ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT Civil Engineering – Land Development

828CL – Remaining Phase of Site Formation and Engineering Infrastructure Works at Kwu Tung North New Development Area and Fanling North New Development Area – Construction

Members are invited to recommend to the Finance Committee ("FC") the upgrading of the remainder of **828CL** to Category A at an estimated cost of **\$30,167.9 million** in money-of-the-day ("MOD") prices.

PROBLEM

Kwu Tung North/Fanling North New Development Area ("KTN/FLN NDA") is implemented in two phases. The First Phase development commenced in 2019 upon funding approved by the Legislative Council ("LegCo"). We propose to apply funding for the Remaining Phase development so as to commence the construction works from mid-2024.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade the remainder of **828CL** project to Category A at an estimated cost of **\$30,167.9** million in MOD prices for carrying out site formation and engineering infrastructure works to support the Remaining Phase development of KTN/FLN NDA ("Remaining Phase works").

OVERVIEW OF KTN/FLN NDA

- 3. KTN/FLN NDA is the first NDA in the Northern Metropolis ("NM") to enter the construction stage. Under the NM Action Agenda, KTN/FLN NDA is planned as a predominantly residential community, located within the Boundary Commerce and Industry Zone adjacent to the existing new towns in Fanling/Sheung Shui. With a view to driving the development, we are planning to relocate some government offices from the urban areas to KTN.
- 4. KTN/FLN NDA, with a total development area of 320 hectares ("ha"), is implemented in two phases: the First Phase involves an area of 73 ha and the Remaining Phase involves an area of 247 ha. The phasing plan of the project is at The site formation and engineering infrastructure works for Enclosures 1 and 2. the First Phase development commenced in 2019 and is progressing well. sites have been handed over progressively for the construction of public housing The site formation works for a site reserved for the development of a government office complex is also expected to complete in 2026¹. two private housing developments implemented under in-situ land exchange within the development area under the First Phase, one of which was already completed at end 2022, while two other private housing sites, disposed through the land sale programme, are under construction. Moreover, public housing is being developed by the Housing Authority and the Hong Kong Housing Society on three sites for completion in phases starting from 2026. The construction of Fanling Bypass (Eastern Section), which will create a direct connection for the new population of FLN to Fanling Highway bypassing the existing Fanling/Sheung Shui town centre, is progressing well for completion in 2025. The 37-ha Long Valley Nature Park has been substantially completed and will be open for public enjoyment this year. The Civil Engineering and Development Department ("CEDD") targets to complete the First Phase development in 2026.
- 5. Upon full development, KTN/FLN NDA will provide a total of about 86 200 housing units (of which about 57 500 are public housing), accommodating an additional population of about 227 000. In addition to housing supply, a wide range of Government, Institution or Community ("GIC") facilities and a floor area of approximately 554 000 square metres ("m²") for general commercial uses (such as retail) will be provided to support future residents of the NDA and nearby. As mentioned above, the Government also plans to construct a government office complex in KTN to accommodate some government offices to be relocated from the urban areas. As a whole, KTN/FLN NDA will create about 53 000 job opportunities.

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The site formation works include site clearance and removal/transplantation of trees at the site. Detailed tree removal/transplantation proposal is subject to further assessment.

In respect of transport infrastructure, Kwu Tung Station as Phase 1 of the Northern Link Main Line is now under construction. The station, situated between Sheung Shui and Lok Ma Chau Stations of the East Rail Line, is targeted for completion in 2027 to support the KTN development. Kwu Tung Station is located at KTN town centre facilitating future NDA residents to travel. The first public transport interchange within the NDA, located at one of the private housing sites in the First Phase development, is expected to commission in 2025. from the above-mentioned Fanling Bypass (Eastern Section) which is expected to be completed in 2025, other road projects including the widening of Fanling Highway (Kwu Tung Section), construction of Fanling Bypass (Western Section) ("FLBP(W)") and construction of the flyover along Po Shek Wu Road ("PSWR") to Fanling Highway (westbound), etc. will be carried out under the Remaining Phase development for anticipated completion in 2031. These road projects can improve the external connectivity of KTN/FLN NDA and increase the capacity of existing road network, so as to meet the demand arising from the NDA while improving the existing traffic condition in Fanling/Sheung Shui new towns.

7. Key figures of KTN/FLN NDA Remaining Phase development are tabulated below –

Housing yield (public housing)	64 900 units (39 200 units)
New population	172 000
Development area	247 ha
Private land to be resumed and cleared ²	112 ha
Government land to be cleared ²	157 ha
No. of households to be cleared*	1 065
No. of business undertakings to be cleared*	313
Active farmland to be affected*	15 ha
No. of livestock farms to be affected	1
Programme for site formation and engineering infrastructure works	2024 – 2031

^{*} Remarks: The number of households and business undertakings to be cleared and the area of active farmland to be affected are subject to further verification.

/PROJECT

The area of private and government land that has to be resumed and/or cleared (269 ha in total) is different from the development area (247 ha). This is because the former includes land outside the NDA (such as the land covered by the widening of Fanling Highway, construction of service reservoirs, etc.), land required for the works (such as works area), etc.

PROJECT SCOPE AND NATURE

- 8. The proposed works under **828CL** comprise:
 - (a) site clearance and formation (including geotechnical works and land decontamination works) for about 247 ha of land, to supply land for development of public and private housing, commercial uses, GIC facilities, open spaces, etc., and for construction of the road and infrastructure works in sub-paragraphs (b) and (c) below;
 - (b) construction of FLBP(W) of about 2 kilometres ("km") long, PSWR Flyover of about 850 metre ("m") long, local roads of about 12 km long and cycle tracks of about 12 km long within the NDA; widening of Fanling Highway of about 4 km long for connection to KTN NDA; and associated junction/road improvements;
 - (c) construction of other engineering infrastructures including drainage system, sewerage system (including 4 sewage pumping stations), water supply system (including a fresh water service reservoir and a flushing water service reservoir with capacity of about 61 000 cubic metres ("m³") and 14 800 m³ respectively), revitalisation of meander and construction of riverside pavilion, provision of open spaces, undertaking of landscape works as well as other associated works; and
 - (d) implementation of environmental mitigation measures, environmental monitoring and audit ("EM&A") programme and construction supervision for the works mentioned in sub-paragraphs (a) to (c) above.
- 9. Layout plans and artistic impressions for the Remaining Phase development are at **Enclosures 1 to 11**.
- 10. We plan to commence the Remaining Phase works from mid-2024 upon the funding approval by the FC of LegCo with a view to tying in with the progressive completion and population intake of public housing development within this phase starting from 2029 and completing the site formation and engineering infrastructure works for the entire KTN/FLN NDA by 2031. Although the development area of the Remaining Phase (247 ha) is much larger than the First

Phase (73 ha), construction time would be compressed to complete the site formation and engineering infrastructure works of this phase (as mentioned in paragraph 8 above) in about 7.5 years, with a higher development efficiency than the First Phase. To meet the works programme, CEDD has invited tenders for the Remaining Phase works from January 2024 onward to enable early commencement of the proposed works. The project involves eight works contracts, of which the tender for four has been completed. The returned tender prices have been reflected in the estimated cost in this paper, which have been downwardly adjusted by \$2,350.5 million to \$30,167.9 million from \$32,518.4 million when consulting the Panel on Development in March this year. The works contracts will only be awarded upon obtaining funding approval from the FC.

