For discussion on 14 December 2015

# Legislative Council Panel on Home Affairs and Panel on Development Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project

#### <u>Integration and connectivity of the West Kowloon</u> Cultural District with its neighbouring districts

#### **PURPOSE**

This paper provides initial response to Members' comments on the interim recommendations of the Traffic Operation Plan (TOP) study and the issues related to the connectivity of the West Kowloon Cultural District (WKCD) with its neighbouring districts discussed at the Joint Subcommittee to Monitor the Implementation of the WKCD Project (Joint Subcommittee) meeting on 24 November 2015.

#### **BACKGROUND**

2. At the Joint Subcommittee meeting held on 24 November 2015, the West Kowloon Cultural District Authority (WKCDA) briefed Members on the interim recommendations of the TOP study commissioned by WKCDA and the implementation progress of the transport infrastructure projects linking the WKCD with its neighbouring districts. In light of the range of topics covered in the paper (**Attachment A** refers) and the short time available in the meeting, Members agreed to continue to discuss the subject in the next meeting. Members' concerns raised during the 24 November 2015 meeting are summarised in paragraphs 3 to 6 below, with WKCDA's responses in paragraphs 7 to 10.

#### MEMBERS' MAIN CONCERNS AND AREAS OF INTEREST

Car Parking Provision in the WKCD

3. Some members expressed concern that the existing roads in the vicinity of the WKCD including Austin Road West were already heavily congested. They questioned whether provision of over 2 000 car parking spaces in the WKCD was consistent with a vehicle-free design concept and were worried that such provision would aggravate the traffic congestion in the area. Other members however pointed out that given the keen demand for car parking spaces in the West Kowloon area, sufficient car parking spaces should be provided in the WKCD.

#### Traffic Congestion in West Kowloon Area

4. Members raised concerns on the existing traffic congestion problems observed in the West Kowloon area and queried if the prevailing traffic conditions outside the WKCD would further deteriorate and affect vehicular accessibility to the WKCD as the venues in the WKCD and its nearby projects developed.

#### **Marine Transport**

5. Some members expressed support for having marine transport services to connect the WKCD with other parts of Hong Kong. Members requested WKCDA to seek further information from the relevant parties on the proposed provision of marine transport services and facilities in the WKCD. Members also felt that water taxi services should be provided in future to serve the WKCD.

#### Coach Parking and Pick-up/Drop-off

6. Members considered that the WKCD would become a popular destination for local and overseas visitors, and queried whether sufficient coach parking spaces in the WKCD could be provided.

#### WKCDA'S RESPONSES TO MEMBERS' CONCERNS

7. Regarding the car parking provision mentioned in paragraph 3 above, WKCDA is obliged to conform to the requirements set out in the Hong Kong Planning Standards and Guidelines (HKPSG). In doing so, however, WKCDA has adopted the minimum standards in order to minimize the traffic impact in the West Kowloon area taking into account the projected demand for car parking spaces in the WKCD development. In view of the spatial

constraint and to ensure the effective use of car parking spaces in the WKCD, WKCDA proposes car park sharing amongst various land uses to enhance car park utilization. The feasibility of the car park sharing arrangement has been studied taking into account the fact that car park peak demands from different types of land use planned in the WKCD will be staggered, which in turn would enable car parking spaces to be shared amongst offices, performing arts venues and retail/dining/entertainment facilities at different times of the day.

- 8. To address Members' concerns on the existing traffic congestion problems in the West Kowloon area, at the Joint Subcommittee meetings of 7 July 2014 and 12 January 2015 (Attachment B refers), the Administration and WKCDA briefed Members on the road improvement projects that are being implemented by the Highways Department in the vicinity of the WKCD. All the transport studies previously carried out had indicated that when the road improvement works were completed in 2018, the existing congestion can be significantly relieved.
- 9. In response to the marine transport issues mentioned in paragraph 5 above, at the Joint Subcommittee meeting of 24 November 2015, WKCDA had briefed Members on the marine transport initiatives proposed to be undertaken in the early phase. Those initiatives include approaching existing and potential water tour operators to explore the possibility of offering an additional water tour stop at the WKCD; arranging ferry services during large events; and enhancing the existing landing facilities in the WKCD by providing shelters. As for the water taxi services, WKCDA considers that if public landing steps/ferry piers can be provided in the WKCD and a water taxi service is in place in Hong Kong, it would welcome water taxis to have access to the public landing steps in the WKCD. WKCDA will provide necessary facilities and offer marine access points to facilitate the operation, if any, by others.
- 10. As for the coach parking and pick-up/drop-off provision in the WKCD, Members noted that more coach parking spaces than required under the HKPSG would be provided in the WKCD. Members were concerned about pick-up/drop-off provision and management of coaches. The TOP consultant had studied the issue and has given preliminary recommendations to WKCDA for consideration. Dedicated pick-up/drop-off points for coaches

would be provided at the basement level of the WKCD, and about 40 coach parking spaces had been proposed to meet future demand. WKCDA will further discuss and agree with the concerned government departments on the coach parking and management strategy for the WKCD.

#### DESIGN OF INTEGRATED BASEMENT

- Due to the integrated nature of the WKCD development, 11. the design of the transport and pedestrian facilities (including the underground road, underground vehicular connections to various land parcels and pedestrian facilities linking the underground road with the Avenue and topside developments) as well as the integrated basement cannot be undertaken independent of the topside developments. As such, the design of the government-funded works including the part on the underground road in Zones 3A and 3B of the integrated basement has been entrusted to WKCDA. implementing M+ and the Artist Square Development Area in these two zones, it was proven that there were significant design and development benefits for the WKCDA to oversee and take charge of the entire development process. In light of the above benefits, WKCDA has proposed to the Government to extend the scope of the entrustment works to cover the design of Zone 2 (i.e. Zones 2A, 2B and 2C) of the integrated basement, including the underground road therein, with no on-cost payable to WKCDA for the work in accordance with the funding approval granted by the Finance Committee (FC) of the Legislative Council on 10 July 2015.
- 12. The design work for Zone 2 of the integrated basement was not included in the scope of works entrusted to WKCDA in the funding application for the first and second stages of design, site investigation and construction works of the integrated basement approved by FC in July. In considering the design and development benefits to the WKCD development as a whole, the Government intends to extend the scope of the entrustment works to cover the design of Zone 2 of the integrated basement including the underground road to WKCDA.

