

For discussion on
24 June 2017

PWSC(2017-18)12

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT
Civil Engineering – Land Development
763CL – Integrated Basement for West Kowloon Cultural District

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of part of **763CL**, entitled “Integrated Basement for West Kowloon Cultural District – third stage of construction works”, to Category A at an estimated cost of \$3,638.5 million in money-of-the-day prices; and
- (b) the retention of the remainder of **763CL** in Category B.

PROBLEM

We need to carry out the third stage of construction works of the integrated basement to dovetail the phased implementation of the West Kowloon Cultural District (WKCD) and support its early phases of development especially the commissioning of the Lyric Theatre Complex.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Home Affairs, proposes to upgrade part of **763CL** to Category A, at an estimated cost of \$3,638.5 million in money-of-the-day (MOD) prices, for implementing the third stage of construction works of the integrated basement in WKCD.

/ **PROJECT**

PROJECT SCOPE AND NATURE

3. 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 environmental monitoring and auditing (EM&A) works for construction works;
- (b) construction of essential basement structure ¹ and associated works for Zone 3B of the integrated basement;
- (c) construction of an underground road of about 230 metres 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;
- (d) protection works for the existing Airport Express Tunnels (AET)² and associated works in Zone 3B of the integrated basement;
- (e) construction of about 380 metres long drainage box culvert within the essential basement structure for Zone 3B of the integrated basement; and
- (f) necessary environmental mitigation measures, and related EM&A works for construction works in sub-paragraphs (b) to (e) above.

—— Site plans and sections of the proposed works are at Enclosures 1 and 2.

/ 4.

¹ 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.

² 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.

4. Subject to approval of the Finance Committee (FC), we will reimburse the cost associated with the proposed works as mentioned in paragraph 3(a) above to the West Kowloon Cultural District Authority (WKCD), and we plan to entrust the proposed works as mentioned in paragraphs 3(a) to 3(f) above to WKCD with a view to commencing the works in the third quarter of 2017 for substantial completion in phases by around 2021.

5. We will retain the remainder of **763CL**³ in Category B. The scope of the remainder mainly comprises –

- (a) construction of the underground road and essential basement structure in Zone 2A;
- (b) detailed design, site investigation and construction of essential basement structure and construction of the underground road in Zone 2B; and
- (c) construction of the remaining section of a covered footbridge linking WKCD with MTR Kowloon Station (i.e. the remaining section of the Artist Square Bridge)⁴.

JUSTIFICATION

Progress Update

6. Members of the Legislative Council Joint Subcommittee to Monitor the Implementation of the WKCD Project (Joint Subcommittee) were previously informed that WKCD 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.

/ 7.

³ The Administration will liaise with WKCD to review when the detailed design, site investigation and construction of essential basement structure in Zone 2C of the integrated basement should be included in the project scope of **763CL** as appropriate, with a view to tying in with WKCD's implementation programme of the arts and cultural facilities in Zone 2C.

⁴ The scope of works of this item is proposed to be incorporated into a revised funding application for the Artist Square Bridge under **754CL**.

7. Batches 1 and 2 of WKCD'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 was opened in 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 was opened to the public in July 2015.

8. 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 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 endowment⁵ was granted to WKCD 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 WKCD 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 would be implemented in phases to tie in with the phased development programme of the Batches 1 and 2 facilities.

9. 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 a 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, offices, 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

⁵ In July 2008, FC approved a one-off upfront endowment of \$21.6 billion in MOD prices for WKCD to implement the WKCD development covering arts and cultural facilities, retail/dining/entertainment facilities, public open space and certain transport facilities.

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

10. The funding application for the first and second stages of integrated basement, which mainly comprises 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 WKCD with a view to their substantial completion in the first quarter of 2019. The design and site investigation for Zones 2A, 2B and 2C commenced in February 2017 with their preliminary design to be substantially completed in end of 2018 and the detailed design for Zone 2A to be substantially completed in end of 2019. Based on the preliminary design, an updated cost estimate of the whole integrated basement project will be available in the first quarter of 2019.

Proposal - Third stage of construction works of the Integrated Basement

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

11. 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 liaison between the MTR Corporation Limited (MTRCL) and WKCD, MTRCL handed over the site concerned to WKCD in early August 2016. WKCD considers that there would be significant benefits to incorporate the Remaining Foundation Works in the current foundation works contract for Zone 3B so as to reduce construction risks and to provide greater programming certainty for the subsequent construction works in Zone 3B of the integrated basement.