JUSTIFICATION

11. The 247 ha of land to be formed under the Remaining Phase development of KTN/FLN NDA, which amounts to 77% of the total development area of the NDA, will be used for subsequent developments such as housing, commercial uses, public and community facilities, open spaces, transport and other infrastructures, etc.

Providing Land for Housing

12. The housing yield for the Remaining Phase development is about 64 900 units, amounting to about 75% of the total housing supply of KTN/FLN NDA, including about 39 200 public housing units. The Town Planning Board ("TPB") approved in September 2022 an increase in plot ratio for 14 public housing sites within this development phase by 30% and an increase in plot ratio for 23 private housing sites by 20% to meet the current housing yield, with a view to better utilising the land and infrastructure as well as increasing housing supply. Completion and population intake of housing units of this development phase will commence progressively starting from 2029.

Providing Land for Commercial Uses and Other Economic Activities

- 13. To support future residents of the NDA and nearby, ancillary commercial facilities such as restaurants, retail and services, etc., are allowed in some of the housing sites within the Remaining Phase development. The estimated floor area for these commercial facilities is about 432 500 m².
- 14. A site to the west of Man Kam To Road in the Remaining Phase development of FLN is reserved for the development of logistics facilities or

/relevant

relevant multi-storey buildings ("MSBs") in view of its surrounding planning context and direct access to Man Kam To Road and Fanling Bypass. This site is about 5 ha with an estimated gross floor area of about 365 200 m². Besides, since the provision of innovation and technology ("I&T") land in the NM would be concentrated in San Tin Technopole, the land uses of several sites originally proposed for I&T-related use in the Remaining Phase development of KTN are being reviewed under another study, i.e. the Study for the Ma Tso Lung area. The review is targeted for completion within this year.

Providing Land for GIC Facilities and Open Spaces

- 15. We will also provide land for constructing GIC facilities in KTN/FLN NDA Remaining Phase development, such as public transport interchanges, social welfare facilities, schools, sports/leisure centre, community hall, clinics/health centre, refuse collection points, etc.
- 16. For developing a green and livable community, we will provide under the Remaining Phase development user-friendly pedestrian and cycling networks. Riverside pavilions will also be constructed in FLN to promote water-friendly culture and activities. We will develop open space with flood retention functions, including, the construction of a district park of about 6 ha with flood storage tank and an open space of about 2.4 ha with flood retention function in revitalised meander in FLN. This would create a green and naturalistic environment for public enjoyment while serving as flood attenuation facilities. A flood storage tank will also be provided at KTN to increase the drainage capacity of the area.

Providing Land for Other Uses

- 17. We have reserved a site of about 3 ha to the east of Man Kam To Road in the Remaining Phase development of FLN for the development of multi-storey bus depots to support franchised bus services for the new population arising from the development of KTN/FLN NDA and to re-provision an existing bus depot in the district. We will also explore the provision of public goods vehicle parks within the site under the "single site, multiple uses" model to cater for parking demand of heavy goods vehicles in the North District.
- 18. To support livestock farms affected by government projects and to upgrade the industry, a site near Lo Wu Correctional Institution has been earmarked for the development of a MSB for livestock farms. The MSB for livestock farms, occupying a site of about 1 ha, will be operated in a modernised, biologically safe

and environmentally friendly manner. The Agriculture, Fisheries and Conservation Department is following up with the trade on this project.

Providing Other Engineering Infrastructure Facilities

- 19. The Remaining Phase development also involves formation of land for subsequent construction of the Northern Link Main Line by the MTR Corporation Limited, as well as construction of primary distributor road and district distributors including the widening of Fanling Highway (Kwu Tung Section) and construction of FLBP(W) and PSWR Flyover. These road projects will improve the external connectivity of KTN/FLN and increase the capacity of existing road network so as to meet the demand arising from the NDA while improving the existing traffic condition in Fanling/Sheung Shui new towns. This development phase also comprises the construction of other infrastructures such as drainage system (including drains, flood storage tanks and box culverts), sewerage system (including sewage pumping stations, gravity sewers and rising mains), and water supply system (including a fresh water service reservoir and a flushing water service reservoir³, fresh water mains and flushing water mains).
- 20. To address the impacts of extreme weather, CEDD has adopted the latest flood protection standards based on the Stormwater Drainage Manual updated in March 2024, with due consideration of the relevant rainfall intensities, characteristics and size of the catchment, as well as the ground surface condition when planning and designing the drainage system for KTN/FLN NDA. We will also take due consideration of extreme weather and climate change in the design of appropriate site formation levels for the NDA. Taking FLN NDA as an example which is partly a low-lying area, the Government will raise the level of the low-lying area through site formation works to prevent flooding. Moreover, as mentioned in paragraph 16 above, we will incorporate design elements of "bluegreen infrastructure" to enhance the flood protection capacity of the drainage system, including the construction of flood retention facilities, improvement and revitalisation of existing watercourses, and development of open spaces with flood retention functions.
- 21. Apart from meeting the need of KTN/FLN NDA, the provision of infrastructures will also bring improvements to the area in the aspects of traffic condition and others, benefiting the communities in neighbouring areas. For examples, the proposed road network in KTN NDA will improve the existing connectivity of Ho Sheung Heung; the proposed Kwu Tung Interchange will be a

/new

The service reservoirs will also serve demand from areas outside KTN/FLN NDA including existing and planned developments in the Sheung Shui/Fanling area.

/iii.

\$ million

new route for ingress/egress from Fanling Highway to KTN NDA; and the Kwu Tung Road will be modified to connect with the proposed Road L3 to improve the connectivity between Kwu Tung North and Kwu Tung South. In addition, drainage improvement works for low-lying villages in the vicinity of the NDA, such as Tin Ping Shan Tsuen, will be carried out to enhance flood resilience for those villages. The newly constructed drainage system will also enhance the flood protection capacity of the entire area, benefitting the existing communities and villages.

