

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Public safety – Ambulance services

37BA – Construction of an ambulance depot at Choi Shun Street, Sheung Shui

Members are invited to recommend to Finance Committee the upgrading of **37BA** to Category A at an estimated cost of \$174.5 million in money-of-the-day prices for the construction of an ambulance depot at Choi Shun Street, Sheung Shui.

PROBLEM

The current emergency ambulance facilities for Sheung Shui/Kwu Tung cannot meet the needs for emergency ambulance services of the district in the long run.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Security, proposes to upgrade **37BA** to Category A at an estimated cost of \$174.5 million in money-of-the-day (MOD) prices for the construction of an ambulance depot at Choi Shun Street, Sheung Shui.

/PROJECT

PROJECT SCOPE AND NATURE

3. We propose to construct a 5-storey ambulance depot on a site of 2 432 square metres (m²) at the junction of Choi Shun Street and Choi Yuen Road in Sheung Shui. The scope of **37BA** comprises –

- (a) a 5-bay appliance room and 2 covered parking spaces, which can accommodate 12 emergency ambulance service vehicles;
- (b) a watch room, offices and meeting/lecture room;
- (c) a disinfection room;
- (d) fuel filling facilities;
- (e) an open drill yard;
- (f) toilets and shower facilities;
- (g) a drying room;
- (h) kitchen and canteen;
- (i) an exercise room, barracks and a recreation room;
- (j) stores; and
- (k) ancillary and supporting facilities, e.g. server room and main switch room.

———— A location/site plan, a perspective drawing, a sectional plan and a barrier free access plan are at Enclosures 1 to 4 respectively. Subject to funding approval of the Finance Committee, we plan to start the construction works in February 2013 for completion in February 2015.

JUSTIFICATION

To meet increasing service demand and improve the performance of emergency ambulance services in the district

4. At present, the Fire Services Department (FSD) does not have any ambulance depot in Sheung Shui/Kwu Tung. In a number of years in the past, the

/emergency

emergency ambulance services in the district were provided by the ambulances stationed at the Sheung Shui Fire Station. The Response Time Performance of emergency ambulance services of the district was below the performance pledge of FSD¹. In 2009, FSD established a temporary ambulance post in Kwu Tung and deployed two ambulances there as an interim measure to improve the emergency ambulance services in that area. The service performance has improved since then and is able to meet performance pledge of the Department². However, FSD estimates that the number of emergency ambulance service calls in the concerned district would continue to rise. According to population distribution projections by the Planning Department, the population aged over 60 in Sheung Shui/Fanling is projected to increase substantially by around 37% from 36 900 in 2011 to 50 400 in 2016, which is higher than the overall growth rate of the elderly population in Hong Kong of about 24% in the same period. Taking these factors into account, FSD considers it not sustainable to rely on the interim measure in meeting the growing demand for emergency ambulance services in the future.

5. In the long run, FSD considers it necessary to construct an ambulance depot in Sheung Shui to improve emergency ambulance services in that area. The proposed ambulance depot at Choi Shun Street of Sheung Shui is a strategic location between Sheung Shui and Kwu Tung. Its service coverage includes Sheung Shui town area, Kwu Tung and the neighbouring Fanling area. The proposed ambulance depot could therefore improve the performance of emergency ambulance services in the North District of the New Territories as well. If there is no increase in the emergency ambulance resources for the district in the long run, FSD anticipates that it will be difficult to maintain its service performance pledge in the district.

Insufficient parking facilities for ambulances at present

6. The original design of Sheung Shui Fire Station does not reserve parking space for ambulances. The Station has become very crowded after some of the space is being taken up by four ambulances and one emergency medical assistant motorcycle. There is no room to accommodate additional ambulances. For the Kwu Tung Temporary Ambulance Post, it has not been equipped with the standard mobilising systems and parking facilities. It cannot accommodate additional ambulances either because of the limited space.

/7.

¹ FSD's performance pledge is that for 92.5% of emergency ambulance calls, ambulances should be able to arrive at the scene within a response time of 12 minutes. From 2001 to 2010, only 88% of emergency ambulance calls in average met the performance target annually in Sheung Shui/Kwu Tung.

² In 2011, the performance in respect of emergency ambulance services in Sheung Shui/Kwu Tung was 93.8%.

