

**For discussion
on 24 March 2020**

Legislative Council Panel on Development

**PWP Item No. 765CL
Development of Anderson Road Quarry Site –
Remaining Pedestrian Connectivity Facilities Works**

PURPOSE

This paper briefs Members on the proposal to upgrade the remainder of **765CL**, “Development of Anderson Road Quarry Site”, to Category A at an estimated cost of \$250.6 million in money-of-the-day (MOD) prices, for the construction of the remaining off-site pedestrian connectivity facilities works proposed under the Development of Anderson Road Quarry (ARQ) Site project.

PROJECT SCOPE AND NATURE

2. The remainder of **765CL** that we propose to upgrade to Category A, hereinafter referred to as “the proposed works”, comprises the implementation of the following works –

- (a) a two-way escalator link (“EL1”) of about 50 metres (m) long between Sau Mau Ping Road and the existing footbridge to Po Tat Estate;
- (b) a two-way escalator link (“EL2”) of about 55 m long between Sau Mau Ping South Estate and the existing footbridge to Sau Mau Ping Road;
- (c) a footbridge (“FB1”) of about 30 m long with lift tower and staircase, between Hiu Kwong Street and the podium of Sau Ming House, Sau Mau Ping Estate;
- (d) a footbridge (“FB2”) of about 55 m long with lift tower and staircase, between Sau Mau Ping Road and the podium of Po Tat Estate;
- (e) ancillary works and landscaping works; and

- (f) implementation of environmental mitigation measures, and an environmental monitoring and audit (EM&A) programme for the works mentioned in (a) to (e) above.

The layout plans and artist's impressions of the proposed works are at **Enclosure 1**.

3. Subject to funding approval of the Finance Committee (FC) of the Legislative Council (LegCo) within this LegCo session, we plan to commence the proposed works in the second half of 2020 for substantial completion in the second half of 2023. To achieve this programme, we plan to invite tenders in parallel to enable early commencement of the proposed works. The contract will only be awarded upon obtaining FC's funding approval.

JUSTIFICATIONS

4. The ARQ development is one of the major initiatives to increase land supply in short and medium term, providing about 40 hectares (ha) of land for housing development¹, commercial uses, government, institution or community (GIC) facilities and amenity areas, etc. Upon full completion by around 2026, the ARQ site will accommodate a total population of about 30 000.

5. The site formation and infrastructure works² for the ARQ site commenced in December 2016, while associated off-site road improvement works³ commenced in May 2018. These works are being carried out to tie in with the phased population intake of the ARQ development starting from 2023-24 onward.

6. To support the development of the ARQ site which is located uphill away from the town centre of Kwun Tong, a series of pedestrian connectivity facilities are proposed as part of the project. These facilities will enhance the

¹ There are a total of 11 housing sites at ARQ development. Following the decision of the Government to re-allocate seven sites originally planned for private housing to public housing development in 2019, there are altogether eight sites for public housing, one site for private housing, and two sites for combined private housing and Starter Homes.

² The site formation and infrastructure works were funded under PWP Item No. 803CL approved by LegCo in June 2016.

³ The road improvement works were funded under PWP Item No. 818CL approved by LegCo in January 2018.

connectivity between the ARQ site and nearby areas including the Kwun Tong MTR Station and the bus-bus interchange at Tseung Kwan O Road now under construction, and reduce residents' demand for short road trips. These facilities are provided on four pedestrian connectivity routes, each equipped with escalator links and/or footbridges with lift towers and/or staircases. Together they will form a continuous grade-separated pedestrian network, providing a safe, convenient, barrier-free and covered walking environment round-the-clock. Not only will the pedestrian network serve the ARQ site development (population of some 30 000) and the five existing main housing estates⁴ covering a total population of some 100 000, it will also better connect the Kwun Tong town centre including the MTR Station with the 20 existing and planned primary and secondary schools and training institutes as well as some 20 recreational, cultural, welfare and district facilities in the uphill neighbourhood. The overall planning and progress of implementation of the pedestrian connectivity facilities are at **Enclosure 2**. The site plan showing the main service area of the pedestrian link network is at **Enclosure 3**.

7. The construction works for the pedestrian connectivity facilities for the ARQ development are undertaken in phases, taking into account the progress of detailed design and statutory process for individual links. Funding for part of the pedestrian connectivity works was approved by the FC in June 2016⁵ and January 2018⁶, and works have commenced for gradual completion starting from early 2021. The proposed works under this funding application are the remaining phase of the pedestrian connectivity facilities, covering mainly two two-way escalator links and two footbridges with lift towers and staircases connecting the ARQ site with the nearby Po Tat Estate, Sau Mau Ping Estate and Sau Mau Ping South Estate. When planning for the proposed works, our main considerations are the safety and convenience of the pedestrians, improvement of the connectivity of the area and provision of barrier-free access. Details of the pedestrian connectivity facilities under the proposed works are set out below.

- i. Two two-way escalator links between Sau Mau Ping Road and the footbridge to Po Tat Estate (“EL1”), and between Sau Mau Ping South Estate and the footbridge to Sau Mau Ping Road (“EL2”)*

⁴ The five existing housing estates refer to On Tat Estate, Po Tat Estate, Sau Mau Ping Estate, Sau Mau Ping South Estate and Hiu Lai Court.

⁵ Pedestrian connectivity facilities covering the seven footbridges and two escalators connecting On Tat Estate, Hiu Lai Court, Hiu Wah Building and the bus-bus interchange at Tseung Kwan O Road were funded under PWP Item No. 803CL approved by LegCo in June 2016.

⁶ The connectivity facility being funded under PWP Item No. 818CL and approved by LegCo in January 2018 is a two-way escalator link.