#### **DISCUSSION**

13. Members are invited to note and comment on the information provided above and in the attached papers on the connectivity and interim traffic operation proposal of the WKCD.

West Kowloon Cultural District Authority December 2015

# Legislative Council Panel on Home Affairs and Panel on Development Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project

## <u>Integration and connectivity of the West Kowloon</u> <u>Cultural District with its neighbouring districts</u>

#### **PURPOSE**

This paper updates Members on the interim recommendations of the Traffic Operation Plan (TOP) study commissioned by the West Kowloon Cultural District Authority (WKCDA) and the implementation progress of the transport infrastructure projects linking the West Kowloon Cultural District (WKCD) with its neighbouring districts.

#### BACKGROUND

- 2. At the Joint Subcommittee to Monitor the Implementation of the WKCD Project (Joint Subcommittee) meeting held on 7 July 2014, WKCDA briefed Members on the future car parking and loading/unloading arrangements, cycling provision, as well as vehicular and pedestrian accessibility plans of the WKCD.
- 3. At the Joint Subcommittee meeting on 12 January 2015, Members were further updated on the programme and progress of the government-funded transport infrastructure works for the WKCD project. The scope of the TOP study, which aims to develop a comprehensive operation plan to manage future pedestrian and vehicular traffic and formulate short-, medium- and long-term transport strategies for the WKCD, was also presented.
- 4. The TOP study commenced in November 2014 and the interim recommendations on public transport planning and operation, private car and coach parking provision as well as

marine transport options are summarised in the ensuing paragraphs. The WKCDA will further discuss the interim recommendations with the relevant government departments.

#### INTERIM RECOMMENDATIONS OF THE TOP STUDY

#### **Public Transport Planning and Operation**

#### Connectivity between WKCD and other areas

- 5. The WKCD is in the vicinity of four major public transport interchanges (PTI) which at present provide more than 30 bus and green mini bus (GMB) routes connecting various districts of the territory. Eight bus and one GMB routes running along Austin Road West provide direct connections between the WKCD and Central Kowloon, Tsim Sha Tsui, Tuen Mun and Sha Tin. To enhance the public transport services to cater for the future passenger demand generated from the WKCD and to strengthen the services to and from East Kowloon and New Territories East areas, re-routing of some of the existing bus and GMB services operating in the adjacent PTIs with intermediate stops at the East and West gate lay-bys is being considered, subject to the agreement of Transport Department (TD) and other stakeholders including bus operator(s) and the relevant District Council(s).
- 6. During major events, visitors are encouraged to use railway as the primary transport mode to access to and depart from the WKCD. Based on WKCDA's experience, provision of supplementary express feeder bus services to nearby MTR stations would be welcomed by the public. Similar arrangements may be considered when major events are held in future. To cater for the substantial demand for railway transport service during major events, higher frequency of the train services will be required to disperse crowds at Kowloon and Austin Stations. WKCDA will maintain regular dialogue with MTR Corporation Limited (MTRCL) on the event schedules and the estimated number of visitors to facilitate the former's train service deployment.

#### Environmental-friendly transport system with WKCD

- In addition to the bus re-routing proposal mentioned above, the TOP consultant is also studying the feasibility of introducing environmental-friendly bus services along the underground road of the Integrated Basement to cater for the passenger traffic within the WKCD. Environmental Protection Department's environmental initiatives, the eBus Trial Programme (the Trial) for franchised buses is targeted to commence progressively by end of 2015 for trial run on various bus routes under different conditions in Hong Kong. The Trial will last for two years and aims to assess the vehicles' operational efficiency, performance and economic viability in local conditions. If the results of the Trial are satisfactory, the Government may encourage the franchised bus companies to use electric buses in a suitable way. WKCDA and its consultant will liaise with TD and existing bus operators to assess the feasibility of introducing electric buses and other low or zero emission vehicles to serve the WKCD.
- The use of compact electric buses is well established in European and North American countries. A typical compact electric bus is slightly longer than a normal private van. seating and standing capacity of typical compact buses range from 8 to 30 seats depending on their internal layout and luggage carrying capacity. In recent years, the use of driverless cars is also on trial under real conditions in Singapore, Europe and North America. Examples of compact buses and driverless transport systems are shown in **Annex A**. If the safety, licensing, regulatory and technology issues are overcome, these new transport modes could be considered to fulfil the Environmentally Friendly Transport System (EFTS) options running along the waterfront promenade, along routes providing shared-use with pedestrians and possibly bicycles. This would link the Xigu Centre in the east and the Park in the west, with intermediate stops as a supplementary service to the underground bus services mentioned in paragraph 7 above. To minimize the interference with the at-grade pedestrian activities, the EFTS under consideration would be a lowcapacity and low-speed transport system. As a further refinement, such a system might also provide a point-to-point on demand service for the elderly and people with a disability travelling within the WKCD. We will continue to monitor progress in this field.

