For discussion on 21 April 2017

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

Implementation of the Integrated Basement for West Kowloon Cultural District

PURPOSE

This paper briefs Members on the funding proposal to upgrade part of **763CL**, entitled "Integrated Basement for West Kowloon Cultural District", to Category A at an estimated cost of about \$3,890 million in money-of-the-day (MOD) prices, to carry out the third stage of construction works of the integrated basement for West Kowloon Cultural District (WKCD).

PROJECT SCOPE AND NATURE

- 2. The part of **763CL** which we propose to upgrade to Category A (the proposed works) as the third stage of construction works comprises
 - (a) construction of the remaining foundation works for Zone 3B of the integrated basement and associated environmental mitigation measures, and related monitoring and auditing works for construction works;
 - (b) construction of essential basement structure¹ and associated works for Zone 3B of the integrated basement;
 - (c) construction of an underground road of about 230 metres(m) long in Zone 3B of the integrated basement, remaining works for the remaining section of underground road in Zone 3A of the integrated basement, and associated works including footpaths, pick-up/drop-off area, water supply, drainage, electrical and mechanical works, fire services installation works, plant rooms, and means of escape/means of access for firefighting and rescue;

Essential basement structure generally includes structural elements of the integrated basement such as walls, floor and ceiling slabs, columns and beams, as well as other associated works.

- (d) protection works for the existing Airport Express Tunnels (AET)² and associated works in Zone 3B of the integrated basement;
- (e) construction of the remaining section of a covered footbridge (namely, Artist Square Bridge) of about 15m long, with a clear width of about 7m, with two covered escalators, one covered staircase, other infrastructure works and associated works; and
- (f) necessary environmental mitigation measures, and related monitoring and auditing works for construction works in sub-paragraphs (b) to (e) above.

Site plans and artist impressions of the proposed works are at **Enclosures 1 and 2**.

3. Subject to approval of the Finance Committee (FC) within the current legislative session, we will transfer the costs associated with the proposed works as mentioned in paragraph 2(a) above to the West Kowloon Cultural District Authority (WKCDA), and entrust the proposed works as mentioned in paragraphs 2(b) to 2(f) above to WKCDA with a view to their commencement in the third quarter of 2017 for substantial completion in phases by the fourth quarter of 2021.

JUSTIFICATION

Progress Update

- 4. Members of the Legislative Council Joint Subcommittee to Monitor the Implementation of the WKCD Project (Joint Subcommittee) were previously informed that WKCDA would, in view of its latest financial situation, adopt a pragmatic approach to implement the WKCD project in a timely and cost-effective manner with its facilities to be delivered in batches.
- 5. Batches 1 and 2 of WKCDA's facilities include, among others, the Art Park (with M+ Pavilion which was previously called Arts Pavilion), Freespace (Black Box and Outdoor Stage), Xiqu Centre, M+ and Lyric Theatre Complex (LTC). The M+ Pavilion has been opened since July 2016. Construction of the Art Park and Freespace, Xiqu Centre, M+ and LTC are in progress and are targeted for completion in stages between 2017 and around 2021. To facilitate earlier public enjoyment of the open space, a temporary Nursery Park has been opened to the public since July 2015.

Protection works for the existing AET mainly cover structural elements spanning over the tunnels to avoid imposition of extra loads from the integrated basement and topside developments on the tunnels.

- 6. The integrated basement is an integral component of the Foster + Partners' Conceptual Plan forming the basis for the Development Plan for WKCD. It is also an essential design feature to meet the statutory minimum requirement of providing 23 hectares of public open space in WKCD as specified in the South West Kowloon Outline Zoning Plan. This design enables traffic to be put underground thereby freeing up the site for cultural use and public enjoyment. It also enhances the walking environment at grade. Acknowledging that the integrated basement was not envisaged when the upfront endowment³ was granted to WKCDA in 2008, the Government announced in June 2013 that it would fully fund the capital works of the main integrated basement as general enabling works to facilitate the development of the WKCD project, subject to FC's funding approval. This would allow WKCDA to focus on delivering the arts and cultural facilities. At the Joint Subcommittee meeting held on 28 May 2014, Members were informed that the integrated basement will be implemented in phases to tie in with the phased development programme of the Batches 1 and 2 facilities.
- 7. The area around the Artist Square, which includes M+, LTC and some office sites on top of the integrated basement at Zones 3A and 3B (referred to as the Artist Square Development Area (ASDA)) presents a good opportunity for early development into a "mini-WKCD". With target completion date by around 2021, ASDA will form a precinct supported by a balanced mix of land uses including core arts and cultural facilities, office, other arts and cultural facilities and retail/dining/entertainment facilities. The public spaces in ASDA, including the interfacing area with the Art Park, open space at the Artist Square and the waterfront promenade, will be developed to create a sense of place for the general public and to bring vibrancy to the area.