The two existing footbridges connecting Sau Mau Ping Road with Po Tat Estate, and between Sau Mau Ping Road and Sau Mau Ping South Estate are currently equipped with one lift tower (comprising two lifts) and one staircase each. The estimated one-way pedestrian flow rate of the two footbridges at peak hours is estimated to be 3 410 pedestrians per hour in 2026 taking into account the additional population moving into the ARQ site by then. The existing two lifts and one staircase each of the two footbridges could not handle the anticipated pedestrian flow in 2026. While an additional lift can handle 680 more pedestrians per hour, no more lifts can be added to the two footbridges owing to site constraints. According to the Transport Department (TD)'s "Transport Planning and Design Manual" (TPDM), the Government may consider installing escalators for existing footbridges with lifts and staircases when the two-way pedestrian flow rate is expected to exceed 3 000 pedestrians per hour. To meet the estimated pedestrian flow and promote patronage of the footbridge links, we *propose* that a two-way escalator link be provided each at the existing footbridge connecting Sau Mau Ping Road and Po Tat Estate ("EL1") and the existing footbridge connecting Sau Mau Ping Road and Sau Mau Ping South Estate ("EL2").

ii. *Footbridge "FB1" with four lifts and one staircase linking Hiu Kwong Street and the podium of Sau Ming House, Sau Mau Ping Estate*

The proposed footbridge "FB1" serves to connect Sau Mau Ping Estate with Hiu Kwong Street. The proposed footbridge also forms an integral part of the pedestrian route 3 of the ARQ pedestrian network (as shown on **Enclosure 2**), by further linking up with another escalators at Hiu Kwong Street now under construction⁷ that will go all the way downhill to Hiu Ming Street and then to the Kwun Tong town centre including the MTR Station. The estimated one-way pedestrian flow rate from Sau Mau Ping Estate to Hiu Kwong Street and to Hiu Ming Street at peak hours is 1 670 pedestrians per hour in 2026. We *propose* to provide a lift tower (comprising four lifts) and one staircase for the "FB1" at the landing point on Hiu Kwong Street. In deciding the number of lifts to be provided, it is noted that the capacity of each lift is about 680 pedestrians per hour and at least three lifts are required to meet the estimated demand at peak hours. Considering that the proposed

⁷ It is covered under PWP Item No. 818CL approved by LegCo in January 2018.

footbridge will serve the adjacent eight schools/training institute⁸ that start classes in the half-hour period between 7:45a.m. to 8:15a.m. in the morning peak hour, the usage of the footbridge will rise sharply in this time slot, which may overload the three lifts. From users' point of view, if queuing for lift services takes too long, they may take the staircase down to Hiu Yuk Path at an elevation of about 13m (or 4-5 storeys)⁹ or worse still jaywalk. To accommodate the surge of demand in morning rush hours while ensuring efficiency of the footbridge system, and having regard to the operational requirements¹⁰ and enhancing pedestrian safety, we *propose* a lift tower with four lifts for "FB1" at the landing point of Hiu Kwong Street.

iii. *Footbridge "FB2" with two lifts and one staircase linking Sau Mau Ping Road and the podium of Po Tat Estate*

The proposed footbridge "FB2" serves to connect Sau Mau Ping Road and the podium of Po Tat Estate. The proposed works will enhance walkability and convenience of the residents by linking up the pedestrian route 4 (as shown on **Enclosure 2**) that will connect ARQ site with the future bus-bus interchange at Tseung Kwan O Road. The estimated peak hour one-way pedestrian flow rate of the "FB2" is about 770 pedestrians per hour in 2026. Considering the need for high pedestrian connectivity to the future bus-bus interchange at Tseung Kwan O Road, we *propose* a lift tower with two lifts for the "FB2" at the landing point on Sau Mau Ping Road to provide barrier-free and continuous access for residents.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the proposed works to be \$250.6 million in MOD prices. Detailed breakdown of the costs would be submitted to the LegCo Public Works Subcommittee (PWSC) and FC.

⁸ The eight schools/training institute include Kwun Tong Government Primary School (Sau Ming Road), Leung Shek Chee College, The Hong Kong Taoist Association Ching Chung Secondary School, HKSKH Bishop Hall Secondary School, The Mission Covenant Church Holm Glad College, S.K.H. Leung Kwai Yee Secondary School, CCC Mong Man Wai College and Hong Kong Institute of Vocational Education (Kwun Tong).

⁹ Alternatively, users may make a detour of some 320 m, at an elevation of about 13 m, to cross Hiu Kwong Street and then reach Hiu Yuk Path near the Leung Shek Chee College.

¹⁰ Experience in other footbridge projects shows that lifts will be shut down temporarily for an average of half day per week for routine maintenance.

PUBLIC CONSULTATION

9. Two public forums were held on 10 and 13 January 2015 at the Kwun Tong Community Hall to collect views from the public on the proposed network of pedestrian connectivity facilities under the ARQ development. The attendees generally supported the implementation of the proposed pedestrian connectivity facilities. On 29 January 2015, we consulted the Traffic and Transport Committee of the Kwun Tong District Council (KTDCTTC) on the proposed network of pedestrian connectivity facilities. Members supported the implementation of the proposed network. In respect of the remaining pedestrian connectivity facilities as proposed under this funding application, we further consulted the KTDCTTC on 29 November 2018. Members supported the proposed works and urged for their early implementation.

10. During 2016 – 2018¹¹, we consulted the LegCo Panel on Development and obtained funding approval of the FC for the part-upgrading of PWP Item No. **765CL** to Category A for site formation and infrastructure works and part of pedestrian connectivity works (i.e. PWP Item No. **803CL**) and the road improvement and infrastructure works (i.e. PWP Item No. **818CL**). Members urged for the early completion of the remaining pedestrian connectivity facilities under the ARQ project.

11. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 2 August 2019 and no objection was received. The works were authorised by the Secretary for Transport and Housing on 1 November 2019.

ENVIRONMENTAL IMPLICATIONS

12. The project is not a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). In July 2014, we completed the EIA report for the Development of Anderson Road Quarry under Schedule 3 of Cap. 499, which covered the proposed pedestrian connectivity facilities works. The EIA report concluded that the proposed works would not cause any long-term adverse environmental impacts.