#### Private Car and Coach Parking Provision

- 9. Based on the latest development parameters, about 2 200 to 2 900 car parking spaces will be required in the WKCD for the entire WKCD. To support the phased implementation and operation of the Park and the Artist Square Development Area (ASDA), a new underground car park (with about 200 parking spaces) located at the interfacing area between the Park and M+ will be constructed. Together with other parking provisions in the Xiqu Centre, M+ and Lyric Theatre Complex areas, a total of about 750 car parking spaces can be provided in around 2020 to meet the demand in the interim.
- 10. Based on the preliminary design, upon development of the central portion of the WKCD, its underground car park will accommodate around 1 000 car parking spaces. The remaining parking spaces will be provided in other phases of the WKCD west of the ASDA and south of the Xiqu Centre. Some of these parking spaces would be used by different visitors on a time-sharing basis. A well-designed car parking management system with advanced technology is therefore required to enhance the efficiency of the parking operation. Technologies under consideration by the TOP study are:
  - (a) <u>Licence Plate Recognition System</u> a system that records and monitors the licence plates of the cars for security purpose. The use of cameras will also enable car searching function (see sub-paragraph (c) below).
  - (b) Long Distance Radio-frequency Identification (RFID) Technology a longer range contactless RFID system can reduce the clearance time at the car park entrances/exits to 2-3 seconds, about one-sixth of the clearance time of the current Octopus payment.
  - (c) Car Park Guidance and Searching System video detectors will be mounted above parking spaces and driveways to read the licence plates of the cars. It enables the drivers to locate the parked cars by entering the licence plate numbers at the kiosks or using the apps on smart devices.

- (e) Variable Message Signs parking space availability displays will be erected at strategic locations within and outside the car park to advise the directions and numbers of the unoccupied parking spaces.
- (f) Car Park Booking System a pre-booking system that allows drivers to reserve parking spaces online for a time interval of a specific date. It supports pre-trip and on-trip booking and provides information on vacant parking spaces by parking zone and by vehicle type to allow flexibility on car parking.
- 11. Being a mega-size arts and cultural project, the WKCD will attract coaches bringing in thousands of visitors a day. As advised by the TOP consultant, upon full development of the WKCD, 22 coach parking spaces will be required. Sufficient coach parking spaces (about 40 spaces) are planned to be provided at the Integrated Basement and the Mega Performance Venue/Exhibition Centre site to address the long-term demand.
- The lack of spaces for coach pick-up/drop-off and parking in Yau Tsim Mong (YTM) district has been a key traffic issue. Under the TOP study, the consultant surveyed the The survey results coach activities in the YTM district. revealed that the parking utilization rate was very high near Science Museum Road, Salisbury Road and Chatham Road Short-term coach pick-up and drop-off spaces were On the other hand, it was also found that the utilization rate at the existing To Wah Road coach parking area with 26 parking spaces (only about 0.5 km from the WKCD and 3 km away from the Salisbury Road) was significantly underutilized, with 77% occupancy during the evening peak hours (2:00 pm to 8:00 pm), and below 50% during the rest of the day (midnight to 2:00pm and 8:00pm to midnight). consultant had investigated the reasons for the low utilization by interviewing the coach drivers in the district. Over 70% of the surveyed drivers responded that they would not use the coach parking spaces outside the Tsim Sha Tsui operation area as it was inconvenient for picking up passengers. Unless the visitors' behaviour change significantly in future, when the coach parking spaces in the WKCD are open for public use, these parking spaces are unlikely to be attractive to the coaches

that are currently operating in the Tsim Sha Tsui area as the turnaround time between the WKCD and Tsim Sha Tsui area is about 15-25 minutes.

#### **Marine Transport Options**

- 13. Within Victoria Harbour, there are sightseeing cruises operated by private operators. These cruises allow visitors to enjoy the harbour and the seafront for sightseeing, entertainment and dining purposes. These water tour services are popular among tourists. WKCDA will approach the existing and potential water tour operators and explore the possibility of offering an additional water tour stop at the WKCD or introducing a new water tour route departing from the WKCD.
- During major events, traffic demand will surge. A 14. high capacity ferry service will be one of the transport options suitable for dispersing large volumes of people. As a pilot scheme during the Freespace Fest held in November 2014, WKCDA hired vessels and offered free ferry services between the WKCD site and Wan Chai/ Tsim Sha Tsui districts. A total of 96 scheduled vessel trips carried around 3 900 patronage in two days to and from the WKCD, representing about 5-9% of the attendance. At the initial operation stage, WKCDA may arrange similar ferry services for large events. The patronage, pick-up points and passenger patterns will be monitored and reviewed. If the passenger demand proves to be high, and subject to the financial viability, WKCDA would explore the possibility of providing more regular ferry services to connect the WKCD to other piers in the harbour.
- 15. There are two existing public landing steps within the boundary of the WKCD as depicted in **Annex B**. The landing steps (1) near the MTRCL's barging facilities, which are currently not accessible by the public, are being used for the disposal of excavated materials of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project by sea. In the north-western edge of the WKCD are the public landing steps (2) at the New Yau Ma Tei Typhoon Shelter. These steps are in active use providing public access for the transportation of goods and passengers.
- 16. WKCDA proposes to take up the management responsibility of the two existing public landing steps to

facilitate water transport and water tour services to be operated by third party providers. This will be subject to the Marine Traffic Impact Assessment being undertaken by the TOP consultant, consultation with stakeholders and approval from relevant government departments. The conditions of the landing steps are proposed to be improved by providing shelter for waiting passengers and aligning with the overall design of the waterfront promenade. WKCDA will maintain free public access to the two landing steps, though priority may be given to participants when there are major events to be held within the WKCD.

## PROGRESS UPDATE ON GOVERNMENT-FUNDED VEHICULAR AND PEDESTRIAN CONNECTIONS

- 17. Following the Finance Committee's approval of the funding application for the Public Works Programme Item 855TH Road Improvement Works for West Kowloon Reclamation Development (Phase 1) in February 2015, the road improvement works surrounding the WKCD commenced in March 2015. It is anticipated that all the road improvement work packages will be completed in 2018 to relieve the traffic congestion outside the WKCD.
- 18. The proposed Artist Square Bridge is at the schematic design stage. The Bridge will serve as a pedestrian link between the MTR Kowloon Station/The Elements shopping mall and the Artist Square in the WKCD across Austin Road West with further connections to the Park and the harbourfront for visitors to enjoy the Promenade. It will enhance accessibility to the harbourfront by providing direct and barrierfree access. The Bridge will adopt a simple but elegant design involving the use of a series of equal-sized, identical rib sections, and each rib section will be slightly rotated relative to its immediate neighbours to create the visual impact. Uniformlysized glass louvres with gaps are fixed between the rib sections to achieve a light and elegant bridge design. The glass louvres can give visitors good views to the sides and up to the Kowloon and WKCD skylines, as well as optimize the use of natural daylight and hence reduce electricity consumption. current design of the Bridge is shown in Annex C. Subject to the design progress, site investigation/gazetting procedures and Finance Committee's approval of funding application,

construction of the Bridge is targeted to commence in the fourth quarter of 2016 for completion in phases starting from 2019.

