

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Government Offices – Intra-governmental services

117KA – Relocation of New Territories West Regional Office and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai

Members are invited to recommend to Finance Committee the upgrading of **117KA** to Category A at an estimated cost of \$823.4 million in money-of-the-day prices for the relocation of the New Territories West Regional Office and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai.

PROBLEM

We need to relocate the facilities of Water Supplies Department (WSD) currently located at Sai Yee Street, Mong Kok¹ to release the site for early redevelopment.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Development, proposes to upgrade **117KA** to Category A at an estimated cost of \$823.4 million in money-of-the-day (MOD) prices for the

/relocation

¹ The facilities include the New Territories West Regional Office, the Water Resources Education Centre and a customer enquiry centre.

relocation of the New Territories West (NTW) Regional Office and the Water Resources Education Centre (WREC) of WSD to Tin Shui Wai and other related works.

PROJECT SCOPE AND NATURE

3. The proposed scope of works under the project comprises –
 - (a) construction of a new building at a site of about 3 400 square metres (m²) at the junction of Tin Cheung Road and Tin Pak Road, Tin Shui Wai;
 - (b) demolition of the existing facilities of WSD in Mong Kok; and
 - (c) fitting-out and associated works for the reprovisioning of the Mong Kok Customer Enquiry Centre (CEC) at another location in Kowloon².
4. The new building at Tin Shui Wai will consist of seven storeys for the provision of the following facilities –
 - (a) offices;
 - (b) workshops;
 - (c) WREC with exhibition hall and lecture room;
 - (d) night duties accommodation;
 - (e) car parking spaces for a fleet of vehicles to support the operation of the NTW Regional Office of WSD; and
 - (f) other ancillary facilities including changing and shower facilities and storage facilities.

/5.

² The fitting out and associated works for the reprovisioning of the CEC will be carried out in 2017 to dovetail the relocation and demolition programme of the existing WSD facilities in Mong Kok.

5. A site plan, layout plans, section plan and artist's impressions of the proposed new building in Tin Shui Wai are at Enclosures 1 to 8 respectively. To meet the tight programme for completion of the proposed works so as to release the existing site in Mong Kok early, we have invited tenders for the design and construction of the new building in Tin Shui Wai in May 2014. Subject to funding approval of the Finance Committee (FC) within the current legislative session, the construction works are targeted for commencement in mid-2015 for completion in end 2017. We aim to commission the new building in early 2018.

6. Upon commissioning of the new building in Tin Shui Wai, we plan to commence the demolition of the existing WSD facilities in Mong Kok in mid-2018 and complete the demolition in mid-2019. A location plan of the existing WSD facilities in Mong Kok is at Enclosure 9.

JUSTIFICATION

7. As proposed under the "Area Improvement Plan for the Shopping Areas of Mong Kok"³ completed by the Planning Department (PlanD) in 2009, the site currently housing the Food and Environmental Hygiene Department and WSD facilities at Sai Yee Street and the adjoining temporary carpark could be considered for comprehensive redevelopment including residential, commercial/office/hotel, open space and/or Government, Institution or Community facilities. It also recommended enhancing the public realm and public transport facilities in the area. The proposal would require relocating the WSD facilities in order to release the Sai Yee Street site.

8. The NTW Regional Office of WSD, upon relocation to Tin Shui Wai, will be within its serving region. It will help enhance the efficiency of the operation and maintenance of the waterworks installations and water supply and distribution network in the NTW region by, for example, speedy attendance to operational emergencies.

/9.

³ Details are set out in Legislative Council (LegCo) Paper No. CB(1)2342/08-09(03), which was discussed at the LegCo Panel on Development on 28 July 2009.

9. In order to promote public education on water resources and water conservation, WSD has set up a temporary WREC in the Mong Kok facilities in March 2013. Due to space constraint, the temporary WREC can only serve small groups of visitors by appointment. To enhance public education on water resources and water conservation, WSD will provide a permanent WREC in the proposed new building in Tin Shui Wai. The proposed new building in Tin Shui Wai will be installed with water saving features including grey water recycling and rainwater harvesting system. On-site demonstration of these water saving features will be provided to visitors of the WREC. In view of the lack of in-house resources and expertise, WSD plans to engage an exhibition consultant to design and supervise the fabrication and installation of the exhibits in the WREC.

10. The CEC within the existing WSD facilities in Mong Kok is serving WSD customers in Kowloon on enquiries related to water accounts and supply matters. We plan to identify a suitable premises at a convenient location in Kowloon in early 2017 for provisioning of the CEC in order to continue its services for the customers in Kowloon.

FINANCIAL IMPLICATIONS

11. We estimate the capital cost of the project to be \$823.4 million in MOD prices (see paragraph 13 below), broken down as follows –

	\$ million
(a) Site works	2.9
(b) Piling	92.3
(c) Building	339.0
(d) Building services	75.6
(e) Drainage	4.8
(f) External works	9.1
(g) Energy conservation, green and recycled features	12.1
(h) Furniture and equipment ⁴	9.5
(i)	

⁴ The estimated cost of furniture and equipment is based on an indicative list of items.

	\$ million
(i) Exhibits for the WREC	28.8
(j) Demolition of WSD existing facilities in Mong Kok	27.9
(k) Fitting out and associated works of the CEC in Kowloon	2.3
(l) Consultants' fees for	13.6
(i) contract administration	2.1
(ii) exhibition specialist services	9.9
(iii) management of resident site staff (RSS)	1.6
(m) Remuneration of RSS	10.7
(n) Contingencies	<u>62.8</u>
Sub-total	691.4 (in September 2014 prices)
(o) Provision for price adjustment	<u>132.0</u>
Total	<u>823.4 (in MOD prices)</u>

12. We propose to engage consultants to undertake contract administration services, exhibition specialist services and site supervision for the project. A detailed breakdown of the estimate for the consultants' fees and resident site staff costs by man-months is at Enclosure 10. The construction floor area (CFA) of this project is 12 888 m². The estimated construction unit cost, represented by the building and the building services costs, is \$32,169 per m² of CFA in September 2014 prices. We consider this construction unit cost reasonable as compared with similar projects undertaken by the Government.