¹¹ For the part-upgrading of PWP Item No. 765CL for the site formation and infrastructure works and part of off-site pedestrian connectivity facilities (i.e. PWP Item No. 803CL), we consulted the LegCo Panel on Development on 15 March 2016 and 26 April 2016, PWSC on 21 May 2016, and FC on 10 June 2016. For the part-upgrading of PWP Item No. 765CL for the offsite road improvement and infrastructure works (i.e. PWP Item No. 818CL), we consulted LegCo Panel on Development on 28 March 2017 and 25 April 2017, PWSC on 15 November 2017 and 29 November 2017, and the FC on 26 January 2018.

13. We will implement the mitigation measures and EM&A programme as recommended in the approved EIA report to control the short-term environmental nuisances during construction to comply with the established standards and guidelines. We will control the construction dust, noise and surface run-off by mitigation measures including watering at site, use of quiet plant and working methods and close liaison with the nearby schools to avoid noisy construction works to be carried out during examination period, and the use of temporary drains to collect site run-off for on-site treatment before discharge. We have included the cost of implementing the environmental mitigation measures and EM&A programme in the project estimate.

14. At the planning and design stages, we have considered the design to optimise the slope cutting profile to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials) 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 facilities¹². 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 minimise generation of construction waste.

15. 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 also 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 to public fill reception facilities and landfills respectively through a trip-ticket system.

16. We estimate that the project will generate in total 3 500 tonnes of construction waste. Of these, we will reuse 2 600 tonnes (74%) of inert construction waste on site and deliver 400 tonnes (12%) inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 500 tonnes (14%) non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be \$0.13 million for this project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities, and

¹² 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 at public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

\$200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

17. The proposed works will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites and buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

TRAFFIC IMPLICATIONS

18. The proposed works will not cause any significant traffic impact during the construction stage. Temporary traffic arrangements will be implemented to facilitate the construction works. We will display publicity boards on site giving details of the temporary traffic arrangements, and the anticipated completion dates of individual sections of works. In addition, we will set up a telephone hotline to respond to public enquiries or complaints.

LAND ACQUISITION

19. The proposed works require the resumption of about 891 square metres (m²) of private land and clearance of about 188 m² of Government land. The proposed works also require the creation of easements and other permanent rights in about 839 m² of private land and the creation of rights of temporary occupation of about 595 m² of private land. Subject to funding approval from FC, the land resumption procedure and creation of easement will commence and are expected to take six to nine months to complete.

BACKGROUND

20. We upgraded **765CL** to Category B in September 2013.

21. On 21 February 2014, FC approved the upgrading of part of **765CL** to Category A as **774CL** “Development of Anderson Road Quarry site – detailed design and site investigations” at an approved project estimate of \$187.2 million in MOD prices for engaging consultants to undertake the detailed design and site investigation works of the site formation and associated infrastructure works, off-site road improvement works, as well as pedestrian connectivity facilities for the proposed development at the ARQ site.

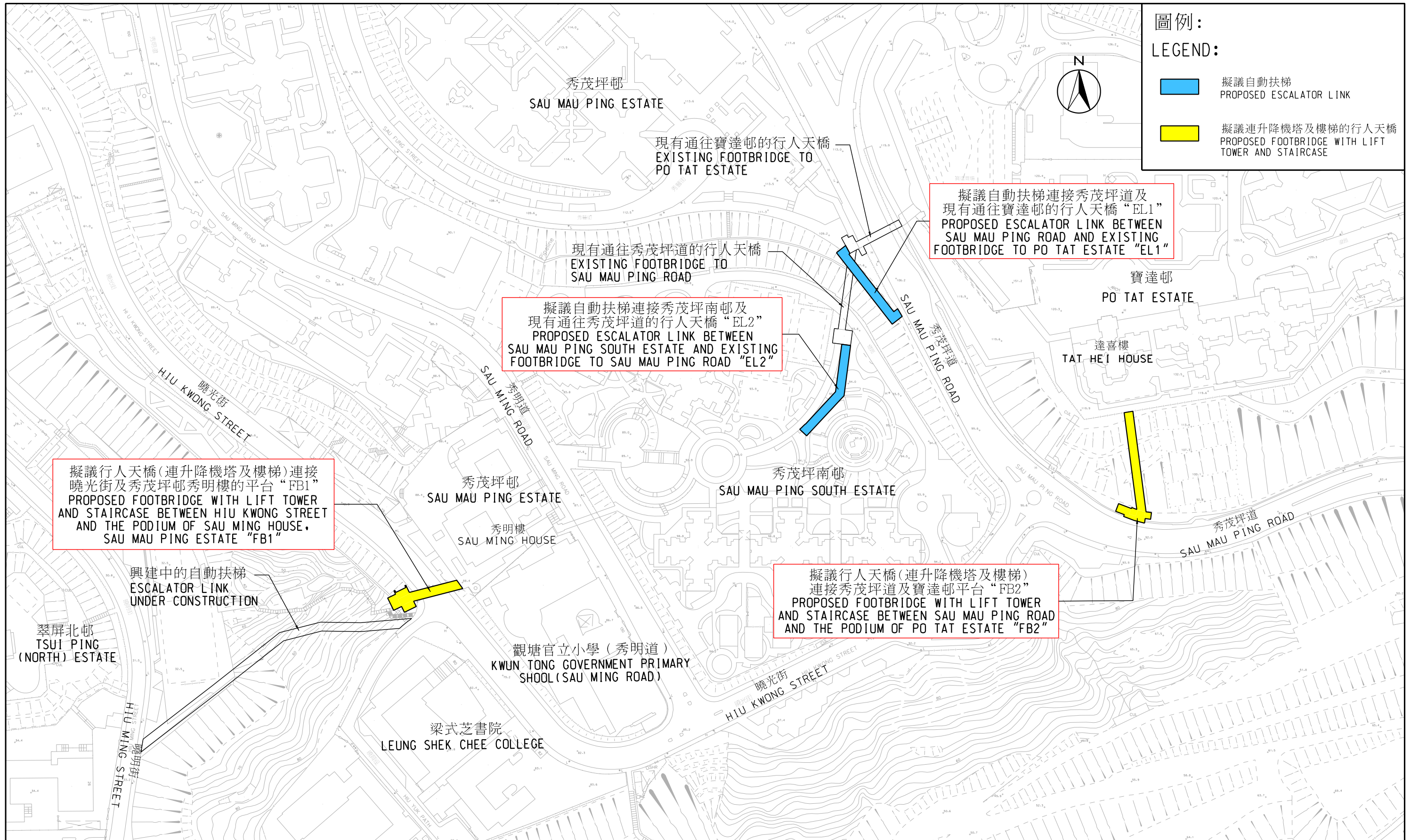
22. On 10 June 2016, FC approved the upgrading of part of **765CL** to Category A as **803CL** “Development of Anderson Road Quarry site – site formation and associated infrastructure works” at an approved project estimate of \$7,693.4 million in MOD prices for the construction of the site formation and associated infrastructure works and part of off-site pedestrian connectivity facilities works for the proposed development of the ARQ site.