19. To further enhance the pedestrian connectivity between the MTR Austin Station and the Xiqu Centre, WKCDA proposes to upgrade the existing pedestrian subway at the junction of Canton Road and Austin Road West. New stairs and lift will be added to bring people up to the ground level footpath adjoining the Xiqu Centre. Subject to the technical feasibility and works programme, the existing subway will be upgraded by providing a new connection point to the basement of the Xiqu Centre. In addition, the existing subway is proposed to be beautified to improve the arrival experience of visitors to the WKCD.

#### **ADVICE SOUGHT**

20. Members are invited to note the interim recommendations of the TOP study and the implementation progress of the transport infrastructure projects connecting the WKCD with its neighbouring districts.

West Kowloon Cultural District Authority November 2015

## Examples of Compact Buses and Driverless Transport Systems

小型巴士和無人駕駛運輸系統的例子



**Compact Buses:** 

小型電動巴士:

Tecnobus Gulliver (in Rome) Tecnobus Gulliver (羅馬)



The Ecolobus (in Quebec) The Ecolobus (魁北克省)



**Driverless Transport Systems:** 

無人駕駛運輸系統:

Driverless Golf Buggies (in Singapore) 無人駕駛高爾夫球車 (新加坡)



Personal Rapid Transit (in Abu Dhabi) 個人快速交通 (阿布扎比)

### **Existing Public Landing Steps within WKCD**

西九文化區內現有的公眾登岸梯級

Annex B 附件B





# Legislative Council Panel on Home Affairs and Panel on Development Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project

#### <u>Integration and connectivity of the West Kowloon</u> Cultural District with its neighbouring districts

#### **PURPOSE**

This paper updates Members on the implementation progress of the transport infrastructures linking the West Kowloon Cultural District (WKCD) and its neighbouring districts.

#### **BACKGROUND**

- 2. Accompanied by representatives of the Administration and the West Kowloon Cultural District Authority (WKCDA), Members conducted a site visit on the connectivity of WKCD with its surrounding areas on 17 December 2013 to observe the respective reserved connection points at the Austin Station and the Kowloon Station development for linking Xiqu Centre (including underground and deck level) and Artist Square respectively, and to visit the site locations of the future M+ and the Park.
- 3. At the Joint Subcommittee meeting on 25 April 2014, WKCDA briefed Members the traffic impact assessment (TIA) results of the planning application for minor relaxation of development intensity of the WKCD site. The TIA has indicated that the traffic impact on the adjacent road networks arising from the proposed minor relaxation of the development intensity of the WKCD site would be minor. In the meeting, WKCDA also advised Members that the impact of the proposal on the traffic of WKCD and its surrounding areas would be manageable.
- 4. At the request of the Joint Subcommittee, the Administration and WKCDA undertook to further explain to

Members and the general public the transport connectivity of WKCD in the coming deputation.

#### WKCD ACCESSIBILITY PLAN

- 5. The strategic pedestrian network of WKCD has been comprehensively designed in such a way that traveller access/egress through each and every transport mode will find a convenient external pedestrian connection to use.
- 6. Rail users will take different routes depending on the line and station they use. Passengers from Kowloon Station can either use the Artist Square Bridge or the West Kowloon Terminus (WKT) pedestrian deck of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) to access the western and central parts of WKCD. Passengers from WKT will probably use the WKT pedestrian deck to access the main avenue of WKCD, while passengers from Austin Station will use the Austin Road Pedestrian Linkage Systems to access WKCD through the Xiqu Centre. Passengers from Tsim Shai Tsui Station and Kowloon Park can access WKCD through the China Ferry Terminal Bridge/existing footbridge over Canton Road to access the Waterfront Promenade, Xiqu Centre and the main avenue.
- 7. Franchised bus and mini-bus passengers have a variety of pedestrian connections to use. Bus passengers on Austin Road West, bus stops alongside toll plaza of Western Harbour Crossing (WHC) can enter WKCD at-grade. Passengers using the bus routes serving Kowloon Station and WKT can make use of WKT pedestrian deck to access WKCD. Bus passengers arriving at the bus stops along Austin Road West and Canton Road can access WKCD at-grade. Passengers arriving by coach, E-bus and car/taxi can access WKCD directly through their designated drop-off bays within the district.

#### LATEST DEVELOPMENT OF THE NEW CONNECTIONS

8. In end-2013, the Government entrusted WKCDA with the design and site investigation of the Public Infrastructure Works (PIW), including new roads and pedestrian linkages between WKCD and its neighbouring districts, for supporting the Batch 1 facilities in WKCD and hotel, office and residential (HOR) developments. The engineering design consultant appointed by WKCDA has started the design of the PIW items. Key transport facilities under design are

summarised in the table below. Detailed descriptions of the transport infrastructures are shown in **Annex A**. The Advisory Committee on the Appearance of Bridges and Associated Structures and the Yau Tsim Mong District Council will be consulted on the design of these infrastructures in the latter half of 2014.