12. At the Joint Subcommittee meeting held on 30 May 2016, Members were informed that WKCD would provide advance funding for taking forward the Remaining Foundation Works 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 WKCD the cost incurred in the Remaining Foundation Works in recognition of the works undertaken on behalf of the Government. Accordingly, we have included in this funding proposal the cost incurred by WKCD in delivering the Remaining Foundation Works of Zone 3B of the integrated basement at an estimated cost of \$47.4 million in MOD prices as set out in paragraph 16(a) and the relevant parts of paragraphs 16(g), 16(h) and 16(k) below.

Main construction works for Zone 3B and remaining works for Zone 3A (paragraphs 3(b) to 3(f) above)

13. To tie in with the construction programme of the LTC which is scheduled for completion around 2021, it is necessary to commence progressively from the third quarter of 2017 for substantial completion in phases by 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, the underground road in Zone 3B, remaining works for the remaining section of the 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, a section of drainage box culvert and associated works in Zone 3B of the integrated basement. The above-mentioned works form the bulk of the current funding application, with breakdown set out in paragraphs 16(b) to 16(e), and other relevant parts of paragraph 16.

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. We therefore consider it necessary and cost effective to entrust to WKCDA the implementation of the proposed integrated basement works 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 as mentioned in paragraphs 3(a) to 3(f) above provided by their consultants and contractors (i.e. third party costs), and separately for their actual in-house management cost incurred capped at a sum of about \$60.3 million (in September 2016 prices), being about 2% of the total estimated cost of the project, mainly based on the estimated resources to be deployed by WKCDA in relation to the proposed works as mentioned in paragraphs 3(b) to 3(f) above.

FINANCIAL IMPLICATIONS

16. We estimate the cost of the proposed works, as set out in paragraph 3 above, to be \$3,638.5 million in MOD prices (please see paragraph 17 below), broken down as follows –

	\$ million
(a) Remaining foundation works for Zone 3B of the integrated basement and associated environmental mitigation measures, and related EM&A works	41.2
(b) Essential basement structure and associated works for Zone 3B of the integrated basement	1,762.5
(c) Underground road in Zone 3B, and remaining works for the remaining section of underground road in Zone 3A of the integrated basement	348.4
(d) Protection works for the existing AET in Zone 3B of the integrated basement	238.3
(e) Drainage box culvert in Zone 3B of the integrated basement	45.6
(f) Necessary environmental mitigation measures, and related EM&A works for items (b) to (e) above	31.1
(g) Consultants' fees for –	41.4
(i) contract administration	22.9
(ii) management of resident site staff	8.0
(iii) EM&A programme	0.6
(iv) Monitoring and auditing on entrusted works	9.9

/ (h)

		\$ million	
(h)	Remuneration of resident site staff	160.4	
(i)	In-house management cost payable to WKCD for the entrusted works	60.3	
(j)	Contingency	268.4	
	Sub-total	2,997.6	(in September 2016 prices)
(k)	Provision for price adjustment	640.9	
	Total	3,638.5	(in MOD prices)

— A detailed breakdown of the estimates for consultants' fees and resident site staff costs by man-months is at Enclosure 3.

17. Subject to funding approval, we project to phase the expenditure as follows –

Year	\$ million (Sept 2016)	Price adjustment factor	\$ million (MOD)
2017 – 2018	112.3	1.05750	118.8
2018 – 2019	732.4	1.12095	821.0
2019 – 2020	991.5	1.18821	1,178.1
2020 – 2021	590.9	1.25950	744.2
2021 – 2022	368.4	1.32562	488.4
2022 – 2023	118.6	1.39190	165.1
2023 – 2024	70.0	1.46150	102.3
2024 – 2025	13.5	1.52909	20.6
	<u>2,997.6</u>		<u>3,638.5</u>

18. 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 from 2017 to 2025.

19. We estimate the annual recurrent expenditure arising from the proposed works to be \$21.6 million.

PUBLIC CONSULTATION

20. We consulted the Yau Tsim Mong District Council and its Food, Environmental Hygiene and Public Works Committee on 21 August 2014 and 16 March 2017 respectively. Members supported in principle the proposed works.

21. 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.