/13.

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

Year	\$ million (Sept 2014)	Price adjustment factor	\$ million (MOD)
2015 – 16	35.0	1.05725	37.0
2016 – 17	180.0	1.12069	201.7
2017 – 18	315.0	1.18793	374.2
2018 – 19	90.0	1.25920	113.3
2019 – 20	50.0	1.33475	66.7
2020 – 21	15.0	1.40483	21.1
2021 – 22	6.4	1.47507	9.4
	<hr/> 691.4 <hr/>		<hr/> 823.4 <hr/>

14. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2015 to 2022. The project will be delivered through a design-and-build contract. We will award the contract on a lump-sum basis because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

15. We estimate the additional annual recurrent expenditure arising from the proposed works to be \$15 million. The project will lead to an increase in the production cost of water by 0.36% in real terms by 2019⁵.

/PUBLIC

⁵ The increase in production cost of water is calculated at the present price level and on the assumption that the water demand remains static during the period from 2015 to 2019.

PUBLIC CONSULTATION

16. We consulted the Culture, Recreation, Community Service and Housing Committee of Yuen Long District Council on the project on 5 November 2013. Members supported the project.

17. We consulted the Legislative Council (LegCo) Panel on Development on 24 March 2015. Members supported submitting the funding proposal to the Public Works Subcommittee for examination. The supplementary information requested by Panel members was submitted on 21 April 2015.

ENVIRONMENTAL IMPLICATIONS

18. The proposed new building in Tin Shui Wai is not a designated project under the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499). In March 2015, D Arch S completed a Preliminary Environmental Review (PER) for the proposed new building at Tin Shui Wai. The PER has been concluded and the Director of Environmental Protection agreed that the project would not cause long-term environmental impacts with the proposed mitigation measures implemented.

19. During construction, we will control noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. These measures include the use of silencers, mufflers, acoustic linings or shields and the building of barrier walls for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities to prevent dust nuisance. We will carry out site inspections to ensure that these recommended mitigation measures and good site practices are properly implemented. We will incorporate into the works contract the mitigation measures recommended in the PER. We have included in the project estimates the cost to implement suitable mitigation measures recommended in the PER.

20. The demolition of the existing WSD facilities in Mong Kok is not a designated project under the EIAO. The project would not cause long-term environmental impacts. We have included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.

/21.

21. During demolition, we will control noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required in the relevant contract. These include proper scheduling of works and use of quieter equipment and noise screens or enclosures to reduce noise impact, frequent cleaning and watering of the site, and the provision of wheel-washing facilities to prevent dust nuisance.

22. We have completed an asbestos investigation for the existing WSD facilities in Mong Kok. The asbestos investigation report identified some asbestos containing materials (ACM) in the existing WSD facilities in Mong Kok, we will remove and dispose of the ACM in accordance with the recommendations of the Asbestos Abatement Plan (AAP) and the requirements under the Air Pollution Control Ordinance and the Waste Disposal Ordinance prior to demolition of the existing WSD facilities at Mong Kok. We have also included in the project estimates the cost to implement suitable mitigation measures recommended in the AAP.

23. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling within the site) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste to public fill reception facilities⁶. We will encourage the contractor 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 the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate 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.

/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. We estimate that the project will generate in total about 21 250 tonnes of construction waste. Of these, we will reuse about 1 350 tonne (6.4%) of inert construction waste on site and deliver 18 640 tonnes (87.7%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 1 260 tonnes (5.9%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about \$0.7 million for this project (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

26. This project will adopt various forms of energy efficient features and renewable energy technologies, in particular –

- (a) water-cooled chillers;
- (b) automatic demand control of chilled water circulation system;
- (c) lift power regeneration; and
- (d) photovoltaic system.

27. For greening features, we will provide greening at different floors and rooftop of the building as appropriate for environmental and amenity benefits.

28. For features of recycling, we will adopt grey water recycling and rainwater harvesting system for cleansing use, irrigation system and flushing water supply system.

29. The total estimated additional cost for adoption of the above features is around \$12.1 million (including \$3 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 12.4% energy savings in the annual energy consumption with a payback period of about 6.7 years.

/HERITAGE

HERITAGE IMPLICATIONS

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

LAND ACQUISITION

31. The project does not require any land acquisition.

BACKGROUND INFORMATION

32. We upgraded **117KA** to Category B in June 2013. We employed consultants and contractors to carry out topographical and tree survey, utility mapping, site investigations in 2013 and to carry out micro-climate study and PER for the proposed new building at Tin Shui Wai, and asbestos investigation for the existing WSD facilities in Mong Kok in 2014. We also engaged quantity surveying consultant to prepare the tender documents in December 2013. We charged the total cost of \$2.8 million to block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. The works and services have been completed.

33. Of the 19 trees within the site of the proposed new building in Tin Shui Wai, none are important trees⁷. One tree will be preserved, 14 trees will be felled and four trees will be transplanted subject to detailed tree survey and finalisation of design. We have incorporated planting proposals as part of the project, including about 50 trees (including four transplanted trees and 46 new trees) and 20 000 shrubs/ herbaceous/ groundcovers and climbers.