FINANCIAL IMPLICATIONS

22. We estimate the capital cost of the Remaining Phase works in MOD prices with breakdown as follows –

			(in MOD	prices)
Work	ks Ca	<u>ategories</u>		
(a)	(inc	e clearance and formation works cluding geotechnical works and d decontamination)		4,120.3
(b)	Roa	ad works		11,775.3
	i.	At-grade roads	3,415.3	
	ii.	Vehicular bridges and pedestrian footbridges	4,572.8	
	iii.	Pedestrian subways	30.8	
	iv.	Noise barriers / noise enclosures	3,756.4	
(c)		ner engineering infrastructure and dscaping works		8,786.5
	i.	Drainage system (including drains, flood storage tanks and box culverts)	1,659.1	
	ii.	Sewerage system (including sewage pumping stations, gravity sewers and rising mains)	1,168.8	

			\$ mil (in MOD	
	iii.	Water supply system (including fresh water and flushing water service reservoirs, fresh water mains and flushing water mains)	1,797.5	
	iv.	Common utilities enclosure	1,261.8	
	v.	Open space	2,398.5	
	vi.	Landscaping and other associated works	500.8	
Supp	leme	entary Expenditures		
(d)	Environmental mitigation measures 490.6 and EM&A programme			
(e)	Co	nsultants' fees		277.1
	i.	Contract administration	82.1	
	ii.	Supervision of Resident Site Staff ("RSS")	131.2	
	iii.	EM&A programme	63.8	
(f)	Remuneration of RSS			1,976.0
<u>Othe</u>	<u>rs</u>			
(g)	Co	ntingencies		2,742.1
		Total		30,167.9

- 23. A breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Enclosure 12**.
- 24. Subject to funding approval, we plan to phase the expenditure for the Remaining Phase works as follows –

Year	\$ million (in MOD prices)
2024 - 25	626.7
2025 - 26	1,850.6
2026 - 27	5,341.4
2027 - 28	6,174.5
2028 - 29	5,323.2
2029 - 30	3,830.5
2030 - 31	3,319.7
2031 - 32	2,063.5
2032 - 33	1,637.8
	30,167.9

- 25. We have derived the MOD estimate on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output from 2024 to 2033.
- 26. In view of the large scale of works for this development phase, we will set out in ensuing paragraphs details on cost estimation and measures taken at the design and procurement stages to keep the cost down. In order to have a better analysis, we will group the proposed works in two main categories, namely (1) site formation and engineering infrastructures of the Remaining Phase development of KTN/FLN NDA; and (2) widening of Fanling Highway of about 4 km long and construction of PSWR Flyover of about 850 m long for alleviating the traffic congestion at Tai Tau Leng Roundabout, with the implementation of associated noise mitigation measures. The works under the former are located within the NDA and will serve the new population directly. The latter involves road works outside the NDA. Apart from the new population of the NDA, nearby residents as well as those currently living in the Fanling/Sheung Shui town centre will also benefit.

For (1) site formation and engineering infrastructures, the estimated cost is about \$22,086.0 million. Excluding the 9% supplementary expenditures (which include environmental mitigation measures during construction stage and EM&A programme, consultants' fees and remuneration of RSS) and the 9% contingencies, the following three works categories altogether account for 82% of the total cost: site clearance and formation account for 19%, road works (including implementation of noise mitigation measures) account for 23%, and other engineering infrastructures and landscaping works account for 40%. The unit costs of the cost estimate are summarised as follows –

Works categories

Works categories	Unit costs		
Overall cost estimate related to (1) site	\$9,700 per m ²		
formation and engineering infrastructures	_		
The unit costs of the site formation and engineering infrastructure works can be			
further broken down into the followings –			
- Site clearance and formation works \$1,800 per m ²			
- Road works (including associated noise \$309,600 per m			
mitigation measures)			
- Other engineering infrastructures	$3,900 \text{ per m}^2$		

Individual key items

Individual key items	Unit costs			
Road works				
- At-grade roads	\$84,200 per m			
- Cycle tracks	\$5,000 per m			
- Footbridges	\$1,009,200 per m			
Other engineering infrastructures and landscaping works				
- Drainage system				
 drains 	\$30,800 per m			
 box culverts 	\$33,000 per m ²			
- Sewerage system				
 sewage pumping stations 	\$8,500 per m ³ /day			
 gravity sewers and rising mains 	\$16,000 per m			
- Water supply system				
 fresh and flushing water mains 	\$25,100 per m			
- Open spaces and landscaping works	$10,200 \text{ per m}^2$			

28. For (2) widening of Fanling Highway of about 4 km long and construction of PSWR Flyover of about 850 m long (including implementation of associated noise mitigation measures), the estimated cost (including contingencies) is about \$8,081.9 million, i.e. about \$1,666.4 million per m, which is lower than the project estimate for the widening of Tai Po Road (Sha Tin Section) (about 1.1 km long) of about \$2,700.0 million approved in 2018. Excluding the 9% supplementary expenditures (which includes environmental mitigation measures during construction stage and EM&A programme, consultants' fees and remuneration of RSS) and the 9% contingencies, the following three associated road works categories altogether account for 82% of the total cost: at-grade road widening works account for 30%, vehicular bridges and footbridges works account for 17%, and noise barriers/noise enclosures account for 35%. The unit costs of the cost estimate are summarised as follows –

Individual key items	Unit costs
- Road widening	\$570,200 per m
- Vehicular bridges	\$760,000 per m
- Footbridges	\$1,388,400 per m
- Noise barriers	\$32,300 per m ²

- 29. The unit costs for other projects of a similar scale, nature (i.e. site formation and engineering infrastructure works) and works value in the past few years⁴ are provided at **Enclosure 13** for Members' information.
- 30. To contain cost and reduce expenditure, CEDD has made reference to good design practices in various projects in the detailed design stage. For example, open cut has been adopted as far as practicable to reduce the amount of retaining structures. In the design of road works, the use of low noise road surfacing has been maximised to reduce the need for constructing noise barriers, whilst shallow footing instead of pile foundation has been used as far as practicable for noise barriers to save construction cost.

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Including projects with funding applications approved: 787CL and 829CL Second Phase Development of Hung Shui Kiu/Ha Tsuen ("HSK/HT") NDA (2024), 817CL and 872CL Stage 1 and First Phase of Stage 2 Development of Yuen Long South ("YLS") NDA (2022), 856CL Main Works Package 1 of Development of Lok Ma Chau Loop (2020), 845CL and 796CL First Phase Development of HSK/HT NDA (2020), 786CL First Phase Development of Tung Chung New Town Extension (2020), 759CL and 747CL First Phase Development of KTN/FLN NDA (2019); road widening projects with additional one lane at each direction including 853TH Widening of Castle Peak Road – Castle Peak Bay (2020), 804TH and 861TH Widening and Retrofitting of Noise Barriers on Tai Po Road (Sha Tin Section) (2018) and 703TH Dualling of Hiram's Highway between Clear Water Bay Road and Marina Cove and Improvement to Local Access to Ho Chung (2015); as well as other engineering infrastructure works (including PWP nos. 332CL, 201TB, 409DS, 355WF, 356WF and 765CL).