Progress of the first and second stages of design, site investigation and construction works of the Integrated Basement

8. The funding application for the first and second stages of integrated basement, which mainly comprise construction of infrastructure works and foundation works for Zone 3A and Zone 3B respectively, as well as the design and site investigation for Zones 2A, 2B and 2C, was approved as Category A Item 791CL by FC in July 2015. The relevant construction works for Zones 3A and 3B have been entrusted to WKCDA with a view to their substantial completion in the first quarter of 2019, while the design and site investigation works for Zones 2A, 2B and 2C will be substantially completed by the fourth quarter of 2019.

In July 2008, FC approved a one-off upfront endowment of \$21.6 billion in MOD prices for WKCDA to implement the WKCD development covering arts and cultural facilities, retail/dining/entertainment facilities, public open space and certain transport facilities.

³ In July 2008, FC approved a one-off upfront endowment of \$21.6 billion in MOD prices for WKCDA

Proposal

Third stage of construction works of the Integrated Basement

Remaining foundation works for Zone 3B (paragraph 2(a) above)

- 9. The scope of the second stage of construction works approved by FC in July 2015 covers most of the foundation works in Zone 3B of the integrated basement except those located within an area which was occupied by the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) project (the remaining foundation works). Following liasion between the MTR Corporation Limited (MTRCL) and WKCDA, MTRCL handed over the associated site to WKCDA in early August 2016. WKCDA considers that there would be significant benefits to incorporate in the current foundation works contract for Zone 3B the remaining foundation works so as to reduce construction risk and to provide greater programming certainty for the subsequent construction works in Zone 3B of the integrated basement.
- 10. At the Joint Subcommittee meeting held on 30 May 2016, Members were informed that WKCDA would provide advance funding for taking forward the remaining foundation works for Zone 3B and the associated consultancy fees on an unconditional basis, and that when applying for funding for the third stage of construction works of the integrated basement, the Government would seek FC's approval for reimbursing WKCDA the cost incurred in the remaining foundation works for Zone 3B in recognition of the works undertaken on behalf of the Government. Accordingly, we have included in this funding proposal the cost incurred by WKCDA in delivering the remaining foundation works of Zone 3B of the integrated basement, as mentioned in paragraph 2(a) above, at an estimated cost of \$50 million in MOD prices⁴.

Main construction works for Zone 3B and remaining works for Zone 3A (paragraphs 2(b)-(d) and part of 2(f) above)

11. To tie in with the construction programme of the LTC which is scheduled for completion in 2021, it is necessary to commence progressively from the third quarter of 2017 for substantial completion in phases by the fourth quarter of 2021 the proposed construction works for Zone 3B where the LTC is located. Given that the construction of Zone 3B of the integrated basement and the LTC is highly integrated and their programming inter-dependent, it is imperative to avoid critical interfacing issues such as overlapping work sites, construction work sequences and methodologies. The proposed works covered by this funding proposal include the construction of essential basement structure in Zone 3B, underground road in Zone 3B, remaining works for the remaining section of the

This figure represents the latest estimate of capital cost. We will finalise the cost estimate before making submission to the Public Works Subcommittee.

underground road in Zone 3A, and the associated works (including footpaths, pick-up/drop-off area, water supply, drainage, electrical and mechanical works, fire services installation works, plant rooms, and means of escape/means of access for firefighting and rescue). The proposed works also include the protection works for the existing AET and associated works in Zone 3B of the integrated basement.