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⁷ An “important tree” refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

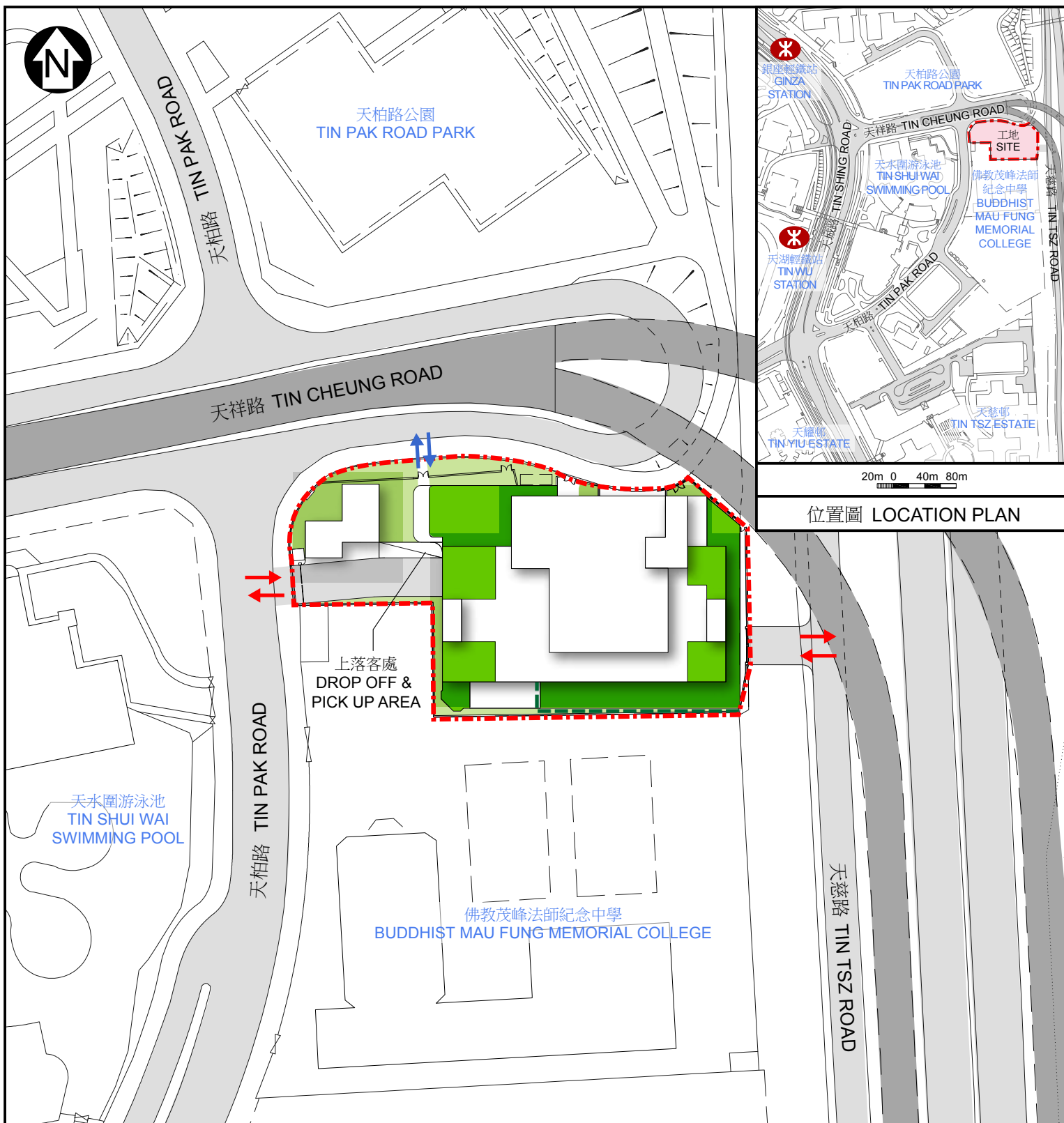
- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking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

34. For the demolition of the existing WSD facilities in Mong Kok, it will not involve any tree removal or planting proposal. There are four mature sized Ficus trees identified within the site. In view of their healthy conditions and significant sizes, they will be preserved on site and appropriate protection measures will be taken for them during the demolition works.

35. We estimate that the proposed works will create about 350 jobs (310 for labourers and 40 for professional/ technical staff) providing a total employment of 6 350 man-months.

36. On 10 June 2011, FC approved funding for **3114KA** “Purchase and conversion of industrial building for Water Supplies Department facilities” vide PWSC(2011-12)10 at an approved project estimate of \$790.5 million in MOD prices for us to purchase and convert an industrial building for relocating the WSD facilities in Mong Kok. However, no suitable industrial building satisfying WSD’s operational requirements and within budget could be identified despite the extensive search by WSD’s consultants. We have so reported to the LegCo vide CB(1)428/12-13(03) discussed at the Panel on Development on 22 January 2013. To facilitate an early release of the Mong Kok site, we have decided to take forward the current project for construction of a new building for the WSD facilities in lieu of **3114KA**. **3114KA** will not be further pursued subject to FC’s funding approval of the current project.

Development Bureau
May 2015



圖例 LEGEND

- | | |
|-----------------------------------|---------------------------|
| 車輛出入口
VEHICULAR INGRESS/EGRESS | 垂直綠化
VERTICAL GREENING |
| 行人出入口
PEDESTRIAN ENTRANCE/EXIT | 地面綠化
AT-GRADE GREENING |
| 工地界線
SITE BOUNDARY | 屋面綠化
LANDSCAPED ROOF |