- 31. CEDD will deliver the Remaining Phase works under eight works contracts using the New Engineering Contract ("NEC")⁵ form with provision for price adjustment and mechanism for sharing project savings or overspending, which establishes a common goal for the two contracting parties to control costs and promotes cooperation to actively manage project risks to lower the project costs.
- 32. We estimate that the annual recurrent expenditure required for the Remaining Phase development is about **\$282.12 million**, mainly covering the operational, management and maintenance expenses for the road works, waterworks, drainage and sewerage facilities, etc.

AFFECTED HOUSEHOLDS AND BUSINESS UNDERTAKINGS

33. In the design for the site formation and engineering infrastructure works for the Remaining Phase development, we have endeavoured to minimise the area required for land resumption and clearance. The resumption and clearance of about 112 ha private land and about 157 ha government land is required. According to the information obtained from the pre-clearance survey ("PCS"), there are a total of 1 065 households and 313 business operators to be affected within the Remaining Phase development. Based on the current works schedule, they are scheduled to depart in batches starting from the third quarter of 2024⁶. The Lands Department ("LandsD") have sent letters to all affected households and business undertakings to be affected by the Remaining Phase development in end 2022, informing them of the scheduled departure dates as well as the compensation and rehousing arrangements for their early preparation. LandsD and the Compensation and Rehousing Service Teams engaged by it will maintain communication with the affected households and business undertakings, and provide updated information as Notices will be posted on sites three months before the departure deadlines of the affected households and business undertakings in accordance with the applicable procedures.

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contract form that emphasises cooperation, mutual trust and collaborative risk management between contracting parties. This project has adopted the "Engineering and Construction Contract Option C" target cost contract form under the NEC. Under this contract form, the construction costs are paid based on the contractors' actual expenditure. Therefore, the contractors need to submit the relevant invoices and accounts for the Government to review, and the contract terms also include a mechanism for sharing any savings or overruns on the target price. If the actual expenditure is lower than the target price, the contracting parties can share the savings according to the mechanism stipulated in the contract.

Conversely, if the actual expenditure exceeds the target price, the parties will also have to share the excess expenditure, up to a maximum of 110% of the target price for the Government, i.e. the Government to bear up to an additional 5% of the target price at most. This mechanism promotes the parties to work together and actively manage the project risks to reduce construction costs.

NEC is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a

⁶ It is estimated that about 780 households and 207 business undertakings will have to move out in the third quarter of 2024.

- 34. The Government is handling the compensation and rehousing matters of the relevant land owners, households and business undertakings at full steam, and will endeavour to arrange rehousing or release compensation for all eligible persons before the clearance commences⁷. In response to affected households' concerns about having to live near the construction sites of the First Phase development, households affected by the Remaining Phase development had been allowed to apply for early departure and receive rehousing and compensation⁸. Of the 889 households that have so applied, as of 30 April 2024, 351 households have been rehoused, 11 households have received ex-gratia cash compensation, and the applications of 392 households are being processed (some subject to submission of supplementary information), and the remaining 135 households are not eligible⁹. LandsD will continue to process relevant applications and contact the affected persons, particularly those households expected to be moved out in the first batch.
- 35. Among the approximately 313 business operators to be affected, 258 involve brownfield operations including warehouses, construction industry, recycling industry, vehicle repair, workshops, carparks, etc., covering a total area of about 40 ha. On the premise of not affecting the works progress, even if the Government has resumed the land, the Government will allow brownfield operators to continue their operations on land reverted to the Government without charging any rent, until the occupying sites are required for works. At the same time, the Government will continue to provide the following assistance to operators who wish to relocate their business
 - (a) LandsD will reach out to affected operators at the soonest possible juncture, and offer appropriate assistance;
 - (b) providing early monetary compensation to eligible affected operators so that they could plan ahead for departure. In May 2022, we have enhanced the arrangements for the EGA for Open-air/Outdoor Business Undertakings, including relaxing the eligibility criteria concerning the operation duration

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The rehousing and ex-gratia allowances ("EGAs") for households were significantly enhanced in mid-2018, including the introduction of a new non-means-tested rehousing option and relaxation of eligibility criteria and EGA amounts. The ex-gratia compensation arrangements for land owners and business undertakings were also enhanced in 2022.

The arrangement applies to eligible households affected by the Remaining Phase development of KTN/FLN NDA, in response to residents' concerns about having to live near the construction sites of the First Phase development.

The main reasons for applicants not being eligible include households moving into the development area after the PCS, living in unauthorised structures, or holding domestic property, etc.

(from seven years preceding the PCS to two years preceding the PCS), and removing the payment ceiling of not exceeding 5 000 square metres for open areas that could be taken into account in calculating the EGA amount. Affected operators may apply for early disbursement of EGAs after LandsD posts the land resumption notice, without having to wait until the departure date;

- (c) the revised Guidelines for Application for Open Storage ("OS") and Port Back-up ("PBU") Uses under Section 16 of the Town Planning Ordinance were promulgated in April 2023 by TPB with a view to, among others, expanding the areas under Category 2 to 600 ha (among which 135 ha of additional land were not occupied at the time of the Government's review) where planning permission may be considered for OS/PBU uses¹⁰;
- (d) identifying more government land suitable for letting specifically to affected operators by way of short-term tenancy through restricted tender. Up to March 2024, 20 sites have been let under this arrangement;
- (e) dedicated multi-disciplinary team Development Bureau coordinate to different departments to assist operators seeking relocating in planning applications and obtaining relevant approvals from other departments. As at end March 2024, we have assisted more than 30 operators affected by government projects (including those from KTN/FLN, HSK/HT and YLS NDAs, etc.) in obtaining planning approvals for relocation of their operations, which include those in logistics, vehicle repairing and construction industries, involving a total of around 49 ha of relocation sites; and
- (f) developing MSBs, where developer/owner would be required through specific land sale conditions to hand over no less than 30% of the floor space to the Government for leasing to operators affected by government projects at concessionary rent for an initial period of 5 to 10 years, so as to allow relocated

/brownfield

planning permission may be given for OS/PBU uses.

The Guidelines classify the rural areas into four categories (Category 1 to Category 4), and set out the criteria for assessing planning applications for OS/PBU uses. Lands under Category 2 are those where

brownfield operations to adapt to an MSB setting and preferably upgrade their operations. The first such site near Yuen Long InnoPark has been put up for tender in March 2024.