23. On 26 January 2018, FC approved the upgrading of part of **765CL** to Category A as **818CL** “Development of Anderson Road Quarry site – road improvement and infrastructure works” at an approved project estimate of \$2,654.4 million in MOD prices for the construction of the road improvement and infrastructure works to support the proposed development of the ARQ site.

WAY FORWARD

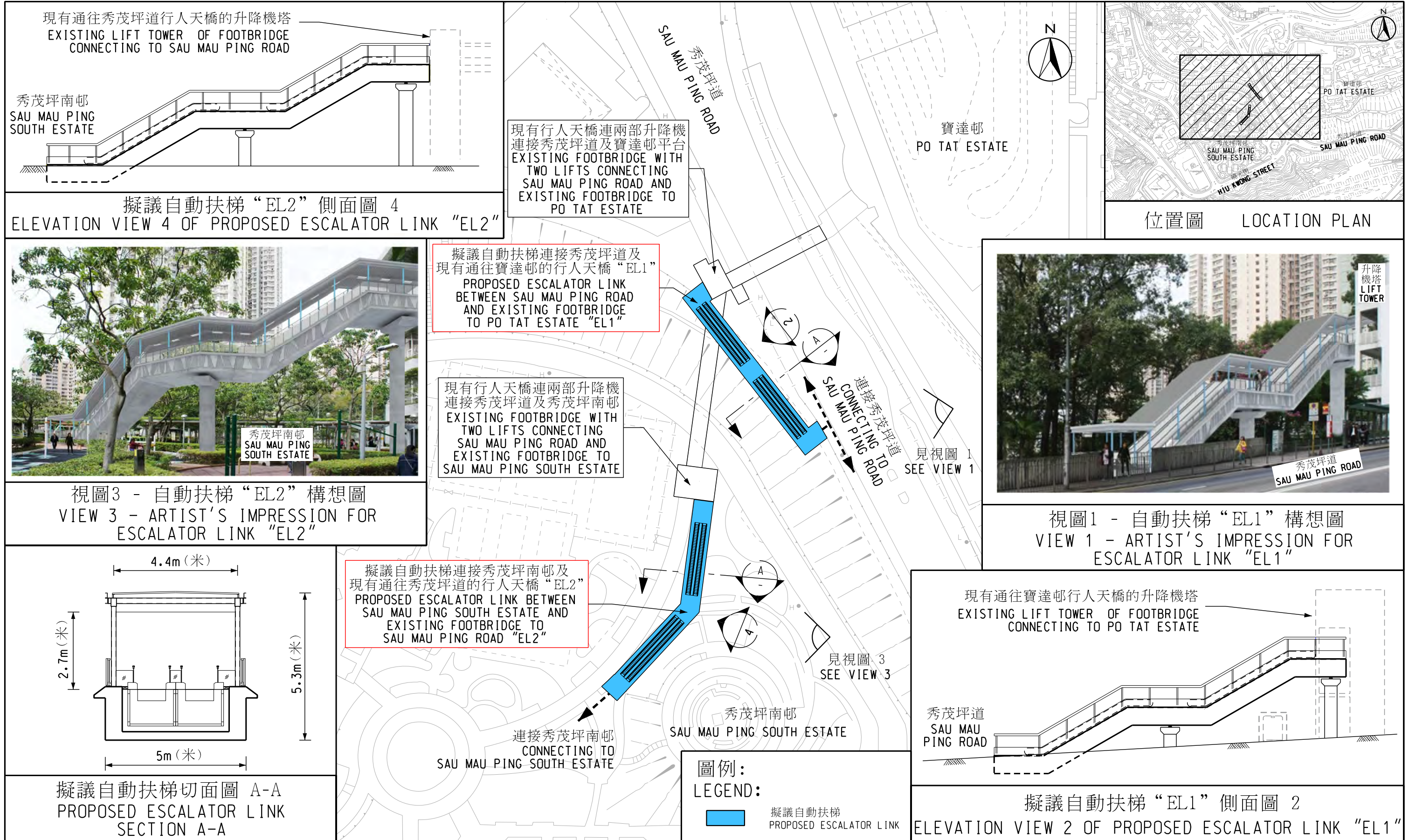
24. We plan to seek funding approval from the FC after consulting the PWSC to upgrade the remainder of **765CL** to Category A.