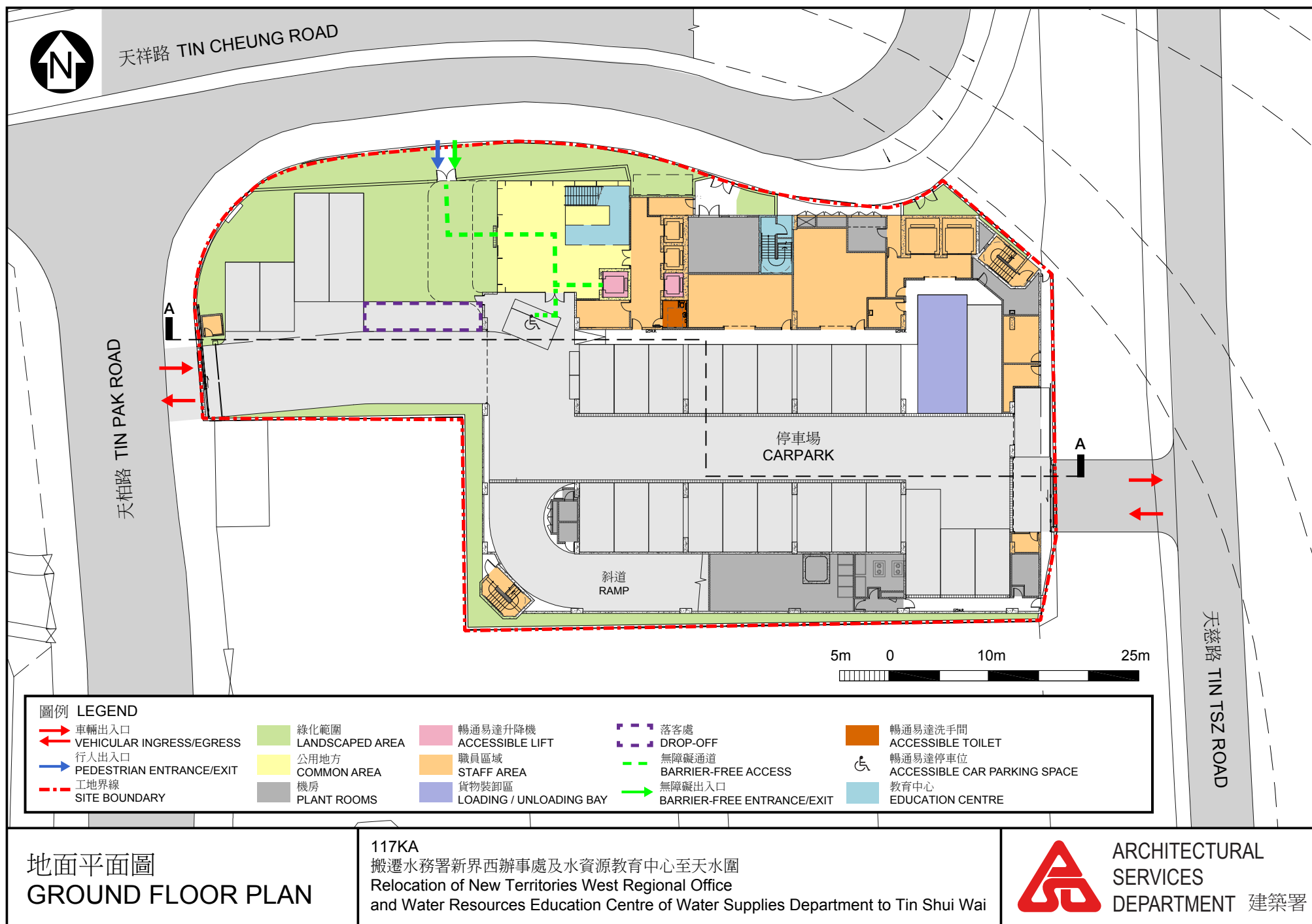
10m 0 20m 50m

工地平面圖
SITE PLAN

117KA
搬遷水務署新界西辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office
and Water Resources Education Centre of Water Supplies
Department to Tin Shui Wai



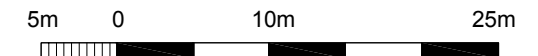
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SERVICES
DEPARTMENT 建築署





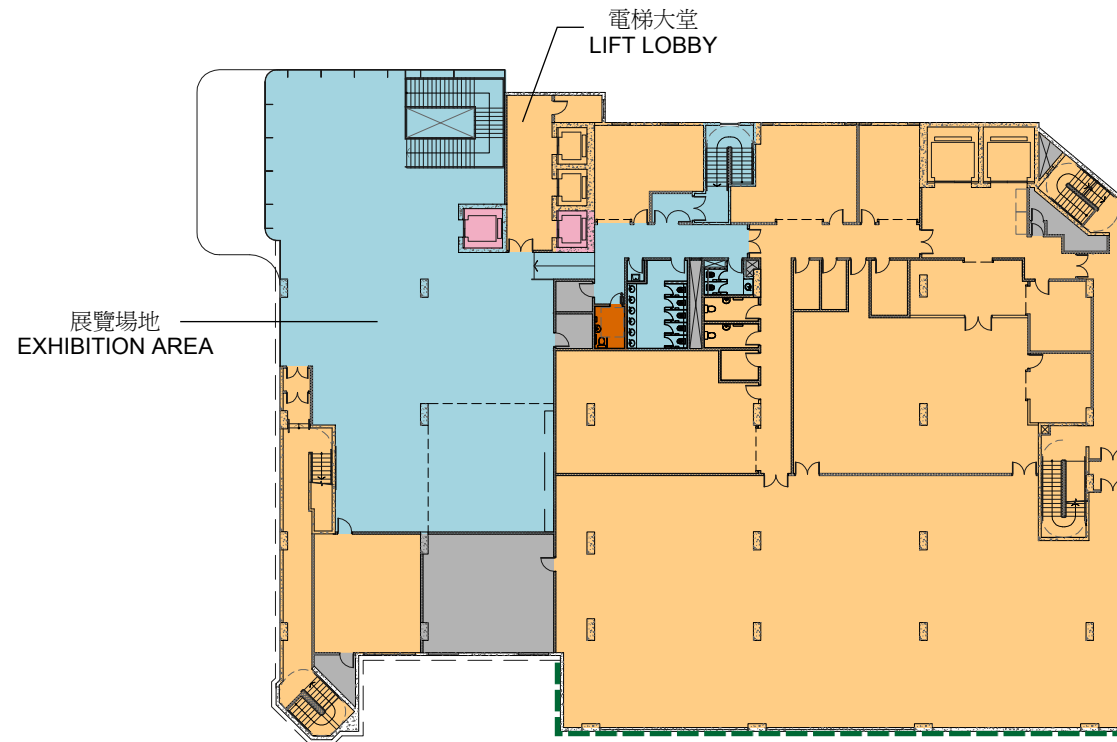
圖例 LEGEND

職員區域 STAFF AREA	暢通易達升降機 ACCESSIBLE LIFT	綠化範圍 LANDSCAPED AREA	垂直綠化 VERTICAL GREENING
機房 PLANT ROOMS	教育中心 EDUCATION CENTRE	暢通易達停車位 ACCESSIBLE CAR PARKING SPACE	暢通易達洗手間 ACCESSIBLE TOILET