#### **Pedestrian Infrastructures**

(Please refer to the diagrammatic layout at **Annex B**)

New Transport Infrastructures	Description	Supporting Facilities	Implementation Period	Opening Year
Austin Road Pedestrian Linkage Systems	Pedestrian linkage systems between MTR Austin Station and Xiqu Centre	Xiqu Centre	2015-2017	2017
WKT Pedestrian Deck	A large pedestrian deck linking WKT and WKCD at ground level	Facilities in Zones 2A and 2B*	2011-2017	2017
China Ferry Terminal Bridge	A pedestrian link between Hong Kong-China City and Waterfront Promenade of WKCD	Waterfront Promenade and HOR alongside	2018-2020	2020
Artist Square Bridge	A pedestrian link between Elements Shopping Mall and Artist Square of WKCD	Artist Square Development Area (including M+, the Park, office and residential developments and Lyric Theatre) and the Park	2016-2018	2018

#### **Vehicular Infrastructures**

(Please refer to the diagrammatic layout at  $\underline{\textbf{Annex C}}$ )

New Transport Infrastructures	Description	Supporting Facilities	Implementation Period	Opening Year
Lay-by at East Gate	Drop-off/ pick-up lay by for public transport on Austin Road West	Xiqu Centre	2015-2017	2017
At-grade road around the WHC tunnel portal	An at-grade vehicular access within WKCD serving M+, the Park and the adjoining HOR developments	Artist Square Development Area (including M+, office and residential developments and Lyric Theatre) and the Park	2015-2017	2017
Lay-by at West Gate	Drop-off/ pick-up lay by for public transport on Austin Road West	Artist Square Development Area (including M+, office and residential developments and Lyric Theatre) and the Park	To be confirmed	Align with the completion year of Zone 2B*

<sup>\*</sup> The zoning plan of the WKCD integrated basement is at  $\underline{\textbf{Annex D}}$ .

#### TRANSPORT OPERATION PLAN

- 9. In addition, WKCDA will engage a consultant in the second half of 2014 to formulate a transport operation plan for WKCD. WKCDA will implement the recommended plans of the consultancy prior to the commissioning of the Batch 1 facilities. The scope of the consultancy will cover the followings
  - (a) E-bus Planning and Operation Plan;
  - (b) Environmentally Friendly Transport System Option study and Feasibility;

- (c) Car Parking Management Plan;
- (d) Loading and Unloading Facilities Management Plan;
- (e) Cycling Provision in WKCD;
- (f) Berthing/Landing Facilities for Vessels;
- (g) Traffic Control and Operation Plan;
- (h) Crowd Dispersal Management Plan; and
- (i) Emergency Traffic Management Plan.

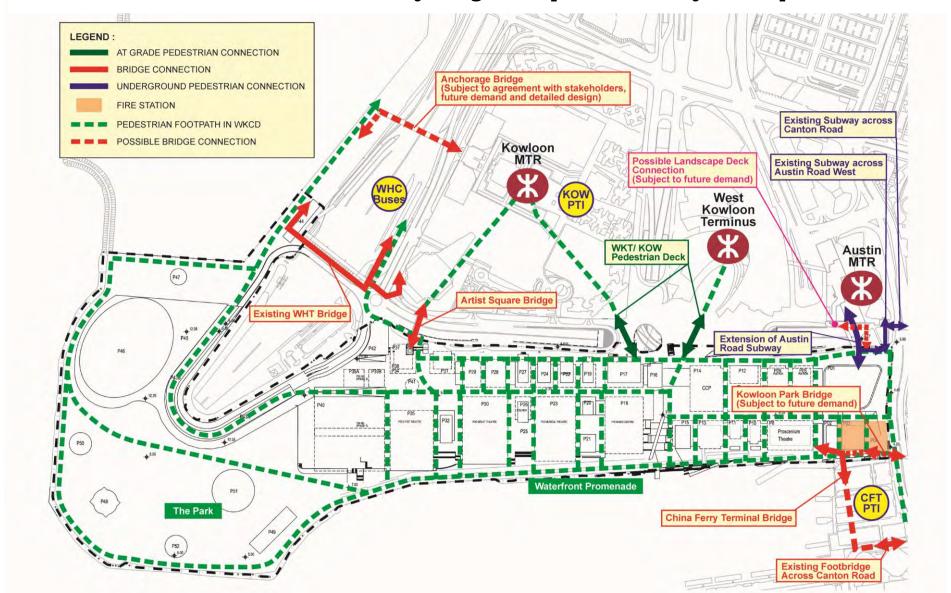
#### RECOMMENDATION

10. Members are invited to note the latest progress of the vehicular and pedestrian connections for WKCD.

## West Kowloon Cultural District Authority July 2014

#### Annex A

#### Pedestrian Connections with the Adjoining Developments and Major Transport Nodes



#### **Description of Each Connection**

In order to maximise accessibility to WKCD and mobility in the district, the Xiqu Centre needs to be properly integrated with neighbouring community and activity nodes. The provision of the following planned connections will ensure easy access for both pedestrians and vehicles –

#### (A) Austin Road Pedestrian Linkage Systems

- 2. With the provision of escalators, lifts and staircases, the existing pedestrian subway across Austin Road West and Canton Road will be enhanced connecting the concourse level of MTR Austin Station and basement level of the Xiqu Centre. This will help ease the increased pedestrian traffic after the opening of the Xiqu Centre.
- 3. The landscape deck (being constructed under the XRL project) over Austin Road West for noise mitigation purpose would be converted to a pedestrian linkage connecting the ground level of Austin Road West. Through the pedestrian subway connection, it can connect with the ground level of Xiqu Centre, MTR Austin Station and Austin Road West.

# (B) <u>Lay-by at East Gate and Connection to At-grade Austin Road</u> <u>West</u>

4. Two new slip roads are being constructed under the XRL project along Austin Road West to facilitate vehicles making U-turn. Additional lay-by will be constructed alongside the eastern slip road, forming the East Gate of WKCD, to allow direct access to the Xiqu Centre and support the pick-up/drop-off activities in WKCD.

#### (C) Kowloon Park Bridge

5. The existing Tsim Sha Tsui Fire Station Complex adjoining the Xiqu Centre on Canton Road will be relocated in stages. The first phase of the works, relocation of the Transformer Room block, is being arranged to complement the target completion of the Xiqu Centre in 2016/17.

6. Upon the relocation of the entire fire station complex in future, a new footbridge can be constructed to link WKCD directly to Kowloon Park across Canton Road. It can serve as an alternative route for passengers to access WKCD from MTR Tsim Sha Tsui Station via Kowloon Park Bridge. This potential connection is subject to future demand.