22. We consulted the Joint Subcommittee on 21 April 2017 and the item was discussed together with another funding proposal to upgrade part of **754CL** entitled "Infrastructure Works for West Kowloon Cultural District, Phase 1" to Category A to carry out the construction works of the main section of the proposed Artist Square Bridge (ASB) and beautification works for the existing subway across the junction of Austin Road West and Canton Road. Members raised concerns mainly on the high estimated cost of the proposed ASB. The Joint Subcommittee did not support submission of the funding proposals to the Public Works Subcommittee, and requested the Administration to provide supplementary information on the cost breakdown of the proposed ASB. Pending further discussion between the Government and WKCD on the ASB, we consulted the Joint Subcommittee on 29 May 2017 on a slightly revised funding application for the third stage of construction works of the integrated basement with the portion relating to the remaining section of ASB taken out. The Joint Subcommittee had no objection to our submission of the revised funding application to the Public Works Subcommittee for consideration. As for the remaining section of the ASB, we intend to incorporate it into the funding application for the main section of the ASB when the project is ready for submission to the Legislative Council. To tie in with the implementation programme of the LTC and other topside developments in Zone 3B of the integrated basement, we need to commence the proposed works as set out in paragraphs 3(b) to 3(f) above in the third quarter of 2017 to dovetail the phased implementation of WKCD.

ENVIRONMENTAL IMPLICATIONS

23. The engineering feasibility study of the WKCD development is a designated project under Schedule 3 of the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO), requiring an Environmental Impact Assessment (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. In 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 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 will 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. We have allowed a total of \$31.6 million (in September 2016 prices) in the project estimate under the items in paragraphs 16(a) and 16 (f) for implementing the necessary environmental mitigation measures, and related EM&A works.

24. 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 facilities⁶. 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 generation of construction waste.

/ 25.

⁶ 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.

25. At the 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 receptor project sites and landfills respectively through a trip-ticket system.

26. We estimate that the proposed works will generate in total 0.9 million tonnes of construction waste. Of these, we will reuse 0.01 million tonnes (1%) of inert construction waste within WKCD and deliver 0.87 million tonnes (97%) of inert construction waste to concurrent projects for subsequent reuse. In addition, we will dispose of the remaining 0.02 million tonnes (2%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at landfill sites is estimated to be about \$4 million for this project (based on a unit charge rate of \$200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

27. 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

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

BACKGROUND INFORMATION

29. 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.

30. 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 WKCD A under **753CL**, and are proceeding in stages to suit the phased implementation of the integrated basement.

