Director of Civil Engineering and Development.

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

22. We estimate that the project will generate in total about 34.5 tonnes of construction waste. Of these, we will reuse about 11.7 tonnes (34%) of inert construction waste on site and deliver about 13.9 tonnes (40%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining about 8.9 tonnes (26%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about \$2,800 for this project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities, and \$200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap.354N)).

HERITAGE IMPLICATIONS

23. The proposed works will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites and buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

TRAFFIC IMPLICATIONS

24. We completed a traffic impact assessment (TIA) for the proposed works. The TIA concluded that the proposed works would not cause any significant traffic impact on the surrounding areas during construction and upon completion. Temporary traffic arrangements will be implemented to facilitate construction works requiring temporary road closure. We will display publicity boards on site giving details of the temporary traffic arrangements, and the anticipated completion dates of individual section of works. In addition, we will set up a telephone hotline to respond to public enquiries or complaints.

/LAND

LAND ACQUISITION

25. The proposed works do not require land resumption and clearance, but creation of easements and other permanent rights⁴ in about seven square metres of private land are required.

BACKGROUND INFORMATION

26. When submitting the draft KTTC Development Scheme Plan for the Town Planning Board's consideration in April 2007, URA conducted a preliminary connectivity study with a view to enhancing the pedestrian network and linkages to the neighbouring areas. Further to the preliminary connectivity study, URA also conducted a preliminary engineering feasibility study which recommended that the Government should build three grade-separated pedestrian facilities during the KTTC Redevelopment, including the proposed footbridge, to enhance the connectivity of the KTTC with the adjoining neighbourhood. The Government decided to take forward the construction of the three grade-separated pedestrian facilities under PWP Item No. **163TB**.

27. In December 2008, we upgraded **163TB** to Category B.

28. Following the winning design of the open competition conducted in September 2009, we engaged consultants in June 2010 to undertake the detailed design of the proposed footbridge and the Yuet Wah Street Pedestrian Linkage at an estimated cost of about \$1.9 million under the block allocation Subhead **7100CX** "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme".

29. In March 2013, we part-upgraded **163TB** to Category A for the construction of the Yuet Wah Street Pedestrian Linkage.

30. We will pursue the subway across Hong Ning Road at the junction with Ngau Tau Kok Road as the last phase of the project at a later stage to tie in with the development programme of the Main Site of the KTTC Redevelopment.

/31.

⁴ They are provided for the Government to have the right to enter, occupy or remain in the land for the purpose of carrying out the works including necessary management, maintenance and repairs.

31. The proposed works will involve felling of one tree. The tree to be felled is not an important tree⁵. We will incorporate planting proposals as part of the project, including a total of one tree and 34 shrubs.

32. We estimate that the proposed works will create about 50 jobs (40 for labourers and another 10 for professional or technical staff) providing a total employment of 1 650 man-months.