#### (D) China Ferry Terminal Bridge

- 7. Scheduled to open upon completion of the Waterfront Promenade of WKCD in the vicinity, the proposed footbridge will form part of the pathway linking the Waterfront Promenade with level 3 of China-Hong Kong City shopping mall and Kowloon Park. The provision of this footbridge will be subject to the future demand justification.
- 8. For enhancing the connectivity of the western end of WKCD, the following planned infrastructures will be provided to ensure easy access for both pedestrians and vehicles –

#### (E) Artist Square Bridge

9. The proposed Artist Square Bridge will be connecting the Elements Shopping Mall at +19.0mPD and Artist Square of WKCD, over Austin Road West. The bridge will become an iconic gateway to the Artist Square Development Area, accessing the M+, Lyric Theatre and office and residential developments adjoining the Square.

#### (F) At-grade road around the WHC tunnel portal

the 10. To Park, future serve Mega Performance Venue/Exhibition Centre, HOR developments around the WHC portal and the existing WSD Kowloon South No.2 Salt Water Pumping Station, a new at-grade road will be constructed to run along the outside perimeter of the WHC portal and connect to the waterfront area. The road will connect to both the at-grade and elevated junctions of Austin Road West and Nga Cheung Road. completed, the road will serve as the main entrance to WKCD at the west end.

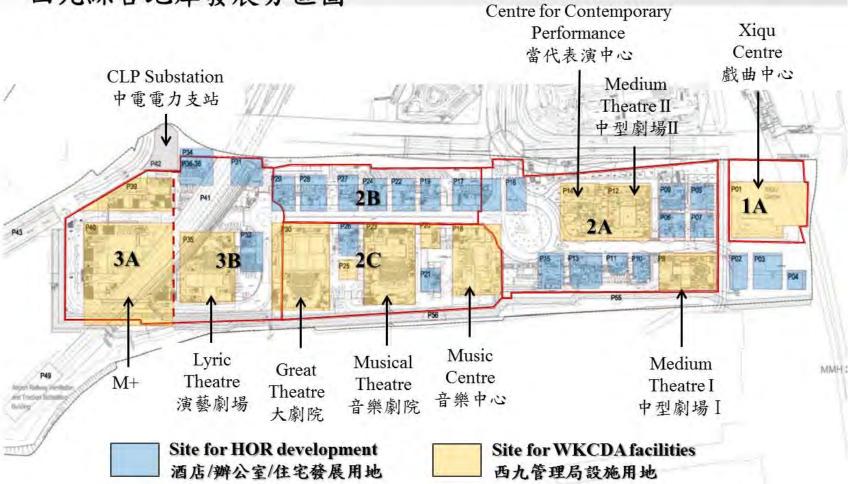
Annex B 附件B New Yau Ma Tei Typhoon Shelter 新油氟地套基準 West Kowloon Terminu 西九龍總站 The Waterfront Promenade 海濱長廊 **Austin Road** Pedestrian Linkage Systems Austin Station 柯士甸道行人 柯士甸边 接影系統 Austin Road Footbridge 柯士甸道行人天橋 Pedestrian Deck 西九龍總站行人平台 **Artist Square Bridge** Arena Plaza 多用途廣場 ArtistSquare 整備基場 Western Harbour Crossing 西國海底穩煌 Exhibition Centre 大型表演場地/展覽中心 TheAvenue 中型影場二 900 Musical Theatre 音樂劇院 Plazzh 音樂中心 China Ferry Terminal Bridge China Ferry Terminal 中港碼頭 中國客運碼頭行人天橋 Terrace Garden 平台休憩用地 Terrace Garden 平台休憩用地 The Waterfront Promenade 海濱長廊 Harbour City 海港城 **161** Pedestrian Infrastructures 為行人而設的運輸基建 • VENUES IN THE PARK ARE SUBJECT TO THE PARK DESIGN



### **Zoning Plan of WKCD Integrated Basement**

Annex D 附件D

西九綜合地庫發展分區圖



備註 Notes:

- 1. The demarcation between the different zones is subject to study during the design stage of the integrated basement project. 發展分區分界有符綜合地庫詳細設計核實。
- 2. The sites for HOR developments also consist of RDE, OACF and parking facilities of WKCDA. 酒店/辦公室/住宅發展用地亦包括西九管理局的零售、餐飲及消閒、其他文化藝術設施及地庫泊車設施。

For discussion on 12 January 2015

# Legislative Council Panel on Home Affairs and Panel on Development Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project

## Integration and connectivity of the West Kowloon Cultural District with its neighbouring districts

#### **PURPOSE**

This paper updates Members on the implementation progress of the transport infrastructure projects linking the West Kowloon Cultural District (WKCD) with its neighbouring districts.

#### **BACKGROUND**

- 2. At the Joint Subcommittee to Monitor the Implementation of the WKCD Project (Joint Subcommittee) meeting held on 25 April 2014, the West Kowloon Cultural District Authority (WKCDA) briefed Members on the traffic impact assessment of the Planning Application for Minor Relaxation of Development Intensity of the WKCD site, including (i) the traffic impact on the adjacent road networks as a result of the proposed increase in development intensity under WKCDA's Section 16 planning application and the proposed traffic improvement measures to cope with the increasing traffic demand; and (ii) the impact of the proposed increase in development intensity on the pedestrian forecasts in the WKCD and the crowd dispersal arrangements for major events to be held within the WKCD.
- 3. At the Joint Subcommittee meeting on 7 July 2014, WKCDA further briefed Members on the future car parking and loading/unloading arrangements, cycling, and the vehicle and pedestrian accessibility plans of the WKCD. The updated programme and progress of the government-funded transport infrastructure projects in the West Kowloon Reclamation Area (WKRA) were also presented. Members were also advised that

WKCDA would engage a consultant to develop a comprehensive Traffic Operation Plan (TOP) to manage the future pedestrian and vehicular traffic and formulate short, medium and long terms transport strategies for the WKCD.