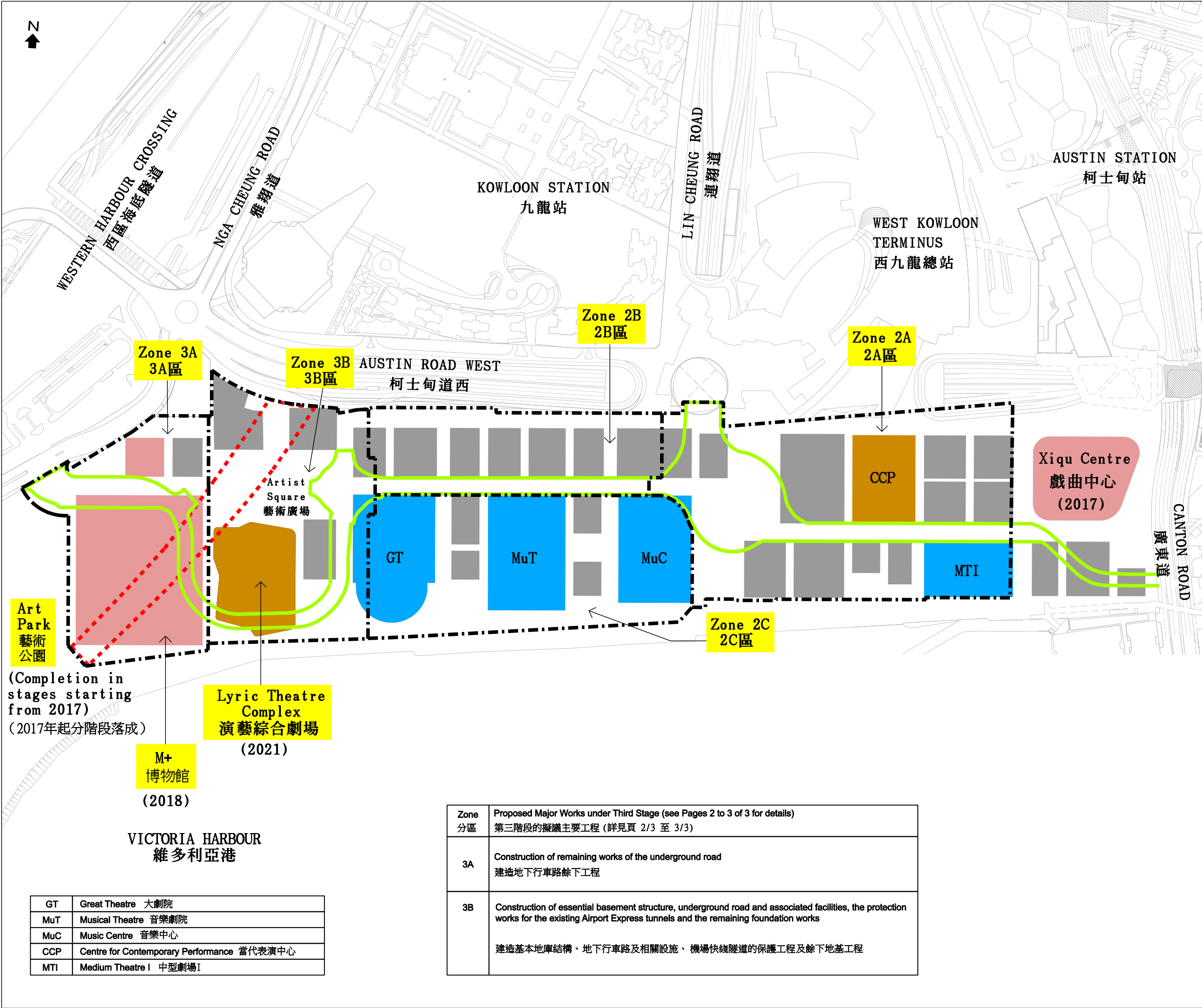
31. We upgraded **763CL** to Category B on 28 June 2013.

32. 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 WKCD A and substantially completed.

33. 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 WKCD A, 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 end of 2019.

34. The proposed works will not involve any tree removal or planting proposals.

35. We estimate that the proposed works will create about 700 jobs (600 for labourers and 100 for professional/technical staff) providing a total employment of 22 000 man-months.



附件一

ENCLOSURE 1

(頁1/3)

(PAGE 1 OF 3)

LEGEND: 圖例:

Batch 1 WKCDA's Facilities
第一批管理局設施

Batch 2 WKCDA's Facilities
第二批管理局設施

Remaining WKCDA's Facilities
餘下管理局設施

Hotel, Office and Residential
Development and Other Arts
and Cultural Facilities
酒店、辦公室及住宅發展
及其他文化藝術設施

Underground road
地下行車路

Airport Express Tunnels
機場快綫隧道

Zone of Integrated Basement
綜合地庫分區

(2021)

Target Completion Dates
預計落成日期

NOTES: 註釋:

1. GENERAL ARRANGEMENT AND DEMARCATION
BETWEEN DIFFERENT ZONES OF INTEGRATED
BASEMENT SUBJECT TO DETAILED DESIGN.
綜合地庫的布局及分區分界有待詳細設計確定

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
段建造工程

圖則名稱 drawing title

ZONING PLAN OF THE INTEGRATED BASEMENT
AND THE PROPOSED WORKS
綜合地庫發展分區圖及擬議工程

比例 scale

Not to scale 不按比例

Zone 分區	Proposed Major Works under Third Stage (see Pages 2 to 3 of 3 for details) 第三階段的擬議主要工程 (詳見頁 2/3 至 3/3)
3A	Construction of remaining works of the underground road 建造地下行車路餘下工程
3B	Construction of essential basement structure, underground road and associated facilities, the protection works for the existing Airport Express tunnels and the remaining foundation works 建造基本地庫結構、地下行車路及相關設施、機場快綫隧道的保護工程及餘下地基工程

GT	Great Theatre 大劇院
MuT	Musical Theatre 音樂劇院
MuC	Music Centre 音樂中心
CCP	Centre for Contemporary Performance 當代表演中心
MTI	Medium Theatre I 中型劇場I

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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)