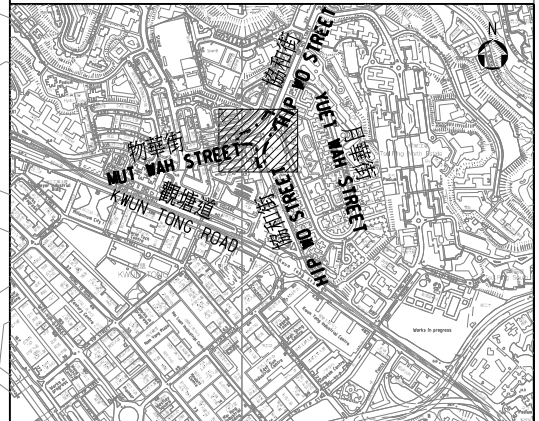
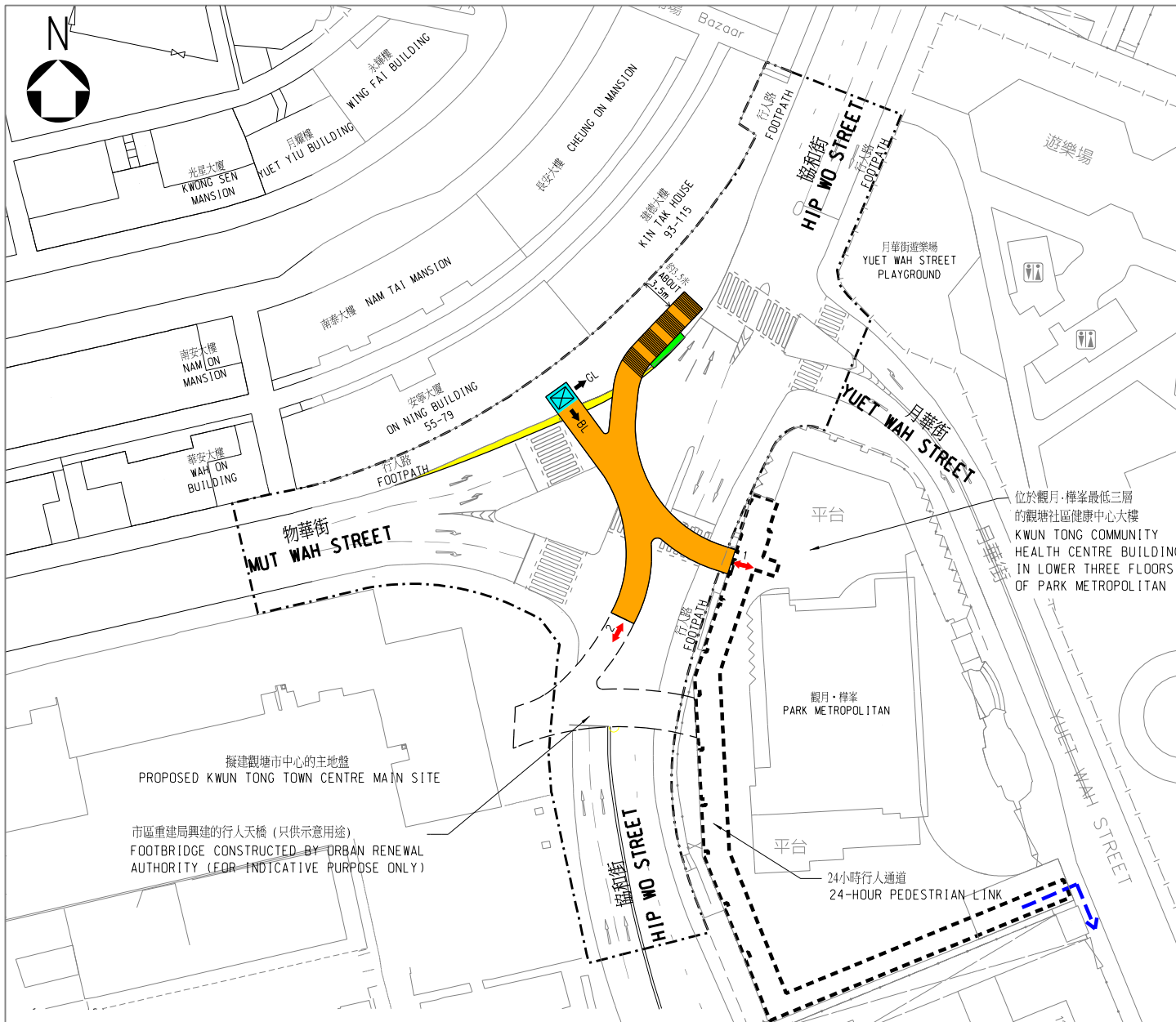
33. On 30 January 2018, we issued PWSC(2017-18)33 inviting Members to recommend to FC the upgrading of part of **163TB**, entitled “Kwun Tong Town Centre redevelopment – provision of grade-separated pedestrian linkages (footbridge across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street), to Category A. The paper had not yet been discussed at the Public Works Subcommittee meeting. This paper supersedes PWSC(2017-18)33.

Development Bureau
May 2018


⁵ “Important trees” refers 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 trees, trees 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 the 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 a trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25m.

附件一(兩張中的第一張)
Enclosure 1 (Sheet 1 of 2)



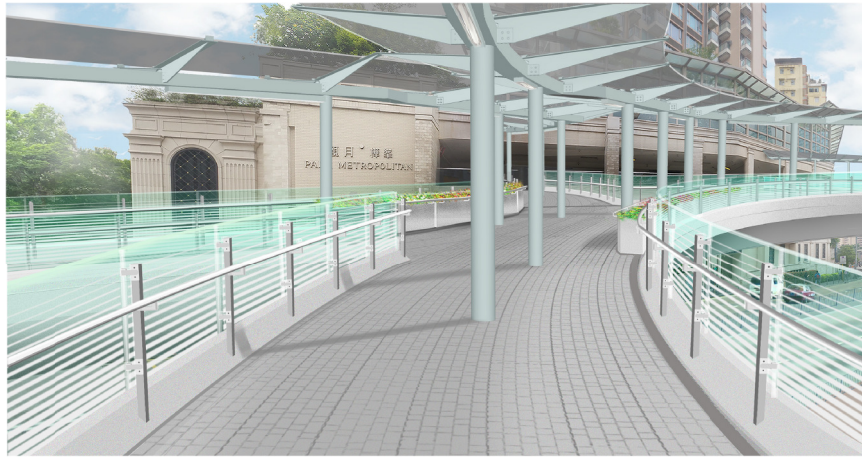
圖例 LEGEND:

-  施工區界限
BOUNDARY OF WORKS AREA
-  擬建行人天橋
PROPOSED FOOTBRIDGE
-  擬建樓梯
PROPOSED STAIRCASE
-  擬建升降機
PROPOSED LIFT
-  擬建升降機地面出口
PROPOSED LIFT DOOR OPENING AT GROUND LEVEL
-  擬建升降機橋面出口
PROPOSED LIFT DOOR OPENING AT BRIDGE DECK LEVEL
-  擬建行人路
PROPOSED FOOTPATH
-  擬建環境美化工程
PROPOSED LANDSCAPING WORKS
-  1
連接觀月·樺峯
CONNECTION TO THE PARK METROPOLITAN
-  2
經市區重建局興建的行人天橋連接擬建觀塘市中心的主地盤
CONNECTION TO THE PROPOSED KWUN TONG TOWN CENTRE MAIN SITE VIA THE FOOTBRIDGE CONSTRUCTED BY URBAN RENEWAL AUTHORITY
-  24小時行人通道
24-HOUR PEDESTRIAN LINK
-  通往月華街一帶的地區包括港鐵觀塘站
TO AREA AROUND YUET WAH STREET INCLUDING MTR KWUN TONG STATION

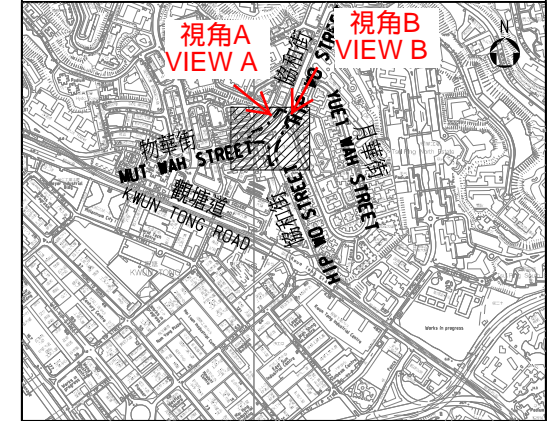
項目名稱 PROJECT TITLE
163TB號(部分) 觀塘市中心重建計劃—
興建分層行人連接系統
橫跨協和街近協和街/物華街交界處的行人天橋— 平面圖
163TB(PART) KWUN TONG TOWN CENTRE REDEVELOPMENT -
PROVISION OF GRADE - SEPARATED PEDESTRIAN LINKAGES
FOOTBRIDGE ACROSS HIP WO STREET NEAR THE JUNCTION OF
HIP WO STREET / MUT WAH STREET - SITE PLAN

位置圖
KEY PLAN

附件一(兩張中的第二張)
Enclosure 1 (Sheet 2 of 2)



視角A
VIEW A



位置圖
KEY PLAN



視角B
VIEW B

項目名稱 PROJECT TITLE
163TB號(部分) 觀塘市中心重建計劃—
興建分層行人連接系統
橫跨協和街近協和街/物華街交界處的行人天橋— 構想圖
163TB(PART) KWUN TONG TOWN CENTRE REDEVELOPMENT -
PROVISION OF GRADE - SEPARATED PEDESTRIAN LINKAGES
FOOTBRIDGE ACROSS HIP WO STREET NEAR THE JUNCTION OF
HIP WO STREET / MUT WAH STREET - ARTIST IMPRESSION

**163TB (Part) – Kwun Tong Town Centre redevelopment –
provision of grade-separated pedestrian linkages (footbridge
across Hip Wo Street near the junction of Hip Wo Street /
Mut Wah Street)**

**Breakdown of the estimates for consultants’ fees and resident site staff costs
(in September 2017 prices)**

| | | Estimated man- months | Average MPS* salary point | Multiplier (Note 1) | Estimated fee (\$ million) |
|--|---|-----------------------------|------------------------------------|------------------------|----------------------------------|
| (a) Consultants’ fees for contract administration (Note 2) | Professional | – | – | – | 0.6 |
| | Technical | – | – | – | – |
| | | | | Sub-total | 0.6# |
| (b) Resident site staff (RSS) costs ^(Note 3) | Professional | 63 | 38 | 1.6 | 7.9 |
| | Technical | 188 | 14 | 1.6 | 8.3 |
| | | | | Sub-total | 16.2 |
| Comprising – | | | | | |
| (i) | Consultants’ fees for management of RSS | | | | 0.3# |
| (ii) | Remuneration of RSS | | | | 15.9# |
| | | | | Total | 16.8 |

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of RSS supplied by the consultants (as at now, MPS point 38 = \$78,775 per month and MPS point 14 = \$27,485 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 **163TB**. The construction phase of the assignment will only be executed subject to the Finance Committee’s approval to upgrade part of **163TB** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

Remarks

The cost figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 9 of the main paper.