36. The Government is also progressively reviewing the EGAs for farmers. Among others, the enhanced EGA for pig and poultry farmers was in place with effect from October 2023, which includes the updating of the parameters for calculating the loss of profit during the re-establishment period (which is the key component of the EGA) to reflect the higher income of farmers who have taken up the role of wholesalers and retailers; adoption of a longer re-establishment period to reflect the circumstances nowadays; and maintaining of the 30% enhancement in the EGA rates first introduced in 1987. The enhanced EGA will be applicable to eligible livestock farmers affected by KTN/FLN NDA Remaining Phase development.

PUBLIC CONSULTATION

- 37. KTN/FLN NDA project went through a three-stage public engagement exercise between 2008 and 2013. Subsequently, the draft KTN and FLN Outline Zoning Plans ("OZPs") were gazetted in December 2013. During the statutory planning process, more than 53 000 representations and comments were received. After giving consideration to the representations and comments, TPB decided not to amend the draft OZPs. In June 2015, the Chief Executive in Council ("CE in C") approved the draft OZPs.
- 38. Later, the Government has reviewed the land uses for a number of sites in the Remaining Phase development ¹¹. The revised draft OZPs were gazetted in October 2022. During the statutory planning process, a total of 33 representations and 3 comments were received. After giving consideration to the representations and comments in May 2023, TPB decided not to uphold the representations. In September 2023, the CE in C approved the revised draft OZPs.
- 39. Members of the North District Council, the Sheung Shui District Rural Committee and the Fanling District Rural Committee were consulted on the proposed works under Remaining Phase development from July to August 2022. Members expressed in-principle support.

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These include (i) two sites in FLN originally reserved for police facilities, which were subsequently rezoned for the development of logistics facilities and bus depots; (ii) a site at FLN originally reserved for facilities related to the environmental friendly transport system, which was subsequently rezoned for public housing development; and (iii) two sites in KTN originally reserved for I&T-related uses, which were subsequently rezoned for private housing development.

- 40. The proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) and the proposed sewerage works under Cap. 370 as applied by the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) for the Remaining Phase development were gazetted on 30 September 2022 and 7 October 2022. During the statutory objection period, a total of 86 objections were received against the proposed road works and 88 objections were received against the proposed sewerage works. concerns were mainly related to land resumption and clearance arrangement, compensation and rehousing arrangement, the overall planning of KTN/FLN NDA, the design of the proposed works and the potential impacts during the construction and operation stages. Upon CEDD's discussion with the objectors, 22 objections against the proposed road works and 4 objections against the proposed sewerage works were unconditionally withdrawn, while others remained unresolved. Upon considering all the unresolved objections, the CE in C authorised the proposed road and sewerage works on 28 November 2023.
- 41. We consulted the Panel on Development on 26 March 2024. The Panel supported the submission of the funding application to the Public Works Subcommittee for consideration. We provided supplementary information to the Panel on 29 May 2024.

ENVIRONMENTAL IMPLICATIONS

- 42. KTN/FLN NDA is a Designated Project ("DP") under Schedule 3 of the Environmental Impact Assessment Ordinance ("EIAO") (Cap. 499). Some of the proposed works for KTN/FLN NDA are DPs under Schedule 2 of the EIAO and Environment Permits ("EPs") are required for their construction and operation.
- 43. The Environmental Impact Assessment ("EIA") report for KTN/FLN NDA (part of the North East New Territories NDAs) was approved with conditions under the EIAO in October 2013. The relevant EPs for construction and operation were also issued in November 2013. The EIA report concluded that the construction of KTN/FLN NDA would be environmentally acceptable with no adverse impact with the implementation of the mitigation measures. We will implement the mitigation measures and EM&A programme recommended in the approved EIA report, and comply with the relevant conditions under the EPs. Key measures to be implemented in the Remaining Phase development include soil treatment works for hotspots identified with high level of arsenic; noise barriers on the FLBP(W), PSWR Flyover and other road sections; and odour control measures for sewage pumping stations. We have included the cost of implementing the

environmental mitigation measures as well as the EM&A programme in the overall project estimates for the Remaining Phase works.

- 44. In view of the proposed intensification in development scale and land use review described in paragraphs 12 and 38 above, an Environmental Review was carried out to confirm the environmental acceptability of the proposed changes, whilst the findings and conclusions of the approved EIA report remained valid.
- 45. As for the short-term environmental impacts during construction stage, we will stipulate clauses in the relevant contracts to require the contractors to implement mitigation measures and the EM&A programme to control environmental impacts arising from the construction works, ensuring compliance with established standard and guidelines. These measures mainly include use of quiet powered mechanical equipment and movable noise barriers or enclosures to minimise the construction noise impact, regular watering of works sites and provision of wheel-washing facilities to minimise dust generation, and use of temporary drains to collect site run-off for on-site treatment before discharge.
- 46. At the planning and design stages, we have considered the proposed works for the Remaining Phase development and their construction sequences to reduce generation of construction waste where possible. In general, we will require the contractors to reuse inert construction waste (e.g. excavated soil) 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 facilities¹². We will encourage the contractors to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.
- 47. At the construction stage, we will require the contractors to submit for approval the plans 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 and 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 designated storage locations within the site and landfills respectively through a tripticket system.

/48.

Public fill reception facilities ("PFRF") are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in PFRF requires a licence issued by the Director of Civil Engineering and Development.

48. We estimate that the Remaining Phase works will not generate any inert construction waste but will receive in total about 2 820 000 tonnes public fills from either concurrent projects or the public fill reception facilities. On the other hand, the Remaining Phase works will generate in total about 66 000 tonnes¹³ of non-inert construction waste which will be disposed of at landfills. The total cost for disposal of the construction waste at landfills is estimated to be about \$24.09 million for the Remaining Phase works (based on a unit charge rate of \$365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

TRAFFIC IMPLICATIONS

- 49. Based on findings of the Traffic and Transport Impact Assessment conducted under the "KTN/FLN NDA Planning and Engineering Review", and a recent traffic review which covered assessments of the traffic impact arising from the proposed intensification of development scale and land use review described in paragraphs 12 and 38 above respectively, the traffic and transport impact due to the proposed works for the Remaining Phase development would be acceptable.
- 50. Temporary traffic arrangements ("TTAs") will be implemented during construction to facilitate implementation of the proposed works for the Remaining Phase development. We will establish a Traffic Management Liaison Group comprising representatives of CEDD, the Transport Department, the Hong Kong Police Force and other stakeholders to discuss, scrutinise and review the TTAs proposed by the contractors with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a telephone hotline to respond to public enquiries or complaints.