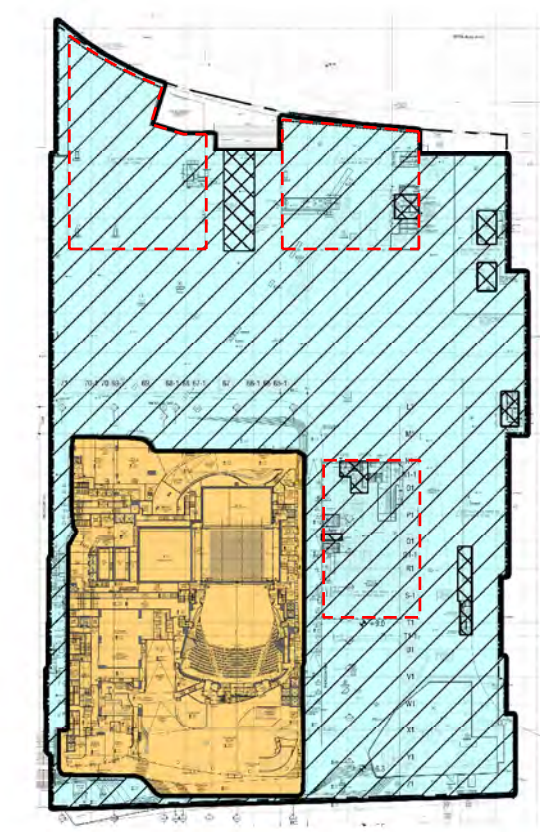
擬議基本地庫結構(政府設施)