Remaining section of the proposed footbridge (paragraph 2(e) and part of 2(f) above)

- 12. As mentioned in the funding proposal to implement the second construction package of WKCD infrastructural works under a separate agenda item, we need to provide a direct, grade-separated pedestrian linkage between the MTR Kowloon Station and ASDA (i.e. the Artist Square Bridge). The proposed footbridge will provide a round-the-clock and barrier-free connection between the MTR Kowloon Station and ASDA.
- 13. To tie in with the phased implementation of ASDA, construction of the proposed Artist Square Bridge will be carried out in two sections:
 - (a) the main section of the proposed footbridge across Austin Road West (including two lifts and two covered staircases) to provide a direct and grade-separated pedestrian linkage with the MTR Kowloon Station; and
 - (b) the remaining section of the proposed footbridge (including two covered escalators and one covered staircase structure) extending into ASDA.

While (a) above will be dealt with by the funding proposal on the second construction package of WKCD infrastructural works (i.e. part of 754CL), (b) is covered by the current funding application as the remaining section of the proposed footbridge rests on the basement structure in Zone 3B of the integrated basement (where LTC is located) and will be developed in conjunction with the third stage of construction works for the integrated basement (paragraph 2(e) and the relevant part of 2(f) above). Subject to FC's funding approval on the proposed works, construction of the remaining section of the proposed footbridge is scheduled to commence in the second quarter of 2020 for substantial completion in the fourth quarter of 2021.

Proposed Entrustment to WKCDA

14. In view of the exceptionally high degree of integration amongst the various facilities in the integrated basement and the critical interfacing issues such as overlapping work sites, construction work sequences and methodologies, and major programming interdependence among the proposed works, the Government proposes to entrust to WKCDA the proposed works to be carried out concurrently with the implementation of the LTC and other WKCDA's facilities in Zone 3B. It would be impractical for WKCDA to construct the LTC and other WKCDA's

facilities in Zone 3B, while the Government separately undertakes the construction of the proposed works in the integrated basement which are located and integrated within the same sites. Moreover, given that the design and construction of the proposed footbridge and the WKCDA facilities in ASDA are highly integrated, it will significantly increase the costs and time required for the construction of the proposed works and create serious interfacing problems for the implementation programmes of the LTC and other WKCDA's facilities in Zone 3B if the works concerned are undertaken by separate contractors of WKCDA and the Government. We therefore consider it necessary and cost effective to entrust to WKCDA the implementation of the proposed integrated basement works as well as the remaining section of the proposed footbridge in conjunction with the implementation of the LTC and other WKCDA's facilities in Zone 3B in a holistic manner.

15. WKCDA will be reimbursed for the actual costs incurred in relation to the management, supervision and construction of the proposed works provided by their consultants and contractors (i.e. third party costs), and separately for their actual in-house management cost incurred in relation to the proposed works as mentioned in paragraphs 2(b) to 2(f) above.

FINANCIAL IMPLICATIONS

16. We estimate the cost of the proposed works, as set out in paragraph 2 above, to be about \$3,890 million in MOD prices⁵.

PUBLIC CONSULTATION

- 17. We consulted the Yau Tsim Mong District Council, and its Traffic and Transport Committee and Food, Environmental Hygiene and Public Works Committee on 21 August 2014, 4 September 2015, 21 July 2016 and 16 March 2017 respectively. Members supported in principle the proposed works.
- 18. We gazetted the proposed underground road in Zone 3A and Zone 3B of the integrated basement under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 13 February 2015. No objection was received during the statutory objection period. The authorization notice was gazetted on 30 April 2015.

This figure represents the latest estimates of capital cost including the advance cost paid by WKCDA mentioned in paragraph 10 above. We will finalise the cost estimates before making submission to the Public Works Subcommittee.

- 19. We gazetted the proposed Artist Square Bridge under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 29 January 2016. No objection was received during the statutory period and the authorization notice was gazetted on 15 April 2016. Subsequently, we have relocated the southern lift and staircase structure of the proposed footbridge to suit the design development of WKCDA's facilities. The amendments were gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 11 November 2016. No objection was received during the statutory period and the authorization notice was gazetted on 10 February 2017.
- 20. At various Joint Subcommittee meetings when the integration and connectivity of WKCD with its neighbouring districts was discussed, Members had urged the Government to enhance the connectivity as soon as possible including, for example, providing a grade-separated pedestrian linkage between the Kowloon Station and ASDA.
- 21. We have consulted the Advisory Committee on the Appearance of Bridges and Associated Structures⁶ on the aesthetic design of the proposed Artist Square Bridge. The Committee accepted the aesthetic design.