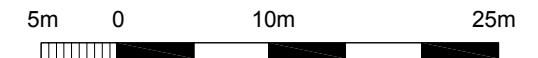
一樓平面圖
1/F FLOOR PLAN

117KA
搬遷水務署新界西辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office
and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai



圖例 LEGEND

職員區域 STAFF AREA	暢通易達升降機 ACCESSIBLE LIFT	垂直綠化 VERTICAL GREENING
機房 PLANT ROOMS	教育中心 EDUCATION CENTRE	暢通易達洗手間 ACCESSIBLE TOILET

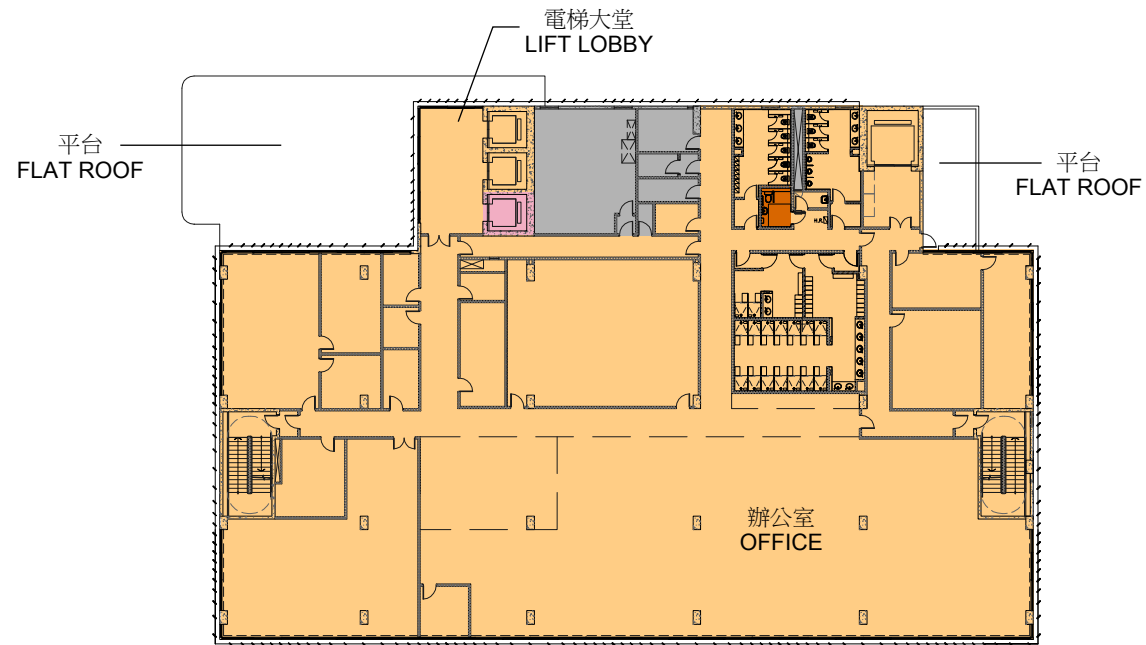


二樓平面圖
2/F FLOOR PLAN

117KA
搬遷水務署新界西辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office
and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai

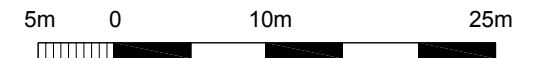


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圖例 LEGEND

職員區域 STAFF AREA	暢通易達升降機 ACCESSIBLE LIFT
機房 PLANT ROOMS	暢通易達洗手間 ACCESSIBLE TOILET

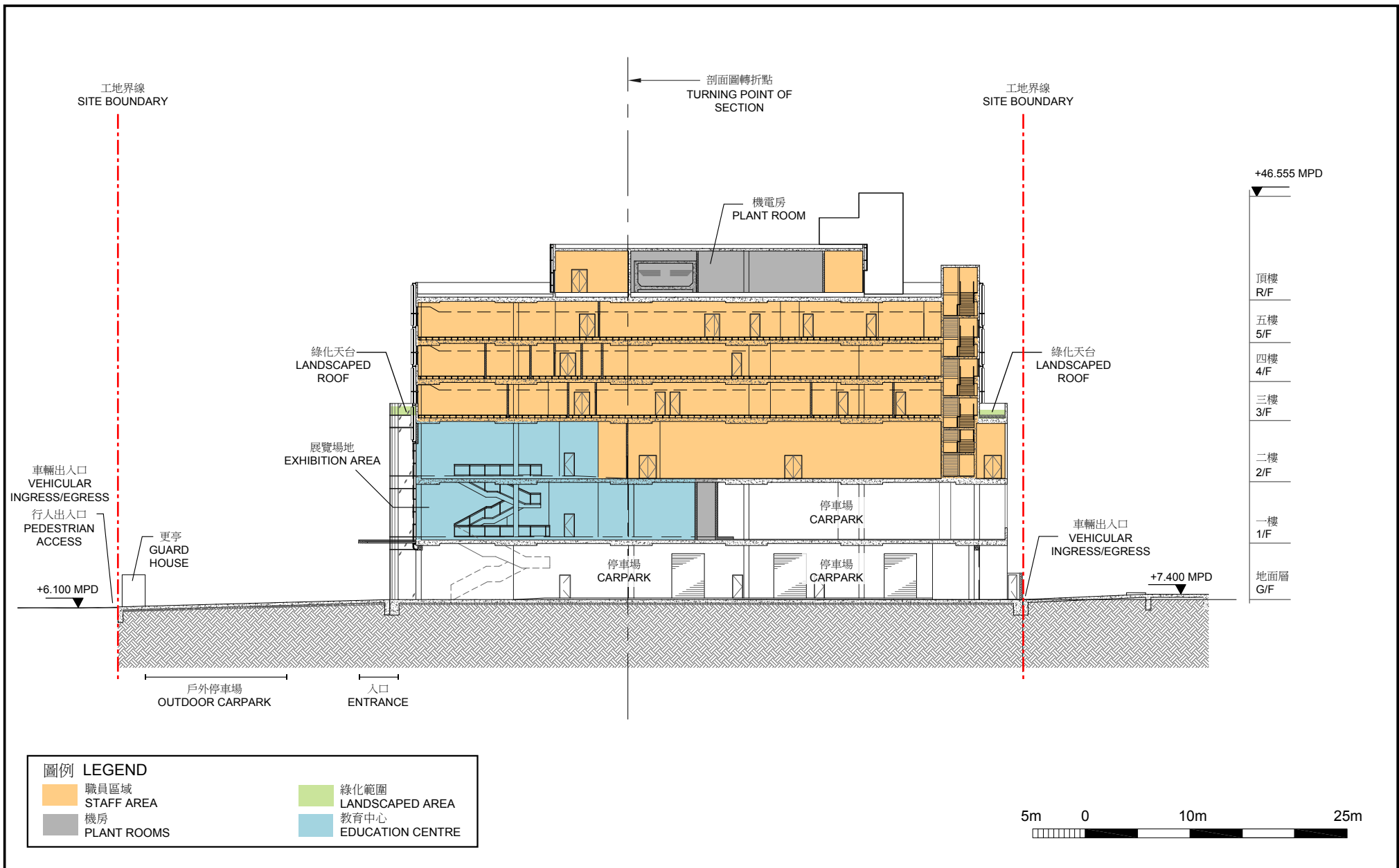


四樓平面圖
4/F FLOOR PLAN

117KA
搬遷水務署新界西辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office
and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai

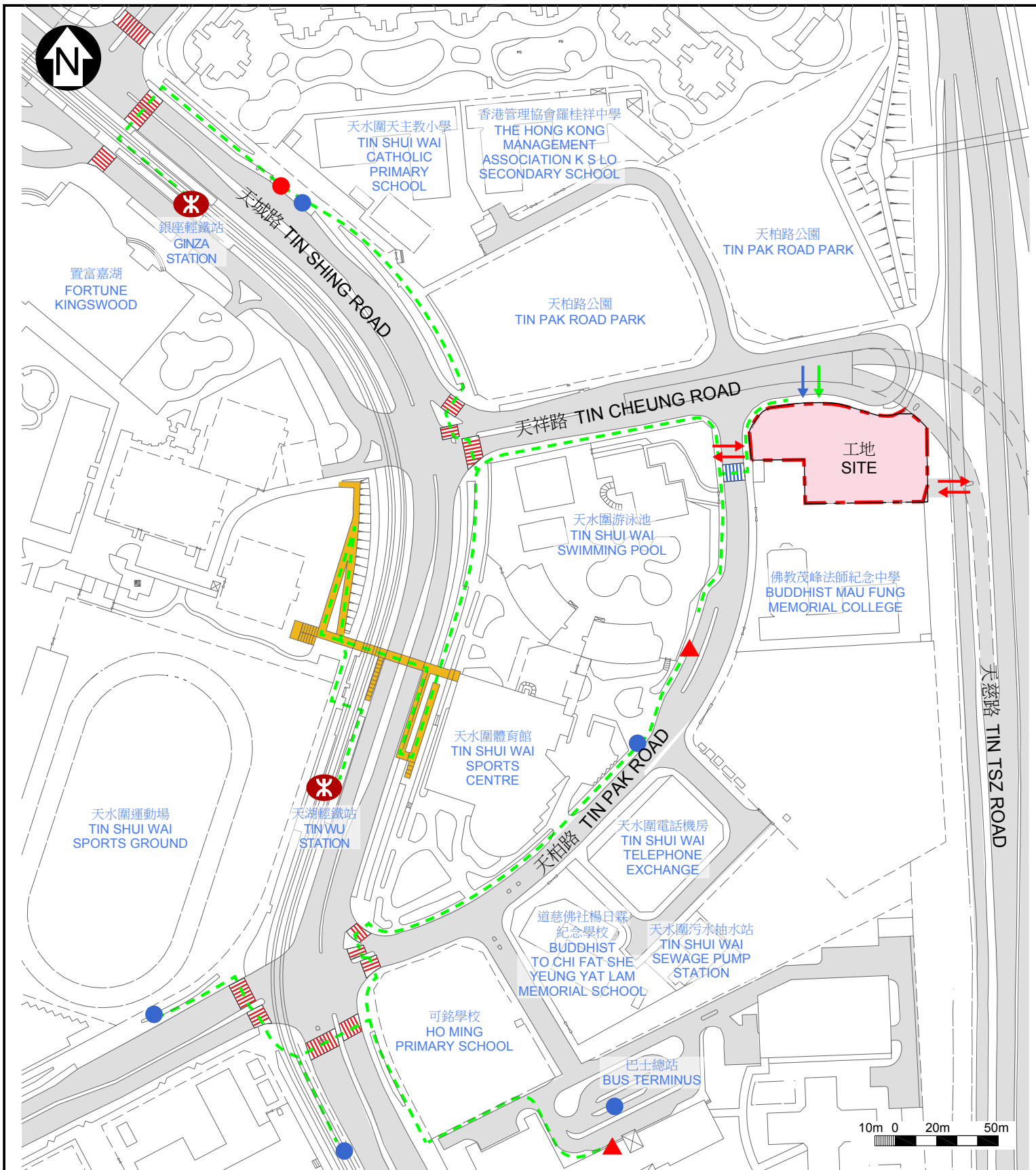


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剖面圖 A-A
SECTION PLAN A-A

117KA
搬遷水務署新界西辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office
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圖例 LEGEND