Lyric Theatre Complex

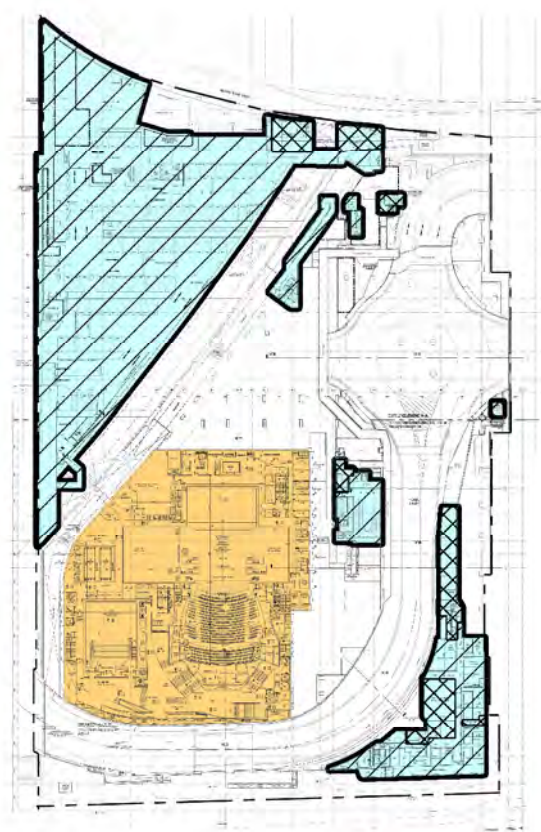
演藝綜合劇場

Topside Development

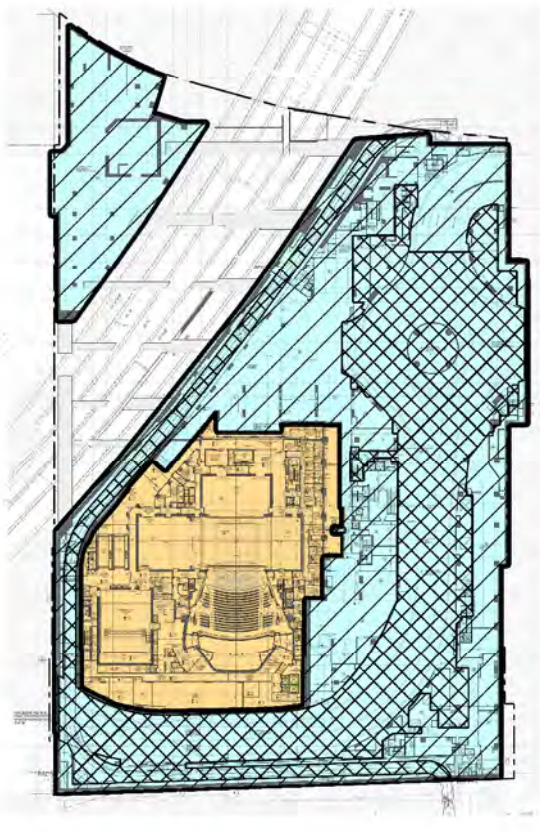
上蓋發展