Development Bureau
Civil Engineering and Development Department
March 2020



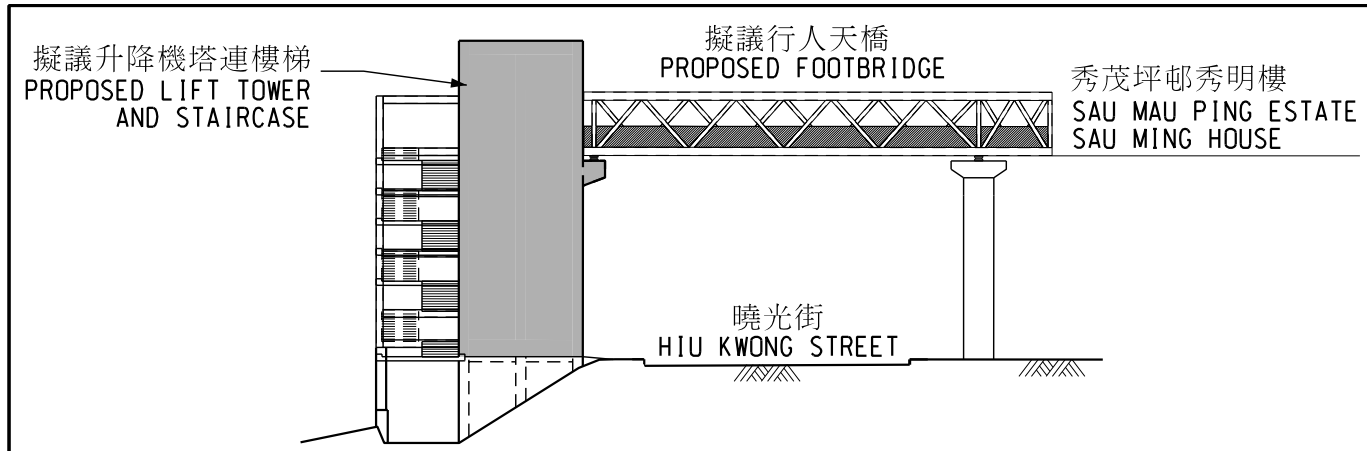
圖則名稱 drawing title

工務計劃第765CL號 - 安達臣道石礦場用地發展 - 餘下行人連繫設施工程
 PWP ITEM No. 765CL - DEVELOPMENT OF ANDERSON ROAD QUARRY SITE
 - REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS



圖則名稱 drawing title

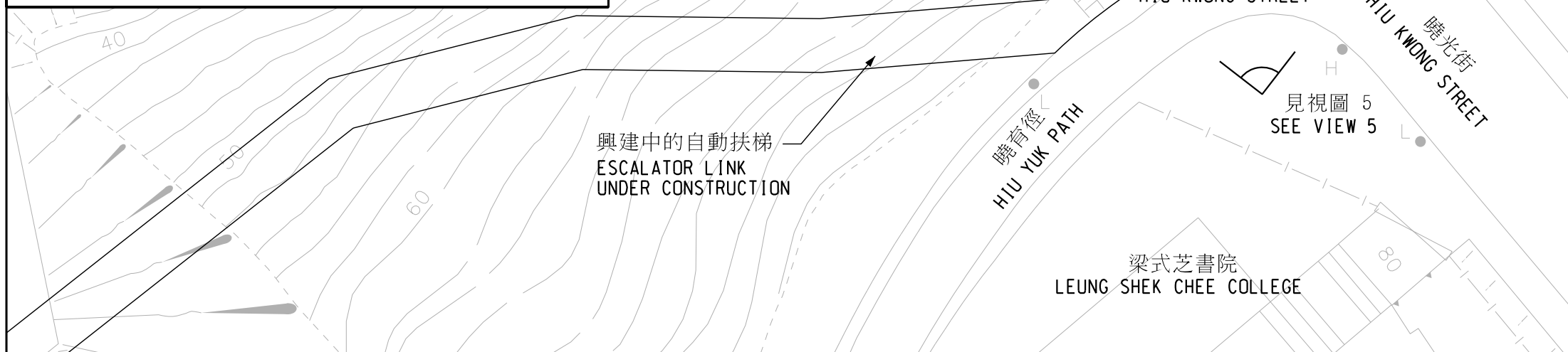
工務計劃第765CL號 - 安達臣道石礦場用地發展 - 餘下行人連繫設施工程
PWP ITEM No. 765CL - DEVELOPMENT OF ANDERSON ROAD QUARRY SITE
- REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS



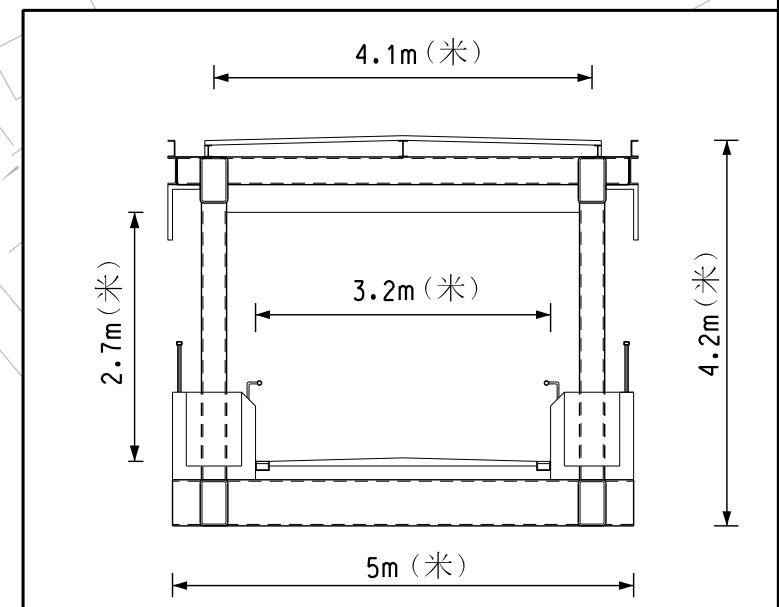
擬議行人天橋側面圖 6
ELEVATION VIEW 6 OF PROPOSED FOOTBRIDGE