7. After a careful study, FSD considers that the construction of an ambulance depot in Sheung Shui will not only consolidate the emergency ambulance resources of Sheung Shui Fire Station, Kwu Tung Temporary Ambulance Post and the ambulance depots in the neighbouring areas, but will also provide additional space for stationing more ambulances in future. Furthermore, it can enhance the management of emergency ambulance services and tie in with the development and service demand in the district concerned.

8. Upon completion of the new ambulance depot, the existing space occupied by ambulances in the Sheung Shui Fire Station will be returned for use by the Station, whereas the premise of Kwu Tung Temporary Ambulance Post will be returned to the Government Property Agency.

FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the project to be \$174.5 million in MOD prices (please see paragraph 10 below), broken down as follows –

	\$ million
(a) Site works	4.0
(b) Piling	12.3
(c) Building	81.0
(d) Building services	24.0
(e) Drainage	3.7
(f) External works	7.2
(g) Additional energy conservation measures	1.8
(h) Furniture and equipment ³	4.0
(i) Contingencies	13.8
Sub-total	151.8 (in September 2012 prices)
	/(j)

³ The estimated cost of furniture and equipment is based on an indicative list of items required.

	\$ million
(j) Provision for price adjustment	22.7
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Total	174.5 (in MOD prices)
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The construction floor area (CFA) of the proposed ambulance depot is 3 558 m². The estimated construction unit cost, represented by building and building services costs, is \$29,511 per m² of CFA in September 2012 prices. We consider this unit cost is reasonable as compared with similar projects built by the Government.

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

Year	\$ million (Sept 2012)	Price adjustment factor	\$ million (MOD)
2013 – 14	24.0	1.06250	25.5
2014 – 15	89.0	1.12625	100.2
2015 – 16	17.6	1.19383	21.0
2016 – 17	11.3	1.26545	14.3
2017 – 18	6.7	1.34138	9.0
2018 – 19	3.2	1.41180	4.5
	<hr/>		<hr/>
	151.8		174.5
	<hr/>		<hr/>

11. 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 2013 to 2019. We will deliver the works through a lump-sum contract because the scope of the works can be clearly defined in advance. The contract will provide for price adjustments.

12. We estimate the additional annual recurrent expenditure arising from the project to be \$7.3 million.

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PUBLIC CONSULTATION

13. We consulted the Social Services, Labour and Economic Affairs Committee of the North District Council on the proposed project on 8 May 2012. FSD reported at the meeting that the environmental and traffic impact assessments for the project had been completed and confirmed that the project would have no adverse impact on the local traffic. The Administration would take measures during the construction period and upon completion of the ambulance depot to minimise noise nuisance to the nearby areas. Members noted the information and supported the project.

14. We also consulted the Legislative Council Panel on Security on 4 July 2012. Members supported this proposal.

ENVIRONMENTAL IMPLICATIONS

15. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environmental Review (PER) in February 2012 which concluded that the project would have no long-term adverse environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.

16. During construction, we will control noise, dust and site runoff nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. These include the use of silencers, mufflers, acoustic lining 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.

17. 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 on site (e.g. use of excavated materials for filling within the site) or in other suitable construction sites as far as possible, in order to minimise the disposal of inert

/construction

construction waste at public fill reception facilities⁴. We will encourage the contractor to maximise the use of recycled/recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

18. 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.

19. We estimate that the project will generate in total about 12 000 tonnes of construction waste. Of these, we will reuse about 4 100 tonnes (34.2%) of inert construction waste on site and deliver 7 300 tonnes (60.8%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 600 tonnes (5.0%) 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 \$272,100 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁵ at landfills).

HERITAGE IMPLICATIONS

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

/LAND

⁴ 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.

⁵ This estimate has taken into account the cost of developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90 per m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

LAND ACQUISITION

21. The project does not require land acquisition.

ENERGY CONSERVATION MEASURES

22. This project has adopted various forms of energy efficient features, including –

- (a) variable refrigerant volume air conditioning system;
- (b) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy sensors and daylight sensors;
- (c) light-emitting diode (LED) type exit signs;
- (d) energy-efficient heat pump for hot water; and
- (e) automatic on/off switching of lighting and ventilation fan inside the lift.

23. For renewable energy technologies, we will install a solar hot water system for environmental benefits.

24. For green features, we will provide greening on rooftop and vertical greening for environmental and amenity benefits.