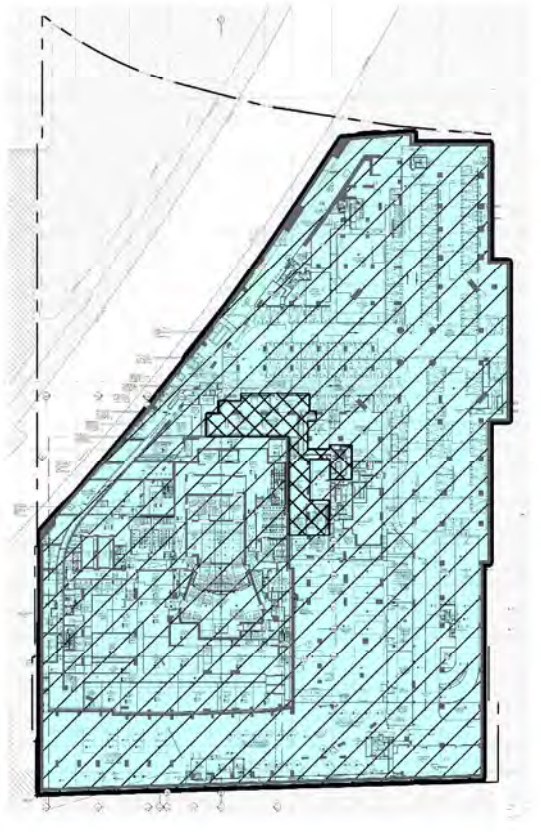
GROUND LEVEL
地面



B1M LEVEL
地庫第一層(閣樓)

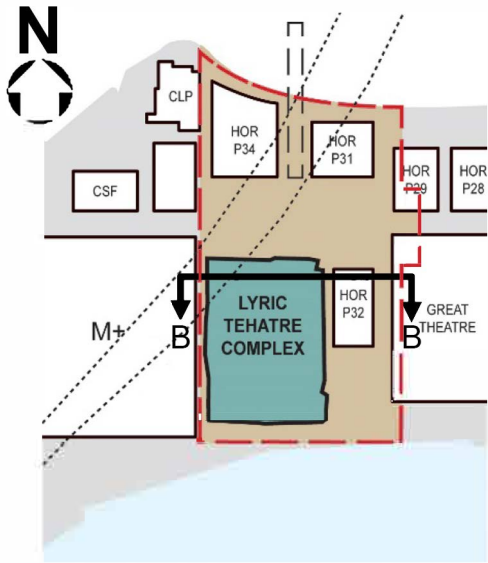
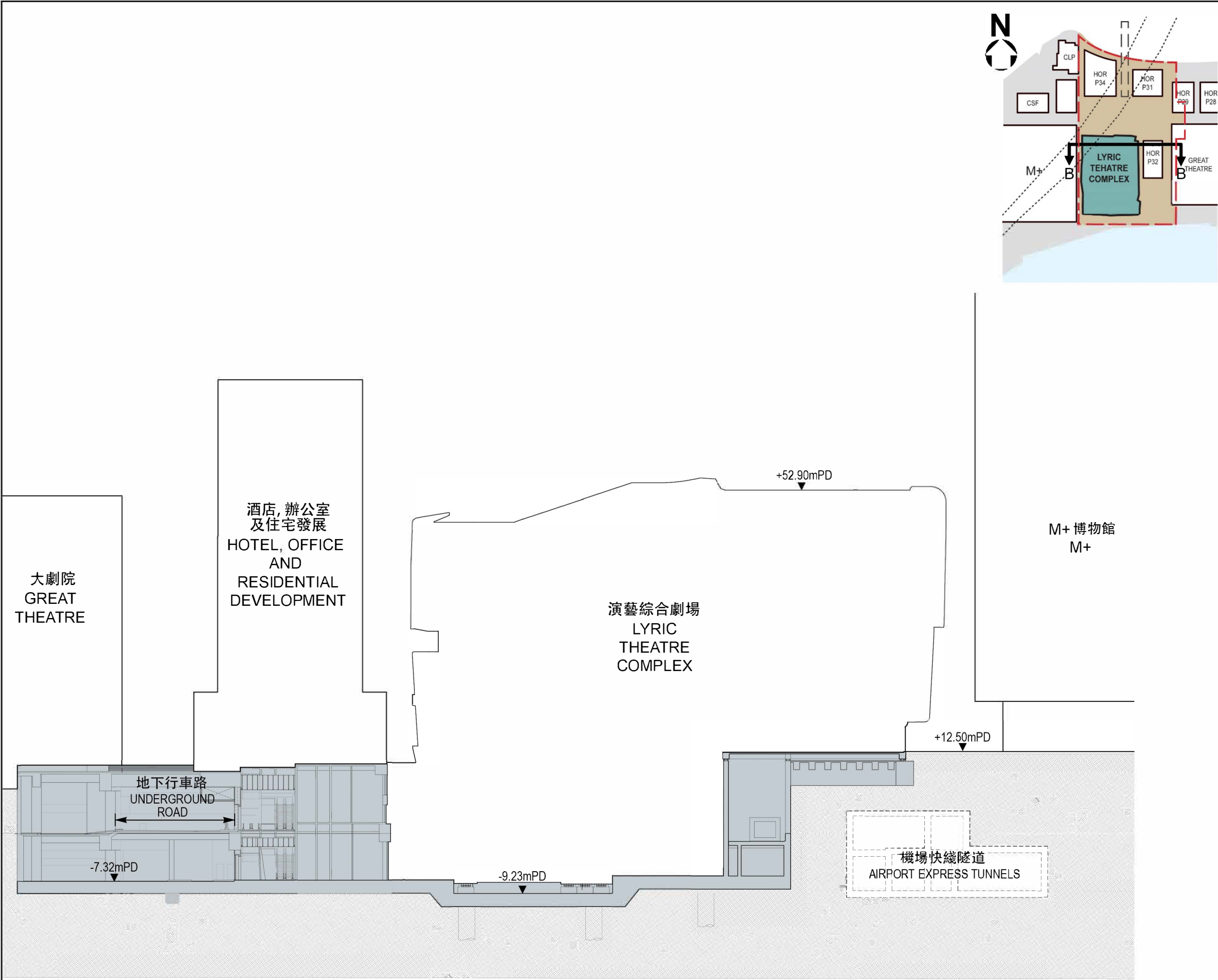