ENVIRONMENTAL IMPLICATIONS

The engineering feasibility study of the WKCD development is a 22. designated project under Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO), requiring an EIA report to be approved under the EIAO. The proposed works forming part of the WKCD development cover an underground road serving WKCD which is a designated project under Schedule 2 of the EIAO, requiring an environmental permit for its construction and operation. November 2013, the EIA report for the WKCD development (which includes the proposed works) was approved under the EIAO, and an environmental permit was obtained for the construction and operation of the underground road. The EIA report has concluded that the environmental impact of the proposed works can be controlled to within the criteria under the EIAO and the Technical Memorandum on EIA process. We shall implement the mitigation measures as recommended in the approved EIA report and as required under the environmental permit. The mitigation measures recommended for the construction phase mainly include adoption of quieter equipment and movable noise barriers or noise insulating fabric to minimise construction noise impact, and regular watering of the site and provision of wheel-washing facilities for dust control.

Advisory Committee on the Appearance of Bridges and Associated Structures 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. It 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.

- 23. At planning and design stages, we have considered the design and construction method of the proposed works to reduce generation of construction waste where possible. In addition, we will require the contractors to reuse inert construction waste (e.g. excavated soil and broken concrete) 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 facilities⁷. We will encourage the contractors to maximise the use of recycled or recyclable inert construction waste and the use of non-timber formwork to further reduce the generation of construction waste.
- 24. At construction stage, we will require the contractors to submit plans for approval 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 plans. We will require the contractors to separate the inert portion from non-inert construction waste on site 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.

HERITAGE IMPLICATIONS

25. The proposed works will not affect any heritage sites, 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

26. The proposed works do not require any private land acquisition.

BACKGROUND INFORMATION

27. The WKCD development is one of the ten major infrastructure projects included in the Chief Executive's 2007-08 Policy Address for promoting the long-term development of arts and culture, and supporting Hong Kong as a creative economy and Asia's World City.

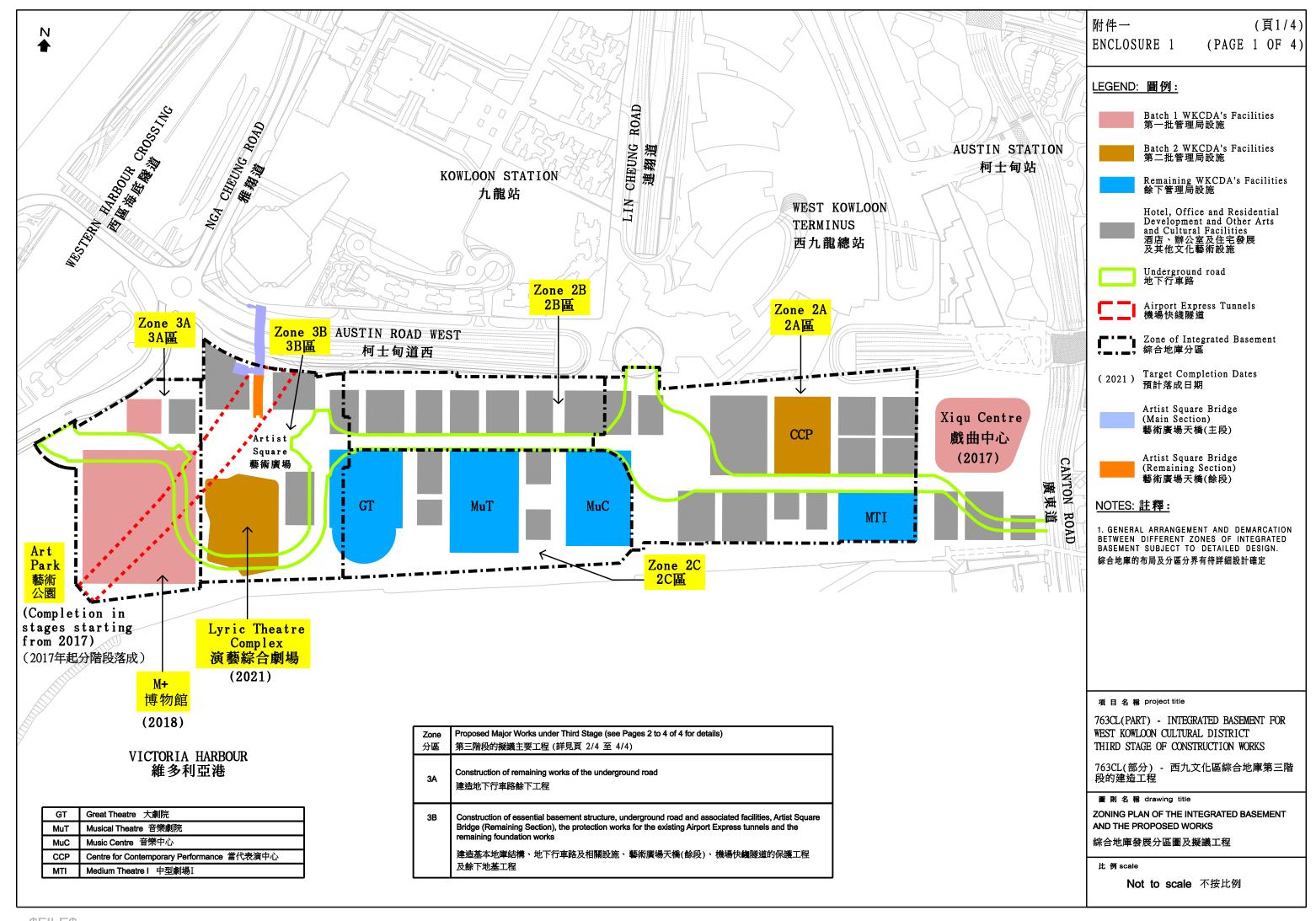
Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