25. For recycled features, we will provide rainwater recycling system for irrigating the greenery.

26. The total estimated additional cost for adoption of the energy conservation measures is around \$1.8 million (including \$125,000 for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 5.6% energy savings in the annual energy consumption with a payback period of about 7.5 years.

/BACKGROUND

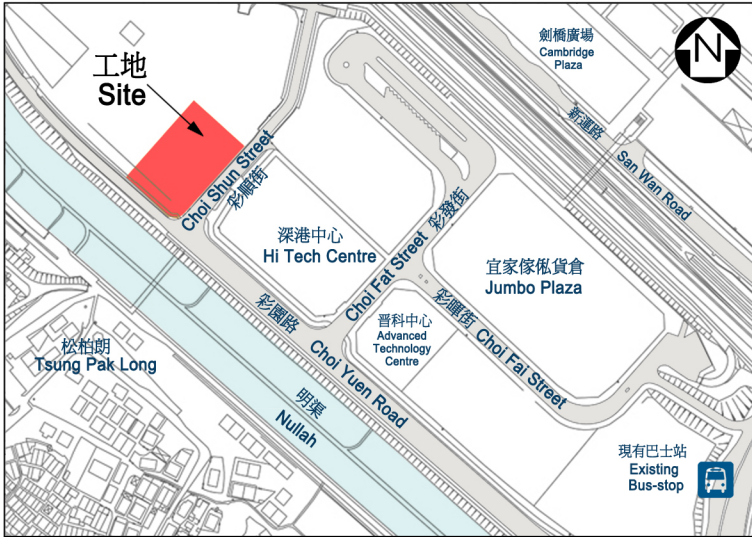
BACKGROUND INFORMATION

27. We upgraded **37BA** to Category B in September 2010. We employed a contractor to carry out site investigations in March 2011. We engaged consultants to carry out a Traffic Impact Assessment (TIA) in March 2011 and also a PER in September 2011. We charged the total cost of \$506,000 to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of Public Works Programme". The contractor and consultants have completed all the above works and services. We have completed the detailed design and tendering exercise of the project with in-house staff resources.

28. The proposed project will not involve any tree removal. We will incorporate planting proposals as part of the project, including estimated quantities of 10 trees, 772 shrubs, 8 230 ground covers and climbers, and 132 m² of grassed area.

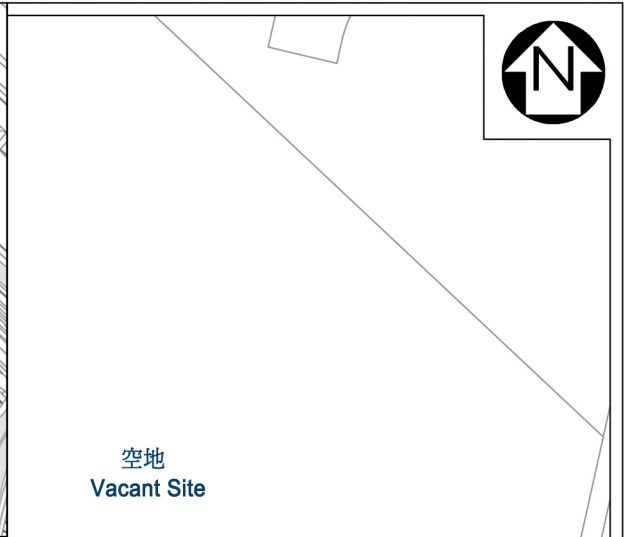
29. We estimate that the proposed works will create about 104 jobs (97 for labourers and another seven for professional/technical staff) providing a total employment of 1 870 man-months.

Security Bureau
November 2012



位置圖 LOCATION PLAN

比例 SCALE 1:5000



空地
Vacant Site



工地平面圖 SITE PLAN

title 037BA 上水彩順街救護站興建計劃 CONSTRUCTION OF AN AMBULANCE DEPOT AT CHOI SHUN STREET, SHEUNG SHUI	drawn by 繪圖 K. W. KWONG date 日期 11/12	drawing no. 編號 7917/XA001a scale 比例 1:750
	approved by 批准 H. K. LI (CA/2) date 日期 11/12	 ARCHITECTURAL SERVICES DEPARTMENT 建築署
	office 辦事處 ARCHITECTURAL BRANCH 建築設計處	