HERITAGE IMPLICATIONS

51. During the planning stage in 2013, CEDD completed the Heritage Impact Assessment under the EIA for KTN/FLN NDA. The assessment includes the studying of background information of declared monuments, archaeological potentials and built heritage within the assessment area, conducting of archaeological surveys, assessment of the level of potential impact and recommendation of mitigation measures. It is concluded that the Remaining Phase

/development

¹³ The figure is approximate only and could only be confirmed after land resumption/ clearance.

development should not affect any declared monuments, proposed monuments, graded historic sites/buildings/structures, sites/buildings/ structures in the list of proposed grading items, and Government historic sites identified by the Antiquities and Monuments Office ("AMO").

- 52. However, part of the Site of Archaeological Interest identified by AMO at Sheung Shui Wa Shan would be affected by the Remaining Phase CEDD will require the contractors to conduct an archaeological survey in accordance with the recommendations of the EIA report before commencement of any construction works to determine the need for any archaeological follow up actions, and recommend relevant mitigation measures to AMO for approval. In addition, for locations with archaeological potential that may be affected by the proposed development, the EIA report also recommended to implement archaeological mitigation measures, including the conducting of surveycum-rescue excavation at impacted areas at Shek Wu San Tsuen, Fung Kong, Fu Tei Au East and Ho Sheung Heung, as well as in-situ preservation of cultivation deposits at the open space in FLN Area 12 near Shek Wu San Tsuen. For areas yet to be surveyed due to private land ownership, CEDD will also follow the recommendations of the EIA report to conduct archaeological investigation after land resumption and before commencement of any construction works. necessary, CEDD will propose mitigation measures and instruct the contractors to re-arrange the relevant site formation works with a view to mitigating any potential impact on the project programme and cost.
- We will comply with the recommendations of the EIA report to carry out a baseline condition survey and baseline vibration impact assessment for built heritage adjacent to works sites before commencement of works, and to evaluate if construction vibration monitoring and structural strengthening measures are required during construction stage to safeguard compliance with the vibration standard stated in the EIA report.

LAND ACQUISITION

54. The cost of land resumption and clearance for Remaining Phase development, including payment to eligible land owners, business undertakings and domestic occupiers of squatters (excluding Special Ex-gratia Cash Allowance), is estimated at about \$20,798.71 million. The cost will be charged to Head 701 – Land Acquisition, a breakdown of which is at Enclosure 14. The annual cashflow will be sought separately according to established procedures together with other block allocation subheads under the Capital Works Reserve Fund.

BACKGROUND INFORMATION

55. In May 2019, the FC approved the upgrading of 747CL and 759CL to Category A, entitled "Advance site formation and engineering infrastructure works at Kwu Tung North New Development Area and Fanling North New Development Area" and "First stage of site formation and engineering infrastructure at Kwu Tung North New Development Area and Fanling North New Development Area", at approved project estimates of \$17,320.1 million and \$896.4 million in MOD prices respectively, for the site formation and engineering infrastructure works for the Advance and First Stage works respectively. On the same date, the FC approved the upgrading of part of 828CL to Category A as 835CL, entitled "Remaining phase of site formation and engineering infrastructure works at Kwu Tung North New Development Area and Fanling North New Development Area – detailed design and site investigation" at an approved project estimate of \$764.5 million in MOD prices for the detailed design and site investigation works for the Remaining Phase development of KTN/FLN NDA. We substantially completed the detailed design of the proposed works for the Remaining Phase development in end 2023.

Of the 24 197 trees within the project boundary of the Remaining Phase development, 2 404 trees will be preserved. For the remaining 21 793 trees, during the construction stage of the proposed site formation and engineering infrastructure works, 21 601 trees will be felled and 98 trees will be replanted within the project site. Besides, 94 trees of particular interest will be affected. A summary of trees of particular interest affected is provided at **Enclosure 15**. We

/will

Trees of particular interest shall be defined in full as below –

Trees of particular interest are defined in paragraph 13.3 of the Guidelines for Tree Risk Assessment and Management Arrangement promulgated by the Development Bureau. Examples of trees of particular interest are listed as follows:

⁽a) Old Valuable Trees ("OVTs") and trees that are potentially registerable in the Register of OVTs;

⁽b) trees of 100 years old or above;

⁽c) trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;

⁽d) stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);

⁽e) rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by the Agriculture, Fisheries and Conservation Department;

⁽f) endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);

⁽g) tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);

⁽h) well-known Fung Shui trees;

⁽i) landmark trees with evidential records to support the historical or cultural significance of the trees;

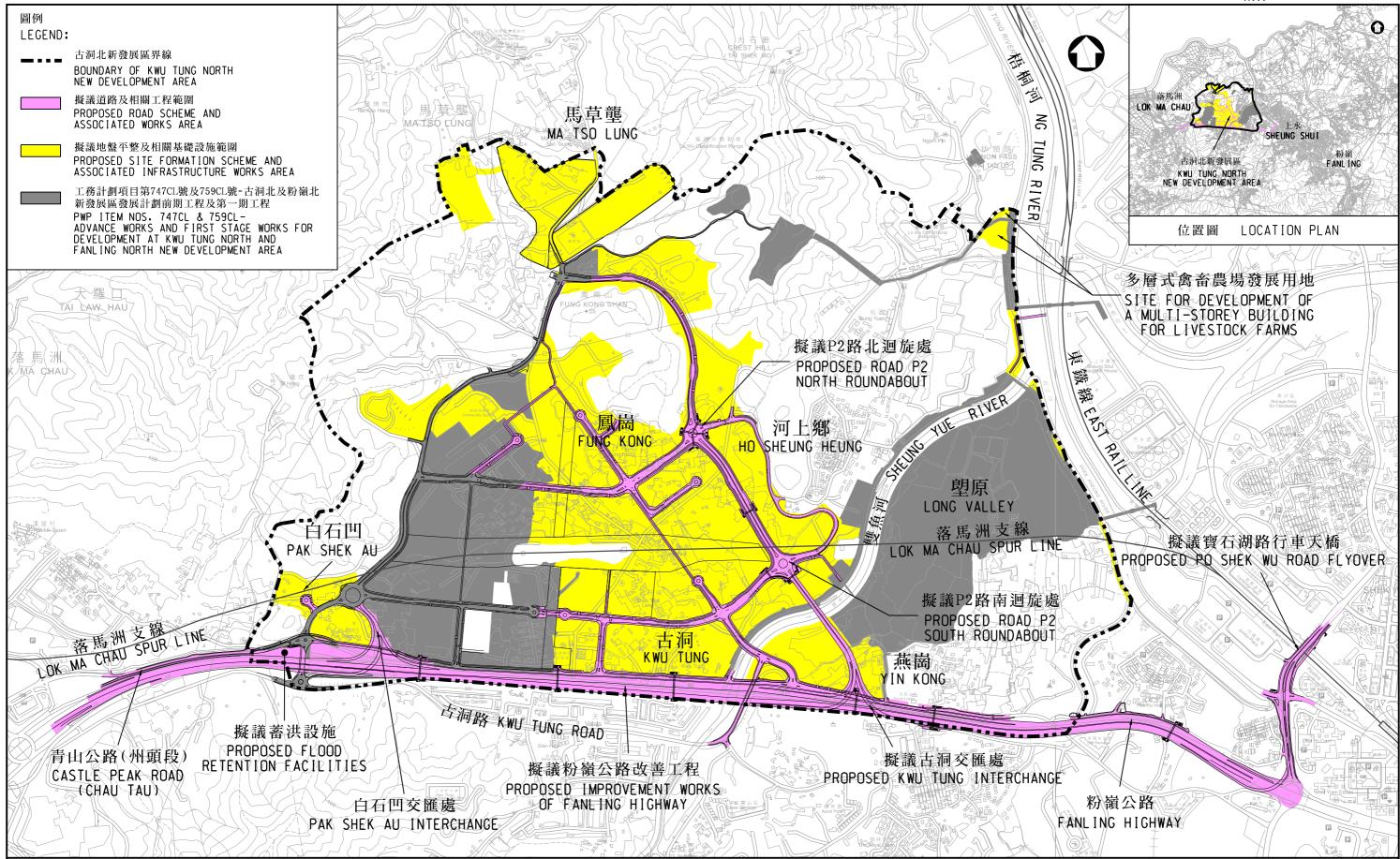
⁽j) trees which may arouse widespread public concerns; and