B1 LEVEL
地庫第一層



B2 LEVEL
地庫第二層

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	



Legend: 圖例:

綜合地庫3B區
ZONE 3B INTEGRATED BASEMENT

+52.90mPD 主水平基準以上52.90米
52.90 METRE ABOVE PRINCIPAL DATUM

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建造工程

圖則名稱 drawing title

Section B-B
剖面圖 B-B

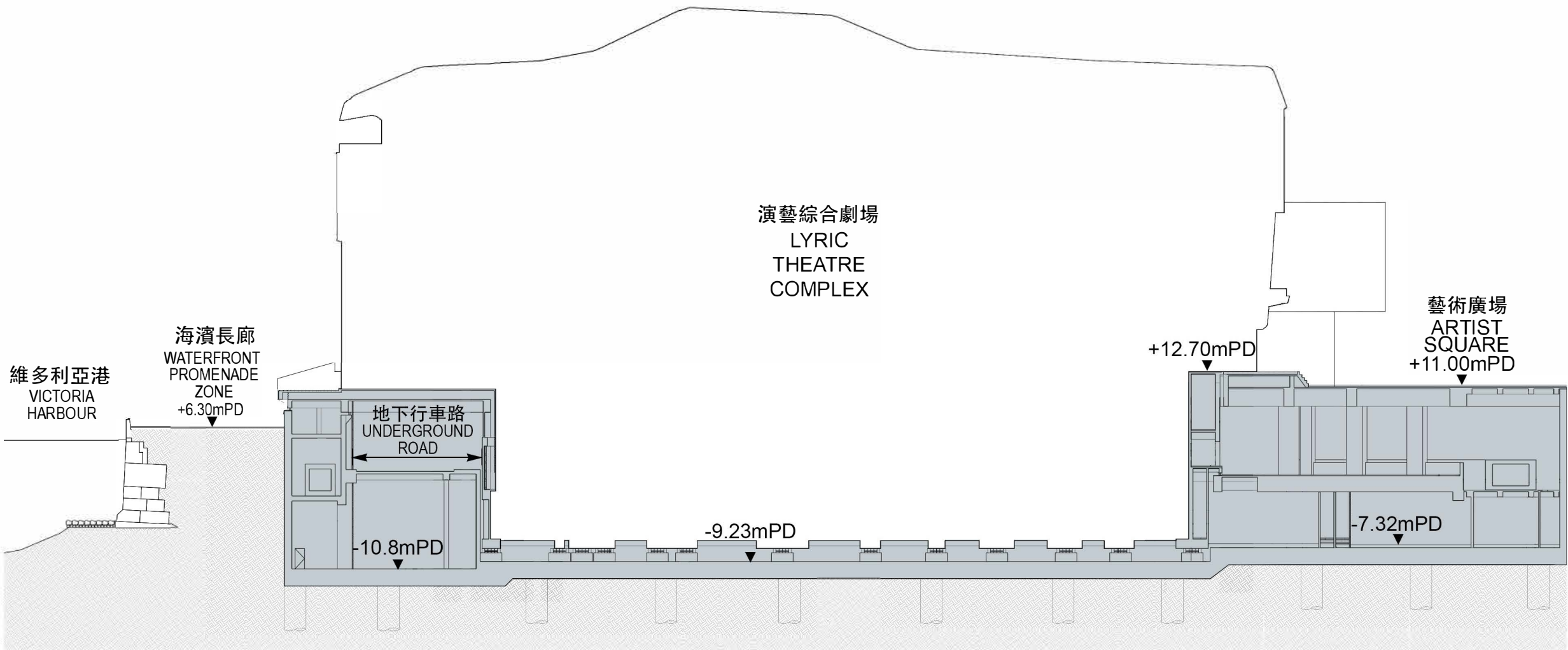
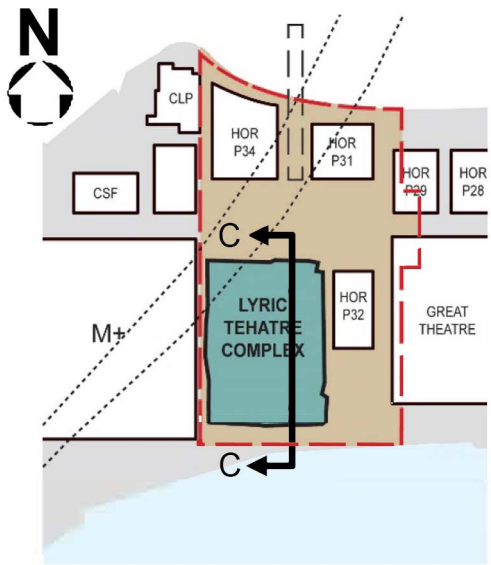
比例 scale

Not to scale 不按比例

Legend: 圖例:

綜合地庫3B區
ZONE 3B INTEGRATED BASEMENT

+12.70mPD 主水平基準以上12.70米
12.70 METRE ABOVE PRINCIPAL DATUM



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建造工程

圖則名稱 drawing title

Section C-C
剖面圖 C-C

比例 scale

Not to scale 不按比例

Enclosure 3 to PWSC(2017-18)12

763CL (part) – Integrated Basement for West Kowloon Cultural District – third stage of construction works

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2016 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional Technical	-- --	-- --	15.3 7.6
				Sub-total	22.9
(b)	Consultants' fees for EM&A programme (Note 2)	Professional Technical	-- --	-- --	0.4 0.2
				Sub-total	0.6
(c)	Consultants' fees for monitoring and auditing on entrusted works (Note 3)	Professional Technical	55 26	38 14	2.0 2.0
				Sub-total	9.9
(d)	Resident site staff costs (Note 4)	Professional Technical	805 1611	38 14	1.6 1.6
				Sub-total	168.4
Comprising –					
(i)	Consultants' fees for management of resident site staff			8.0	
(ii)	Remuneration of resident site staff			160.4	
				Total	201.8

* MPS = Master Pay Scale

Notes

1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost including the consultants' overheads and profit for staff employed in the consultants' offices. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at now, MPS salary point 38 = \$77,320 per month and MPS salary point 14 = \$26,700 per month.)
2. The consultants' staff cost for contract administration and EM&A programme is calculated in accordance with the existing consultancy agreement for the design and construction of **763CL**.
3. The actual man-months and fees will only be known after the consultants have been selected.
4. The actual man-months and fees will only be known after the completion of the construction works.