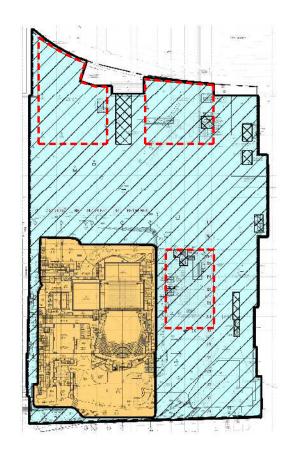
- 28. In January 2013, FC approved the upgrading of **753CL**, entitled "Infrastructure Works for West Kowloon Cultural District, phase 1 design and site investigation" to Category A at an estimated cost of \$478.0 million in MOD prices. The design and site investigation of government infrastructure works in Zones 3A and 3B of the integrated basement (related to the underground road and associated works) form part of the works entrusted to WKCDA under **753CL**, and are proceeding in stages to suit the phased implementation of the integrated basement.
- 29. We upgraded **763CL** to Category B on 28 June 2013.
- 30. In March 2014, we created a Category D item to fund the design of the advance works and site investigation works for Zone 3B of the integrated basement at an estimated cost of \$27.3 million in MOD prices under **Subhead 7100CX**, entitled "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme". The works under this Category D item were entrusted to WKCDA and substantially completed.
- 31. In July 2015, FC approved the upgrading of part of **763CL** as **791CL**, entitled "Integrated Basement for West Kowloon Cultural District first and second stages of design, site investigation and construction works" to Category A at an estimated cost of \$2,919.5 million in MOD prices. The works were entrusted to WKCDA, with construction works targeted for substantial completion in the first quarter of 2019 and the design and site investigation works to be substantially completed by the fourth quarter of 2019.

WAY FORWARD

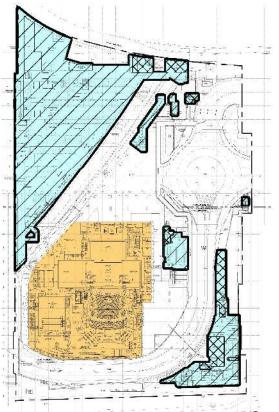
32. Subject to Members' support, we plan to seek funding support of the Public Works Subcommittee in May 2017 and then FC's funding approval to enable commencement of the proposed works in the third quarter of 2017.