從彩園路及彩順街交界望向救護站構思透視圖

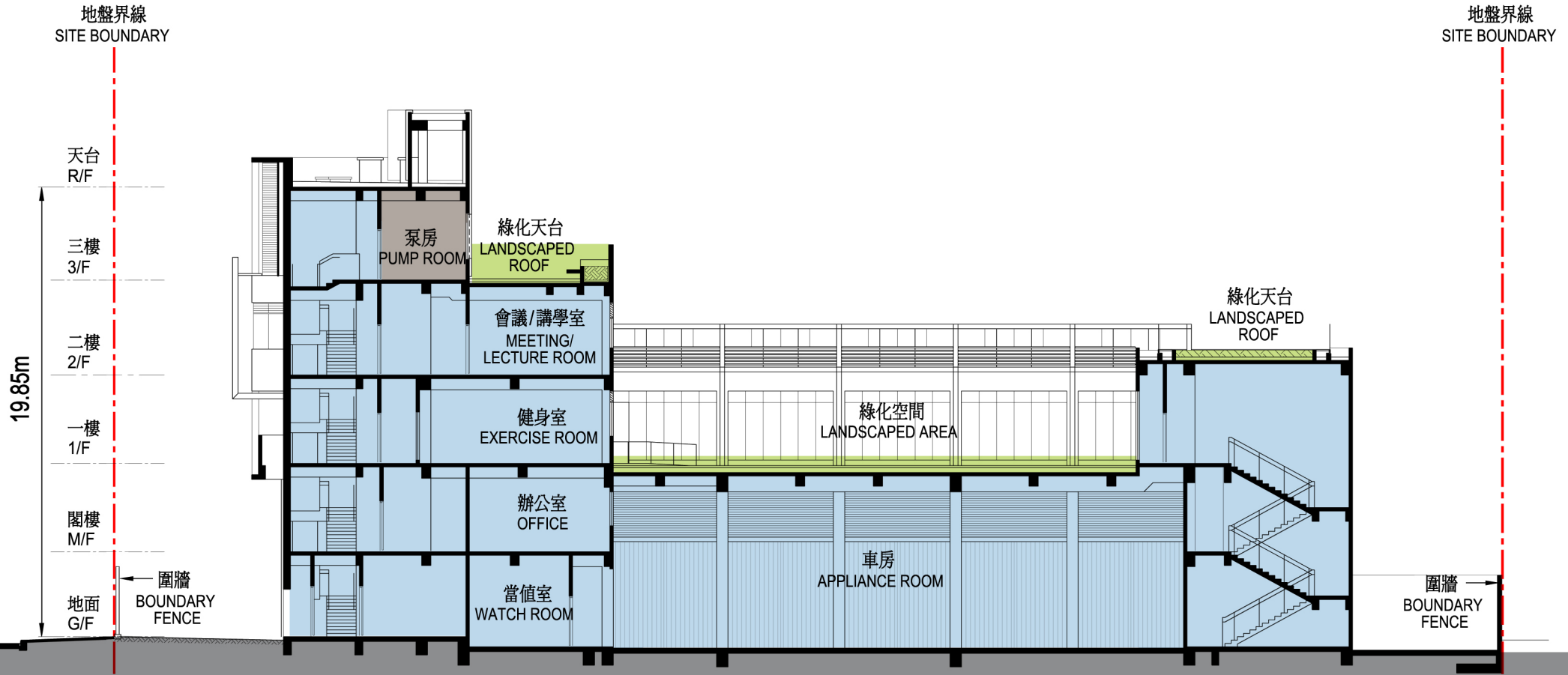
VIEW OF AMBULANCE DEPOT FROM JUNCTION OF CHOI YUEN ROAD AND CHOI SHUN STREET (ARTIST'S IMPRESSION)