⁽k) trees which may be subject to strong local objections on removal.

will incorporate planting proposals as part of the project, including estimated quantities of 23 580 trees, 950 000 shrubs and 93 300 m² of new grassed area.

57. We estimate that the implementation of **828CL** will create about 3 100 jobs (2 530 for labourers and 570 for professional or technical staff), providing a total employment of about 251 400 man-months.

Development Bureau May 2024

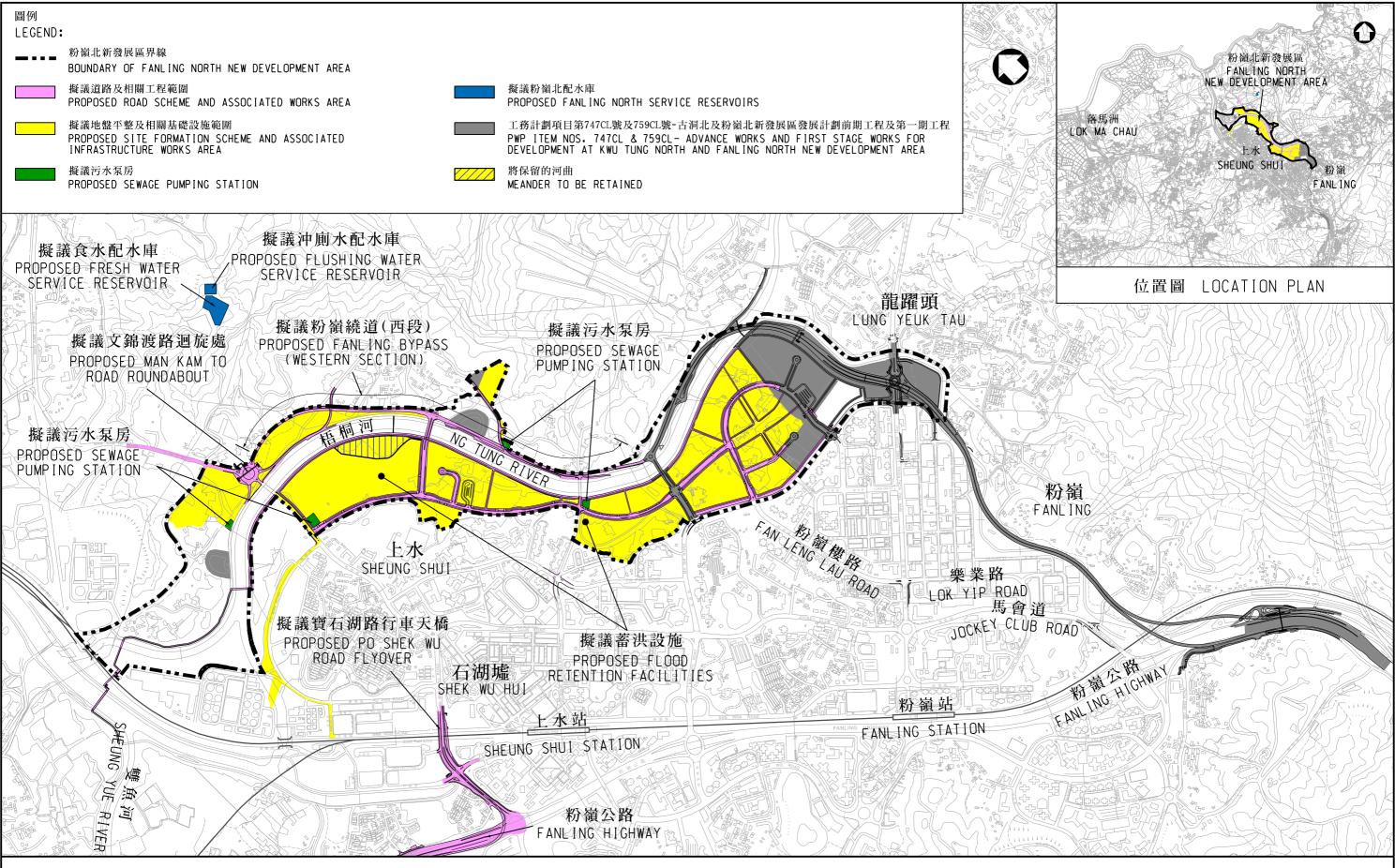


古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 -

平面圖 (古洞北新發展區)

PWP ITFM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEEREING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA - LAYOUT PLAN (KWU TUNG NORTH NEW DEVELOPMENT AREA)