#### PUBLIC CONSULTATION

- 4. Since the Joint Subcommittee meeting of 7 July 2014, WKCDA has consulted and solicited comments from the Yau Tsim Mong District Council (YTMDC), Harbourfront Commission (HC) and local communities on matters related to accessibility and connectivity of the WKCD with its neighbouring areas. Consultation meetings held are listed below
  - a) On 21 August 2014, WKCDA (jointly attended with the Civil Engineering and Development Department (CEDD)) consulted the YTMDC on the first construction package of the Public Infrastructure Works for supporting the WKCD developments;
  - b) On 10 September 2014, WKCDA (jointly attended with CEDD) consulted the HC Task Force on Harbourfront Developments in Kowloon, Tsuen Wan and Kwai Tsing on the roadworks and connectivity of the WKCD; and
  - c) On 13 November 2014, WKCDA met over 50 representatives from one of the neighbouring developments in response to the invitation from its management company, and briefed them on the project updates of the WKCD developments and future connections with the WKCD.

#### SCOPE OF TRAFFIC OPERATION PLAN

5. To secure successful operation of the WKCD project, a comprehensive and multi-disciplinary traffic operation plan will be required for managing the movement of people and freight to, from and within the WKCD. The TOP consultancy study has commenced in November 2014 and interim findings will be available in the second half of 2015. The study covers the following five aspects –

- (i) Public Transport Planning and Operation;
- (ii) Car Park, Loading and Unloading Management;
- (iii) Cycling Provision and Design;
- (iv) Marine Access and Operation; and
- (v) Traffic Control and Management.

The detailed scope of services provided by the TOP Consultancy is shown in **Annex A**. We plan to update Members on the initial findings once available.

#### PROGRESS UPDATE ON PEDESTRIAN CONNECTIONS

- 6. With connections to the nearby inter-city transport hubs Kowloon Terminus (WKT) including the West Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL), the Kowloon Station of Airport Express and the China Ferry Terminal, the WKCD will receive a large number of visitors from local, Mainland, East Asia and overseas. The urban design and landscape principles adopted in the Conceptual Plan prepared by Foster + Partners and the approved Development Plan for the WKCD, which enables traffic to be put underground in an integrated basement, will free up more space for public enjoyment and create a pedestrian-friendly environment at-grade. The provision of a large "vehicle-free" pedestrian deck linking the WKT of XRL and the northern part of the WKCD, together with a continuous waterfront promenade, a vibrant main avenue and side streets as well as convenient pedestrian entrances to the cultural district, will greatly enhance visitors' walking experience in the WKCD.
- 7. Apart from the main pedestrian deck linking the WKCD and WKT of XRL (under construction), two other pedestrian connections (under design), namely the Artist Square Bridge and the Austin Road Subway Connection, will represent the major gateways The former will provide a direct pedestrian link of the WKCD. between the Elements Shopping Mall and the northern entrance to the Artist Square; while the latter will provide convenient access from the Austin Station to the Xiqu Centre, a world-class arts venue for preservation, development and promotion of xiqu. The design criteria of the two connections will be duly considered in order to enhance the connectivity and walking environment of the WKCD. is anticipated that the detailed design of the two connections will be completed in the first half of 2015. Subject to funding approval of

the Finance Committee (FC) of the Legislative Council (LegCo) by the end of this legislative session, construction works are anticipated to start in early 2016. The pedestrian connections are targeted to be open in 2018, in time for the opening/completion of the Xiqu Centre and M+. **Annex B** shows the proposed pedestrian links from the neighbouring districts to the WKCD.

8. Apart from the Austin Road Subway Connection, pedestrians can also access the eastern end of the WKCD via Canton Road and the open space in front of the Xiqu Centre. The open space will serve as a main eastern gateway to the Avenue, through which people can access all venues in the WKCD. Surrounding the Xiqu Centre, wide landscaped footways will be provided to facilitate pedestrian movements. As the WKCD can be accessed from all directions at different levels, it would be easier to demonstrate pedestrian movements by using a simulation model, which is being developed under the TOP Consultancy Study and will be presented to Members together with the initial findings of the Study later this year.

#### PROGRESS UPDATE ON VEHICULAR FACILITIES

While the underground road in the WKCD integrated basement (basement road) will provide vehicular access to different venues/facilities of the WKCD, it is necessary to enhance the transport infrastructure outside the WKCD to cater for the traffic generated by the planned developments in the WKRA including the WKCD. Short and medium terms road improvement works in the WKRA are to be implemented mainly through Public Works Programme (PWP) Item 855TH - Road Improvement Works for West Kowloon Reclamation Development (Phase 1). The funding application for Item 855TH, which was submitted to LegCo in June 2014, is still awaiting consideration by the Public Works Subcommittee (PWSC). Subject to FC's funding approval within this legislative session, construction works will commence in 2016 for completion in 2018 tentatively. The project will provide the future main vehicular entrance to the WKCD, accessing from the north of the WKCD through the depressed Austin Road West and Lin Cheung Road junction (under construction by the MTR Corporation Limited (MTRCL) in conjunction with the WKT of the XRL project) and connecting with the future basement road. According to MTRCL's current construction programme, the depressed road junction can be completed in 2017, prior to the opening of the venues in the central

portion of the WKCD such as the Centre for Contemporary Performance and the Music Centre.

10. As regards vehicular access within the WKCD, public road infrastructure works will be implemented under PWP Item 754CL -Infrastructure Works for the WKCD, Phase 1, which comprises the basement road, an at-grade road around the portal of Western Harbour Tunnel to serve the western part of the district (e.g. the Park and M+), and the East and West Gate Lay-bys on Austin Road West that are under design by WKCDA with entrustment from CEDD. The aforesaid road infrastructure works under PWP Item 754 CL are scheduled for gazettal in early 2015. Subject to the public comment(s) received, FC's funding approval for the construction of the at-grade road, lay-bys, and underground road in Zones 3A and 3B of the integrated basement will be sought before the end of this legislative session. **Annex C** shows the planned vehicular connections from the neighbouring districts to the WKCD.