從東面鳥瞰救護站構思透視圖

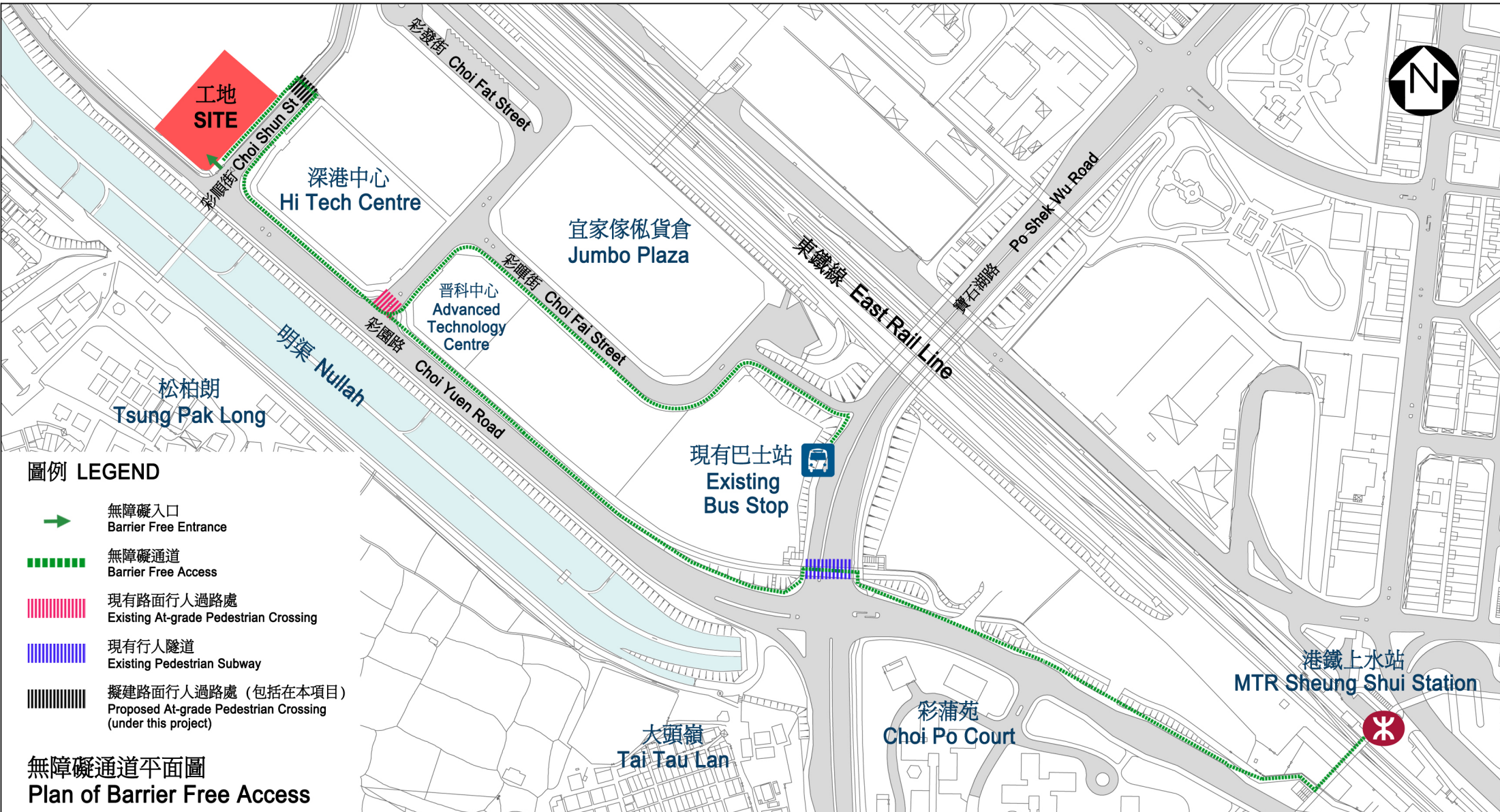
BIRD'S EYE VIEW OF AMBULANCE DEPOT FROM EASTERN DIRECTION (ARTIST'S IMPRESSION)


title 037BA 上水彩順街救護站興建計劃 CONSTRUCTION OF AN AMBULANCE DEPOT AT CHOI SHUN STREET, SHEUNG SHUI	drawn by 繪圖 MAY YAN	date 日期 11/12	drawing no. 編號 7917/XA002a	scale 比例 N/A
	approved by 批准 H. K. LI (CA/2)	date 日期 11/12	 ARCHITECTURAL SERVICES DEPARTMENT 建築署	
	office 辦事處 ARCHITECTURAL BRANCH 建築設計處			



A-A剖面圖
SECTION A-A

title 037BA 上水彩順街救護站興建計劃 CONSTRUCTION OF AN AMBULANCE DEPOT AT CHOI SHUN STREET, SHEUNG SHUI	drawn by 繪圖 K. W. KWONG	date 11/2012	drawing no. 7917/XA003	scale 1:300
	approved 批准 H. K. LI (CA/2)	date 11/2012		
	office 辦事處 Architectural Branch 建築設計處	 ARCHITECTURAL SERVICES DEPARTMENT		



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