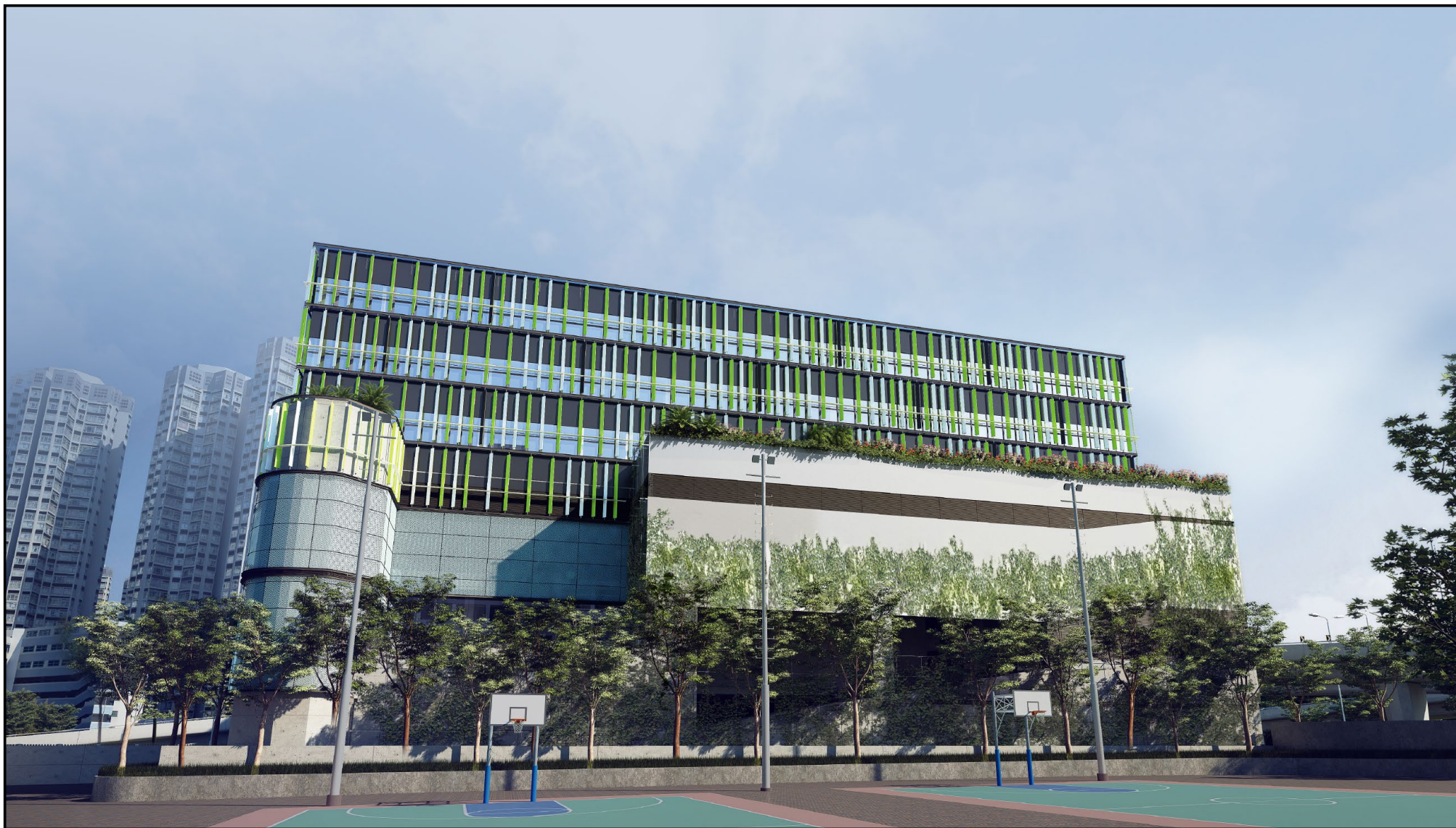
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| <p>車輛出入口
VEHICULAR INGRESS/EGRESS</p> <p>行人出入口
PEDESTRIAN ENTRANCE/EXIT</p> <p>工地界線
SITE BOUNDARY</p> | <p>現有輕鐵站
EXISTING LIGHT RAIL TERMINUS</p> <p>無障礙通道
BARRIER-FREE ACCESS</p> <p>無障礙出入口
BARRIER-FREE ENTRANCE/EXIT</p> | <p>現有巴士站
EXISTING BUS STOP</p> <p>現有巴士站
EXISTING MINIBUS STOP</p> <p>現有的士站
EXISTING TAXI STAND</p> | <p>現有行人過路處
EXISTING AT-GRADE PEDESTRIAN CROSSING</p> <p>擬建行人過路處
PROPOSED AT-GRADE PEDESTRIAN CROSSING</p> <p>現有有蓋行人天橋(設有無障礙斜道)
EXISTING COVERED FOOTBRIDGE WITH ACCESSIBLE RAMP</p> |
|---|---|--|---|

無障礙通道平面圖
BARRIER-FREE
ACCESS PLAN

117KA
搬遷水務署新界西辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office
and Water Resources Education Centre of Water Supplies
Department to Tin Shui Wai