Home Affairs Bureau Civil Engineering and Development Department April 2017

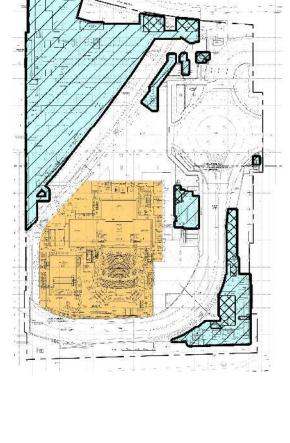


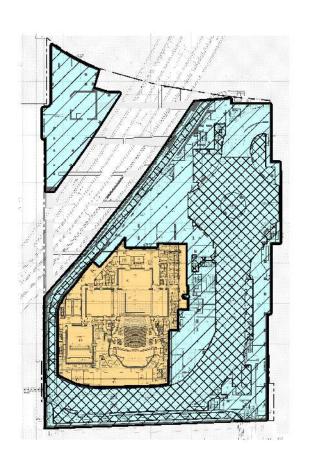


GROUND LEVEL 地面

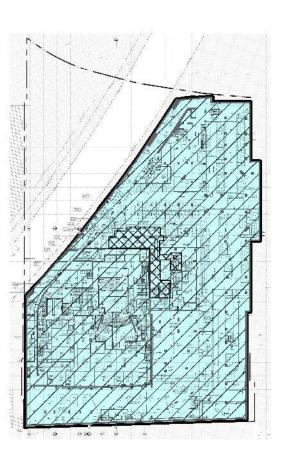


B1M LEVEL 地庫第一層(閣樓)





B1 LEVEL 地庫第一層



B2 LEVEL 地庫第二層

附件 一 (頁2/4) (PAGE 2 OF 4) ENCLOSURE 1

Legend:

圖例

Proposed Essential Basement Structure

(WKCDA's Facilities)

擬議基本地庫結構 (西九管理局設施)

Proposed Essential Basement Structure

(Government Facilities)

擬議基本地庫結構(政府設施)



Lyric Theatre Complex 演藝綜合劇場



Topside Development 上蓋發展

項目名稱 Project title

763CL(PART) - INTEGRATED BASEMENT FOR WEST KOWLOON CULTURAL DISTRICT THIRD STAGE OF CONSTRUCTION WORKS 763CL(部分) - 西九文化區綜合地庫