視圖 5 - 行人天橋的構想圖
VIEW 5 - ARTIST'S IMPRESSION FOR FOOTBRIDGE



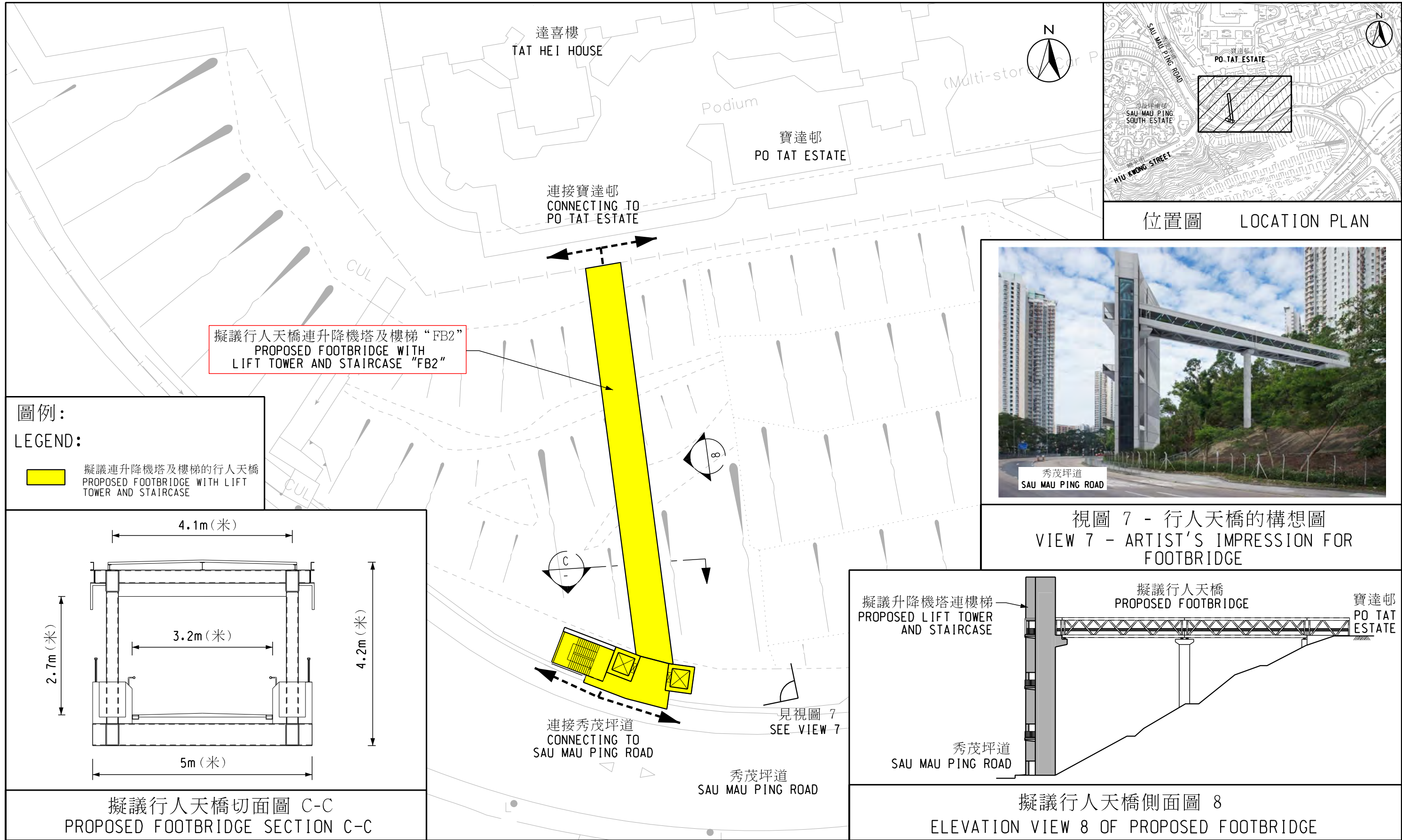
位置圖 LOCATION PLAN



擬議行人天橋切面圖 B-B
PROPOSED FOOTBRIDGE SECTION B-B

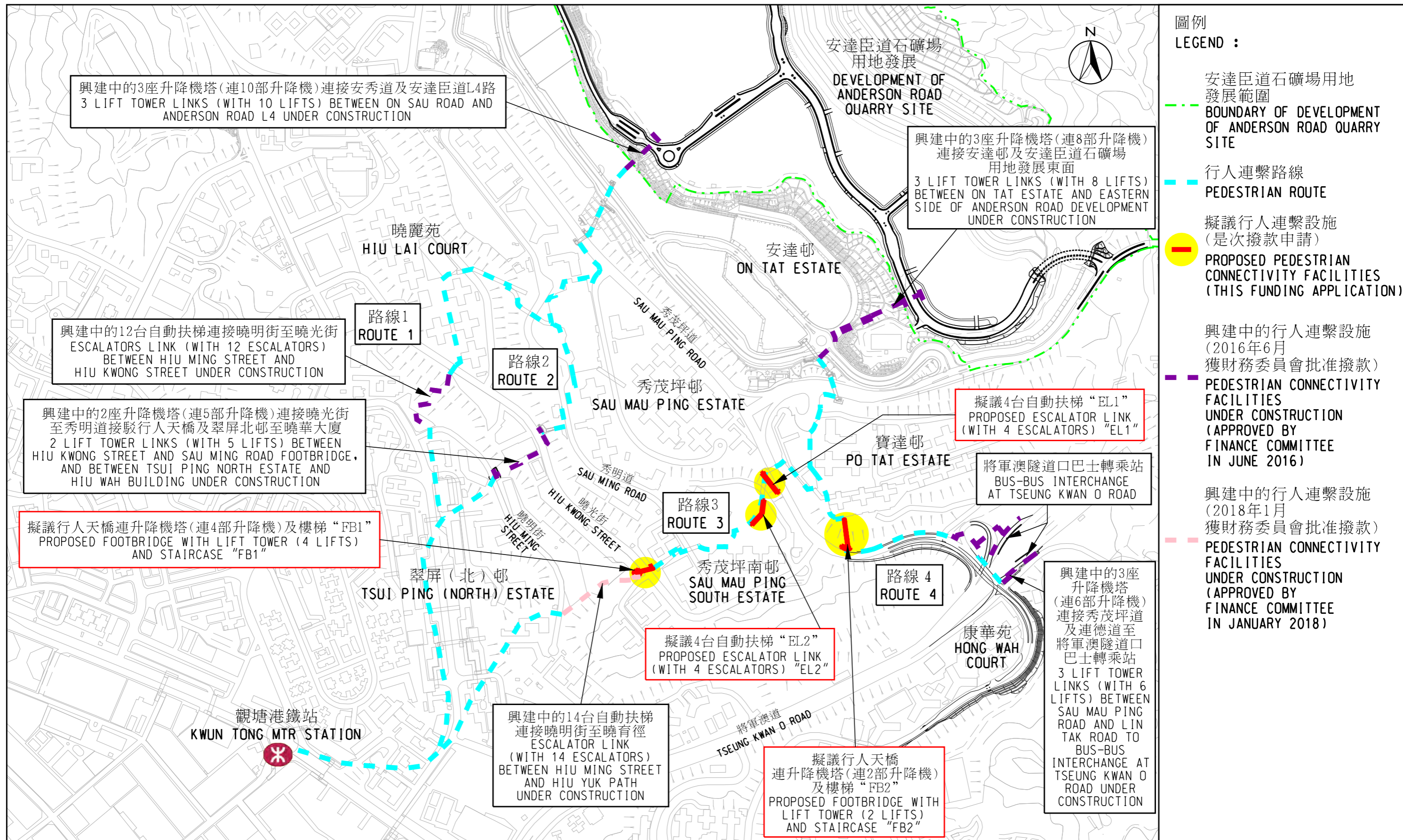
圖則名稱 drawing title

工務計劃第765CL號 - 安達臣道石礦場用地發展 - 餘下行人連繫設施工程