#### OTHER OPTIONS TO ACCESS THE WKCD

11. As regards the suggestions to provide marine access to the WKCD, Members may wish to note that the demand for and technical feasibility of providing a marine access option will be examined in the context of the TOP consultancy study underway.

#### **DISCUSSION**

12. Members are invited to note the implementation progress of the transport infrastructure projects linking the WKCD with its neighbouring districts. We will update Members on the outcome of the TOP study to be available in the second half of 2015.

West Kowloon Cultural District Authority January 2015

The scope of services provided by the Traffic Operation Plan Consultancy covers -

- a) review the existing traffic conditions during peak periods (the morning and evening peak times and lunchtime) in the Area of Influence (AOI), by collecting all available information by means of traffic count surveys (pedestrian and vehicular), journey time surveys, etc;
- b) review the traffic data and survey results of all previous relevant traffic studies within the AOI and carry out supplementary vehicular and pedestrian surveys within the WKCD and the adjoining traffic corridors and junctions as required. Forecast and update the vehicular and pedestrian flows and junction performance for the design years of 2015, 2016, 2018, 2020, 2022 and 2031 and other years as may be specified by the WKCDA, taking into account the planned land uses and latest WKCD project development programme changes within the AOI;
- c) review and assess the WKCD public transport (PT) demand for the design years of 2015, 2016, 2018, 2020, 2022 and 2031 and other years as may be specified by WKCDA. Revisit the current PT arrangement in the AOI and recommend to WKCDA PT rationalization plan (such as rerouting, frequency adjustment and bus stop changes in the AOI) as a result of the actualization of the consultancy. Assist WKCDA in negotiating with the PT operators and Government Departments for implementation of the PT rationalization plan;
- d) review and assess the E-bus proposals suggested by the Development Plan consultant;
- e) evaluate and recommend EFTS options and carry out feasibility of the system for the preferred option. Personal Rapid Transit (PRT) shall be one of the options to be considered;
- f) develop a traffic simulation model covering all transport

#### ANNEX A

models for the WKCD and the surrounding area to analyse the traffic arrangement in various scenarios, such as construction traffic management plan, crowd dispersal plans and emergency traffic management plan. Study and propose a crowd dispersal management plan with the aid of the traffic simulation tool for the WKCD including mega events, such as firework display;

- g) define emergency scenarios and propose an emergency traffic management scheme for each scenario. Liaise with the district-wide fire engineering consultant who will prepare a fire safety management plan for the WKCD; and study and recommend an at-grade emergency vehicle routing;
- h) assess and evaluate the pilot Smartbike project currently implemented at the WKCD promenade. Propose and recommend the requirements of the cycling provision within the WKCD and explore the possibility of extending the cycling provision beyond the WKCD to the adjoining Jordan and Tsim Sha Tsui districts;
- i) assess marine traffic demand and recommend marine access locations, options and their feasibility as well as the mode of operation of the recommended marine access facilities;
- j) conduct a marine traffic impact assessment for construction phase;
- k) study for conduct comprehensive car a management including the allocation of car parking spaces venue/building taking into for each account development phasing, and the management mechanism for promoting car park sharing concept within and outside the WKCD. Study and evaluate the car parking management tools in the market and recommend the preferred tool;
- l) review loading and unloading practices for other arts and performing arts venues, retail/dining/entertainment

#### ANNEX A

facilities and hotel/office/residential developments in Hong Kong. Assess the demand pattern for loading and unloading activities and propose an operation plan for managing the district-wide loading and unloading activities;

- m) carry out coach demand and supply surveys for the popular tourist destinations/attractive spots in Hong Kong. Conduct a comprehensive study for coach parking management, pick-up/drop-off arrangement for the WKCD, and study and present the allocation of coach parking spaces taking into account the development progress;
- n) review the traffic monitoring and control system and operation plan for large basements and tunnels in Hong Kong and recommend the appropriate system and operation modes for the WKCD. Study and recommend organization and man-power setup requirements for managing the integrated basement including public road and car parks, and other government-funded infrastructure within the WKCD. Identify merits and constraints of all the available options including cost effectiveness and other indicators to be agreed with WKCDA;
- o) carry out consultation for transport operation plan in order to gauge the acceptance of the public and Government Departments. Recommend measures to overcome any objections received; and
- p) provide the implementation strategy, delivery programme, capital cost, maintenance and operating costs estimates and cost-benefit analyses for all the traffic operation measures and plan proposed.

### ANNEX B 附件 B



Proposed landscape deck above the public transport interchange may connect with the landscape deck of the Central Kowloon Route under planning to provide a segregated pedestrian corridor to WKCD

擬建的公共運輸交匯處上蓋平台花園 可接駁規劃中的中九龍幹線平台花園, 締造行人分隔走廊直達西九文化區

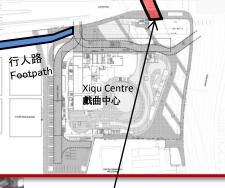


XRL West Kowloon Terminus 高鐵西九龍總站



Canton Road / Austin Road West Junction Improvement

廣東道/柯士甸道西路口改善



Austin Road Subway Connection 柯士甸道行人隧道連接

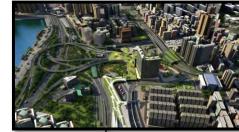
Artist Square Bridge 藝術廣場行人天橋



Proposed single lane elevated road connecting Hoi Po Road to West Kowloon Highway northbound 擬建高架單線行車道連接海寶路至西九龍公路北行方向

### ANNEX C 附件 C

Central Kowloon Route 中九龍幹線





Proposed single lane at-grade road connecting West Kowloon Highway southbound to elevated Nga Cheung Road

擬建地面單線行車道連接西九龍公路 南行方向至雅翔道高架路段



Proposed single lane elevated road connecting elevated Nga Cheung Road to toll plaza of WHC

擬建高架單線行車道連接雅翔道高架路 段至西區海底隧道收費廣場

At-grade road around the Western Harbour Crossing tunnel portal 西區海底隧道出入口一帶地面路段