第三階段的建造工程

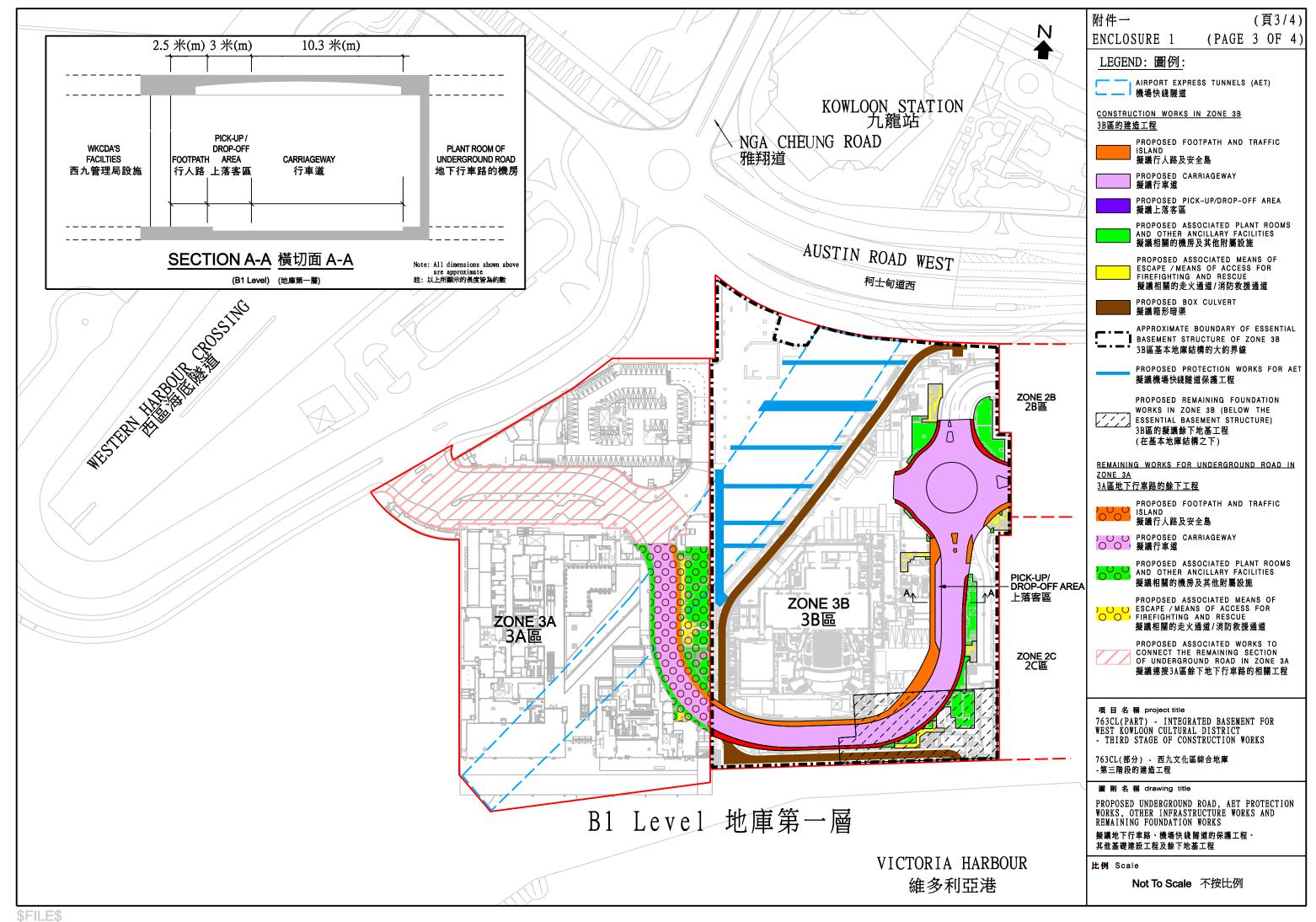
圖則名稱 Drawing title

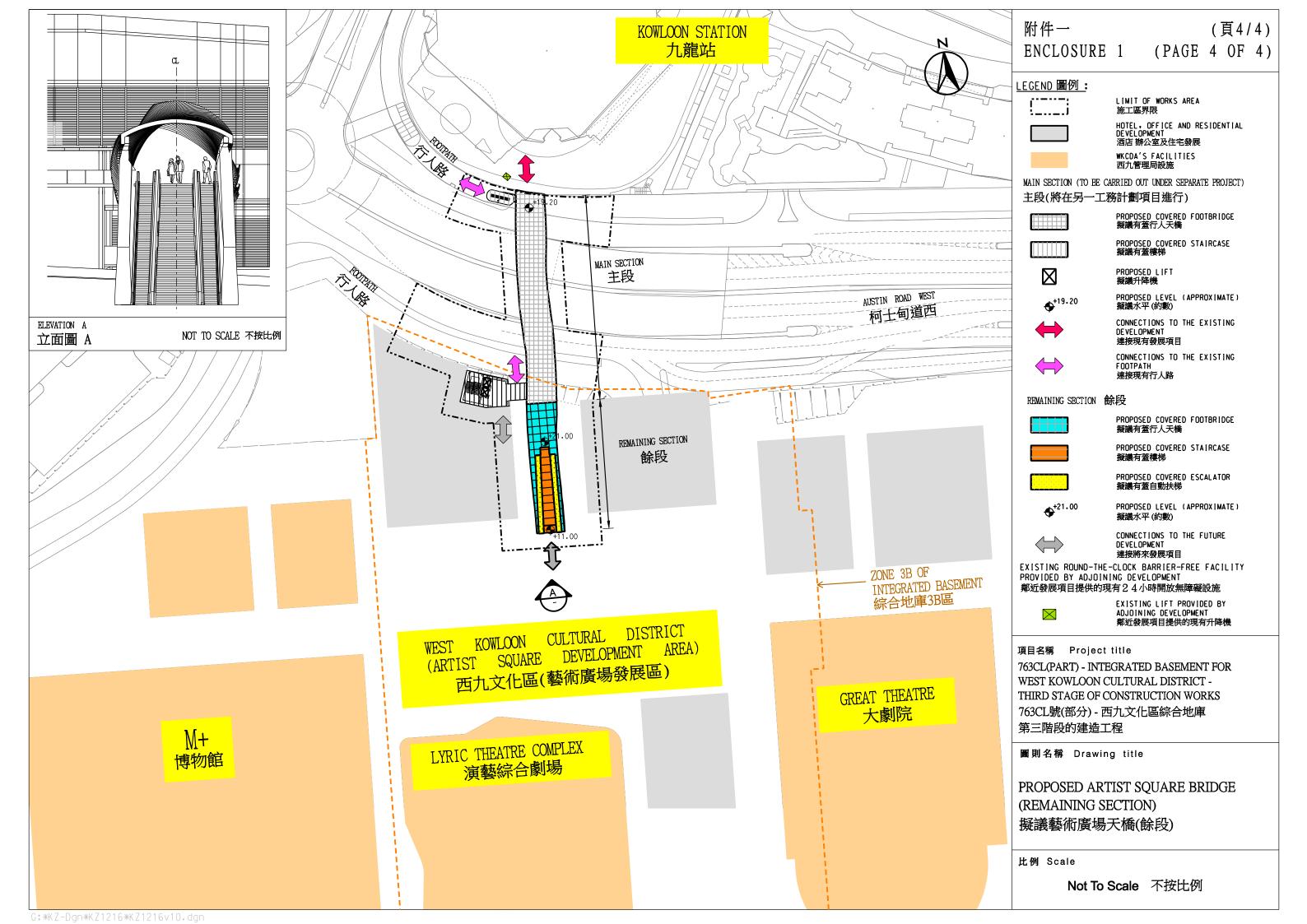
Proposed Essential Basement Structure in Zone 3B