PWP ITEM No. 765CL - DEVELOPMENT OF ANDERSON ROAD QUARRY SITE
- REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS



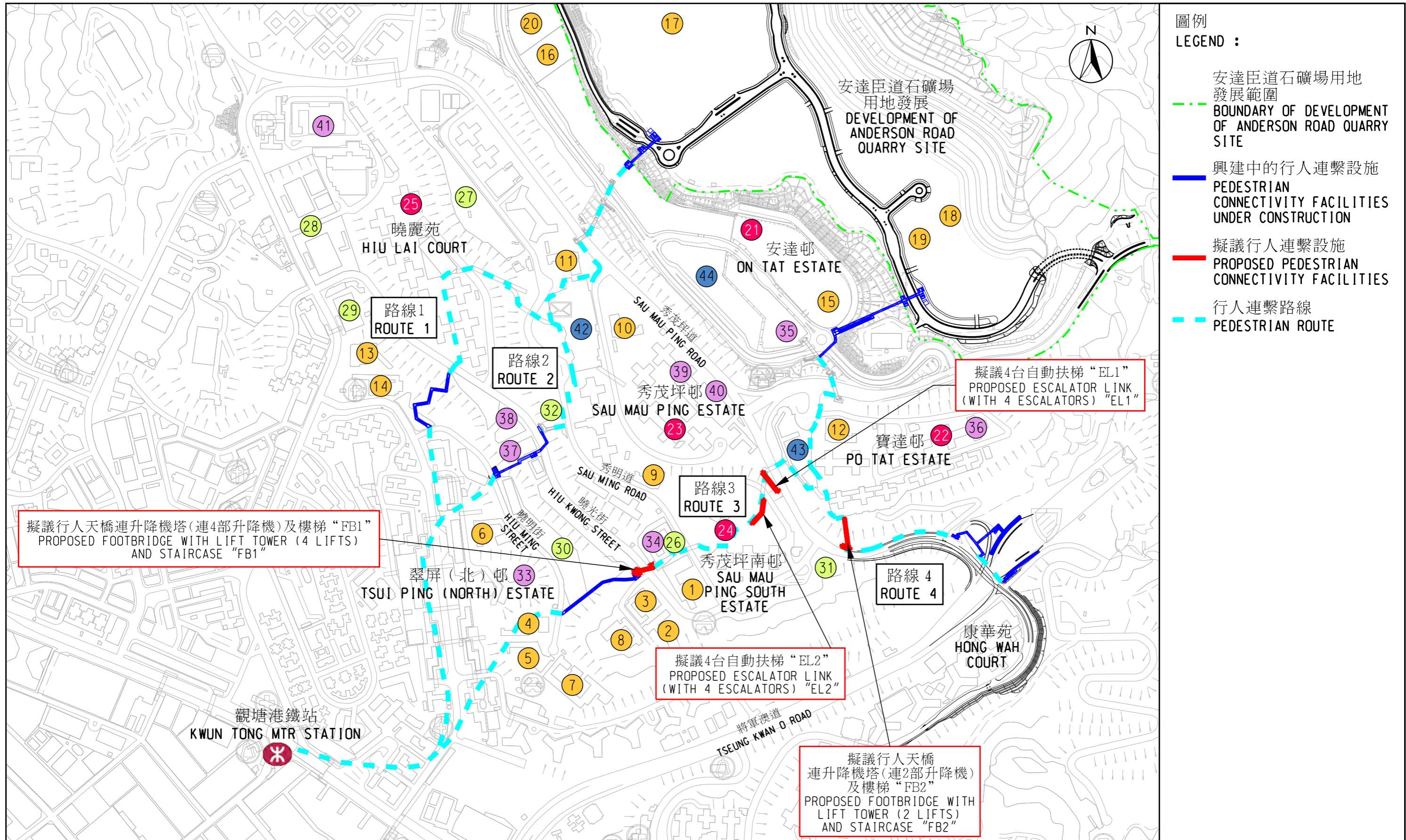
圖則名稱 drawing title

工務計劃第765CL號 - 安達臣道石礦場用地發展 - 餘下行人連繫設施工程
 PWP ITEM No. 765CL - DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS



圖則名稱 drawing title

工務計劃第765CL號 - 安達臣道石礦場用地發展 - 行人連繫設施總體規劃
PWP ITEM No. 765CL - DEVELOPMENT OF ANDERSON ROAD QUARRY SITE
- OVERALL PLANNING OF PEDESTRIAN CONNECTIVITY FACILITIES



圖則名稱 drawing title

工務計劃第765CL號 - 安達臣道石礦場用地發展 - 行人連繫設施附近的屋邨、學校及設施
PWP ITEM No. 765CL - DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - HOUSING ESTATES, SCHOOLS AND FACILITIES IN THE VICINITY OF PEDESTRIAN CONNECTIVITY FACILITIES

項目 ITEM	學校 SCHOOLS
1	觀塘官立小學(秀明道) KWUN TONG GOVERNMENT PRIMARY SCHOOL
2	香港聖公會何明華會督中學 H.K.S.K.H. BISHOP HALL SECONDARY SCHOOL
3	梁式芝書院 LEUNG SHEK CHEE COLLEGE
4	基督教聖約教會堅樂中學 THE MISSION COVENANT CHURCH HOLM GLAD COLLEGE
5	聖公會梁季彝中學 S.K.H. LEUNG KWAI YEE SECONDARY SCHOOL
6	中華基督教會蒙民偉書院 C.C.C. MONG MAN WAI COLLEGE
7	香港專業教育學院(觀塘) HONG KONG INSTITUTE OF VOCATIONAL EDUCATION (KWUN TONG)
8	香港道教聯合會青松中學 HONG KONG TAOIST ASSOCIATION CHING CHUNG SECONDARY SCHOOL
9	路德會聖馬太學校(秀茂坪) ST MATTHEW'S LUTHERAN SCHOOL(SAU MAU PING)
10	秀明小學 SAU MING PRIMARY SCHOOL
11	基督教聖約教會堅樂小學 THE MISSION COVENANT CHURCH HOLM GLAD PRIMARY SCHOOL
12	秀茂坪天主教小學 SAU MAU PING CATHOLIC PRIMARY SCHOOL
13	新生命教育協會呂郭碧鳳中學 NLSI LUI KWOK PAT FONG COLLEGE
14	觀塘瑪利諾書院 KWUN TONG MARYKNOLL COLLEGE
15	聖公會聖約翰曾肇添小學 S.K.H. ST. JOHN'S TSANG SHIU TIM PRIMARY SCHOOL
16, 17,18	已規劃的小學 PLANNED PRIMARY SCHOOL
19.20	已規劃的中學 PLANNED SECONDARY SCHOOL
共 20 學校 TOTAL 20 SCHOOLS	

項目 ITEM	屋邨 HOUSING ESTATES
21	安達邨 ON TAT ESTATE
22	寶達邨 PO TAT ESTATE
23	秀茂坪邨 SAU MAU PING ESTATE
24	秀茂坪南邨 SAU MAU PING SOUTH ESTATE
25	曉麗苑 HIU LAI COURT
共 5 屋邨 TOTAL 5 HOUSING ESTATES	

項目 ITEM	文娛及康樂設施 RECREATIONAL AND CULTURAL FACILITIES
26	秀茂坪公共圖書館 SAU MAU PING PUBLIC LIBRARY
27	秀明道公園 SAU MING ROAD PARK
28	秀雅道遊樂場 SAU NGA ROAD PLAYGROUND
29	曉光街體育館 HIU KWONG STREET SPORTS CENTRE
30	曉明街遊樂場 HIU MING STREET PLAYGROUND
31	秀茂坪道/曉光街休憩處 SAU MAU PING ROAD / HIU KWONG STREET SITTING-OUT AREA
32	秀茂坪社區會堂 SAU MAU PING COMMUNITY HALL
共 7 設施 TOTAL 7 FACILITIES	

項目 ITEM	社福及區內設施 WELFARE AND DISTRICT FACILITIES
33	明愛觀塘長者中心 CARITAS KWUN TONG ELDERLY CENTRE
34	方肇彝長者鄰舍中心 FONG SHIU YEE NEIGHBOURHOOD ELDERLY CENTRE
35	邱木城長者鄰舍中心 STEPHEN YOW MOK SHING NEIGHBOURHOOD ELDERLY CENTRE
36	可榮耆英鄰舍中心 HO WING NEIGHBOURHOOD CENTRE FOR SENIOR CITIZENS
37	康達老人中心(分院) HON TAT ELDERLY CARE CENTRE BRANCH
38	康寧護理中心 HONG LING NURSING CENTRE 曉光護老中心 HIU KWONG NURSING CENTRE
39	恩光社會服務中心 YAN KWONG SOCIAL SERVICE CENTRE
40	秀茂坪邨服務設施大樓 SAU MAU PING ESTATE ANCILLARY FACILITIES BLOCK
41	基督教聯合醫院 UNITED CHRISTIAN HOSPITAL
共 10 設施 TOTAL 10 FACILITIES	

項目 ITEM	商場 SHOPPING CENTRES
42	秀茂坪商場 SAU MAU PING SHOPPING CENTRE
43	寶達商場 PO TAT SHOPPING CENTRE
44	安達商場 ON TAT SHOPPING CENTRE
共 3 商場 TOTAL 3 SHOPPING CENTRES	

圖則名稱 drawing title

工務計劃第765CL號 - 安達臣道石礦場用地發展 - 行人連繫設施附近的屋邨、學校及設施
PWP ITEM No. 765CL - DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - HOUSING ESTATES, SCHOOLS AND FACILITIES IN THE VICINITY OF PEDESTRIAN CONNECTIVITY FACILITIES