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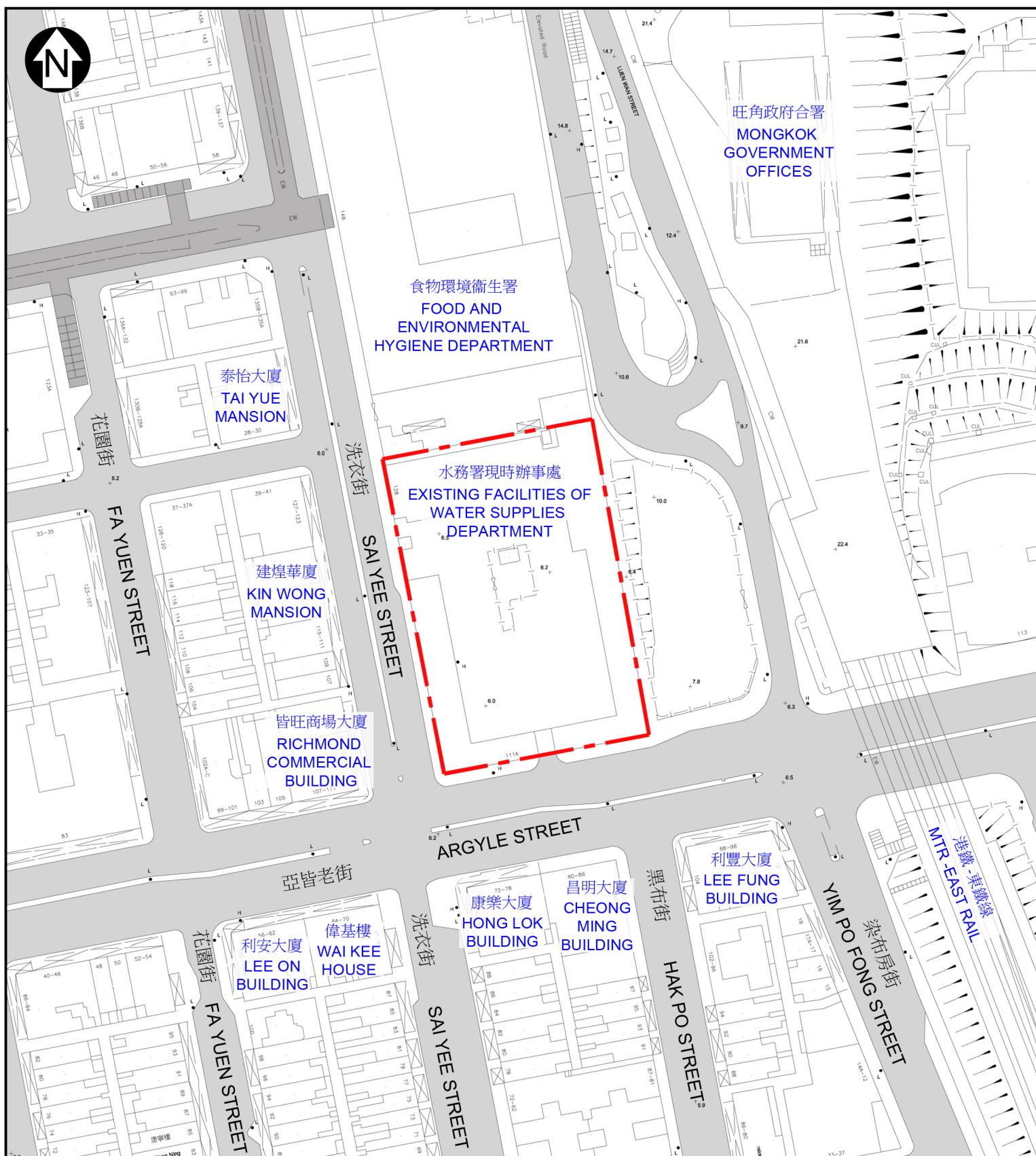
PERSPECTIVE VIEW FROM SOUTHERN DIRECTION (ARTIST'S IMPRESSION)
從南面望向大樓的構思透視圖

構思圖
ARTIST'S IMPRESSION

117KA
搬遷水務署新界西辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office
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現時位於旺角洗衣街的水務署辦事處

EXISTING FACILITIES OF WATER SUPPLIES DEPARTMENT AT SAI YEE STREET, MONG KOK.

位置圖
LOCATION
PLAN

117KA

搬遷水務署新界西分辦事處及水資源教育中心至天水圍
Relocation of New Territories West Regional Office and
Water Resources Education Centre of Water Supplies
Department to Tin Shui Wai



ARCHITECTURAL
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117KA – Relocation of NTW Regional Office and WREC of WSD to Tin Shui Wai**Breakdown of the Estimates for Consultants' Fees and Resident Site Staff Costs
(in September 2014 prices)**

			Estimated man- months	Average MPS* Salary Point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	1.1
		Technical	–	–	–	1.0
					Sub-total	2.1
(b)	Consultants' fees for exhibition specialist services (Note 3)	Professional	–	–	–	5.0
		Technical	–	–	–	4.9
					Sub-total	9.9
(c)	Resident site staff (RSS) costs (Note 4)	Professional	54	38	1.6	6.2
		Technical	157	14	1.6	6.1
					Sub-total	12.3
	Comprising –					
	(i)	Consultants' fees for management of RSS			1.6	
	(ii)	Remuneration of RSS			10.7	
					Total	24.3

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of resident site staff supplied by the consultants (as at now, MPS salary point 38 = \$71,385 per month and MPS salary point 14 = \$24,380 per month).
2. The consultants' fees for contract administration are calculated in accordance with the existing consultancy agreement for the provision of quantity surveying services of **117KA**. The assignment will only be executed subject to FC's approval to upgrade **117KA** to Category A.
3. The actual consultants' fees for exhibition specialist services will be known after the award of the assignment.
4. The actual man-months and actual costs will only be known after completion of the construction works.