擬議3B區基本地庫結構

比例 Scale

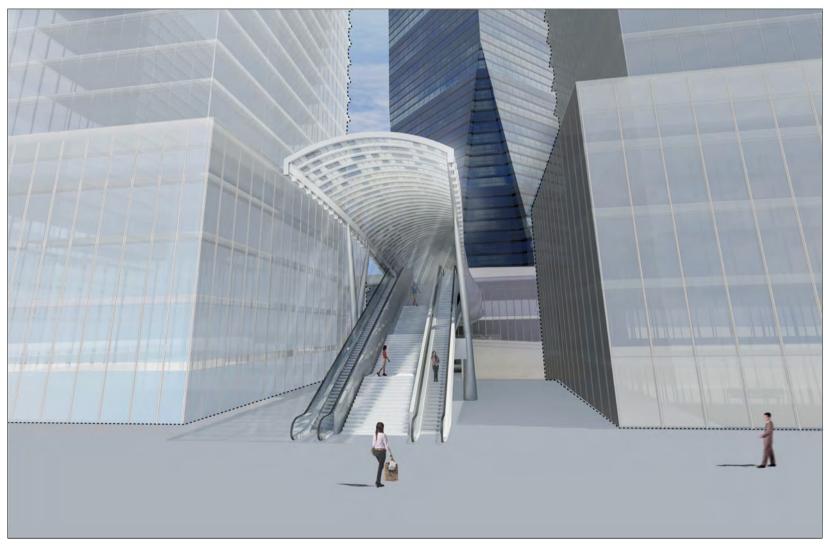
Not To Scale 不按比例







VIEW OF THE WESTERN SIDE OF THE PROPOSED ARTIST SQUARE BRIDGE 擬議藝術廣場天橋西立面構思圖



VIEW OF SOUTHERN SIDE OF PROPOSED ARTIST SQUARE BRIDGE (REMAINING SECTION) (LOOKING NORTH) 擬議藝術廣場天橋(餘段)南立面構思圖 (向北看)

項目名稱 PROJECT TITLE

763CL (PART) - INTEGRATED BASEMENT FOR WEST KOWLOON CULTURAL DISTRICT - THIRD STAGE OF CONSTRUCTION WORKS 763CL號 (部分) - 西九文化區綜合地庫第三階段建造工程

PROPOSED ARTIST SQUARE BRIDGE (REMAINING SECTION) ARTIST'S IMPRESSION 擬議藝術廣場天橋(餘段)構思圖