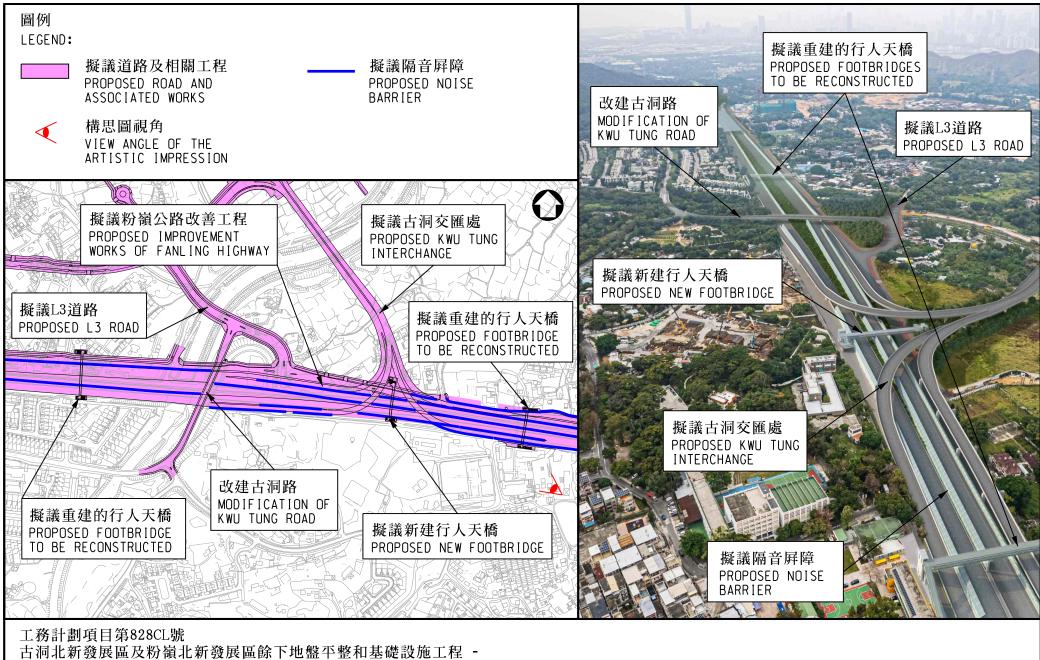


古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 -

平面圖 (粉嶺北新發展區)

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA - LAYOUT PLAN (FANLING NORTH NEW DEVELOPMENT AREA)



擬議粉嶺公路改善工程及古洞交匯處的平面圖及構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH

NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA -

LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED IMPROVEMENT WORKS OF FANLING HIGHWAY AND KWU TUNG INTERCHANGE

擬議寶石湖路改善工程

PROPOSED IMPROVEMENT

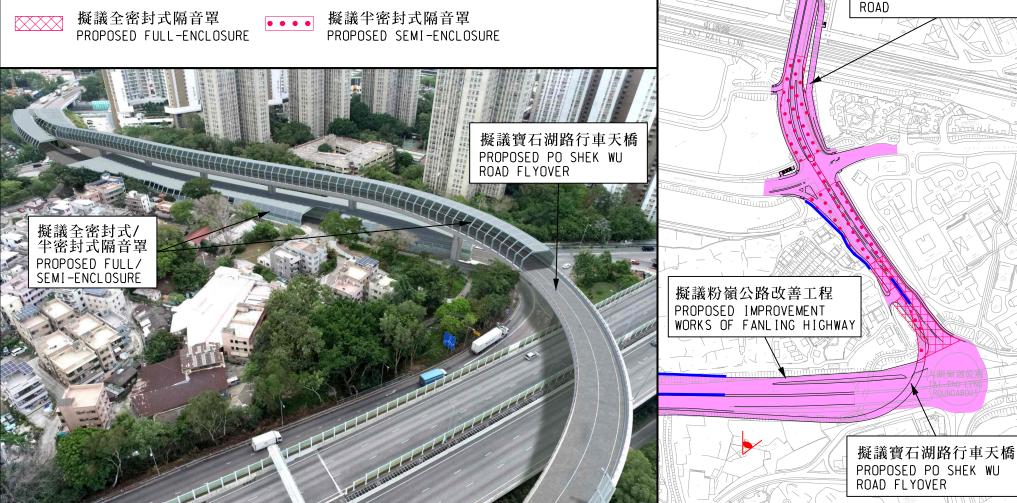
WORKS OF PO SHEK WU

圖例

LEGEND:

擬議道路及相關工程 PROPOSED ROAD AND ASSOCIATED WORKS _____ 擬議隔音屛障 PROPOSED NOISE BARRIER





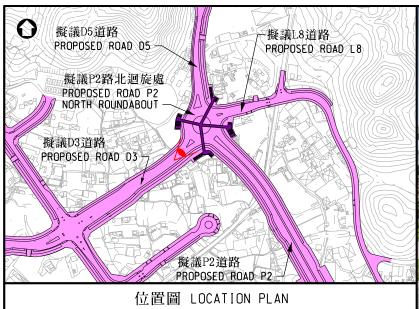
工務計劃項目第828CL號

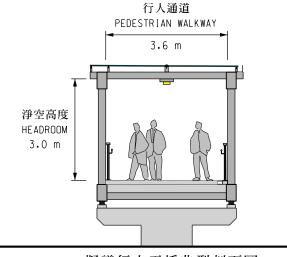
古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 - 擬議寶石湖路行車天橋的平面圖及構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA —

LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED PO SHEK WU ROAD FLYOVER





擬議行人天橋典型剖面圖
TYPICAL SECTION OF PROPOSED FOOTBRIDGE



圖例: LEGEND:

擬議行人天橋 PROPOSED FOOTBRIDGE



擬議道路及相關工程 PROPOSED ROAD AND ASSOCIATED WORKS



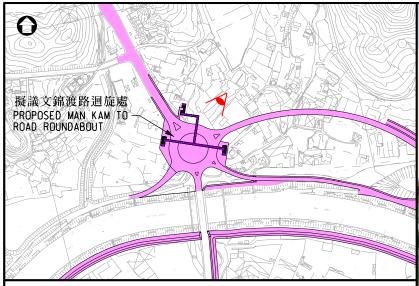
構思圖視角 VIEW ANGLE OF THE ARTISTIC IMPRESSION

工務計劃項目第828CL號

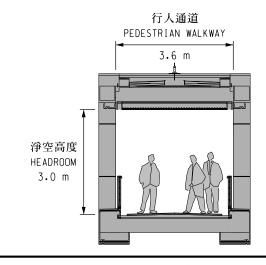
古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 - 擬議古洞北行人天橋FB1的平面圖及構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA —
LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED KWU TUNG NORTH FOOTBRIDGE FB1



位置圖 LOCATION PLAN



擬議行人天橋典型剖面圖 TYPICAL SECTION OF PROPOSED FOOTBRIDGE



擬議粉嶺北行人天橋FB3 PROPOSED FANLING NORTH FOOTBRIDGE FB3

視圖 VIEW

圖例: LEGEND:



擬議行人天橋 PROPOSED FOOTBRIDGE



擬議道路及相關工程 PROPOSED ROAD AND ASSOCIATED WORKS



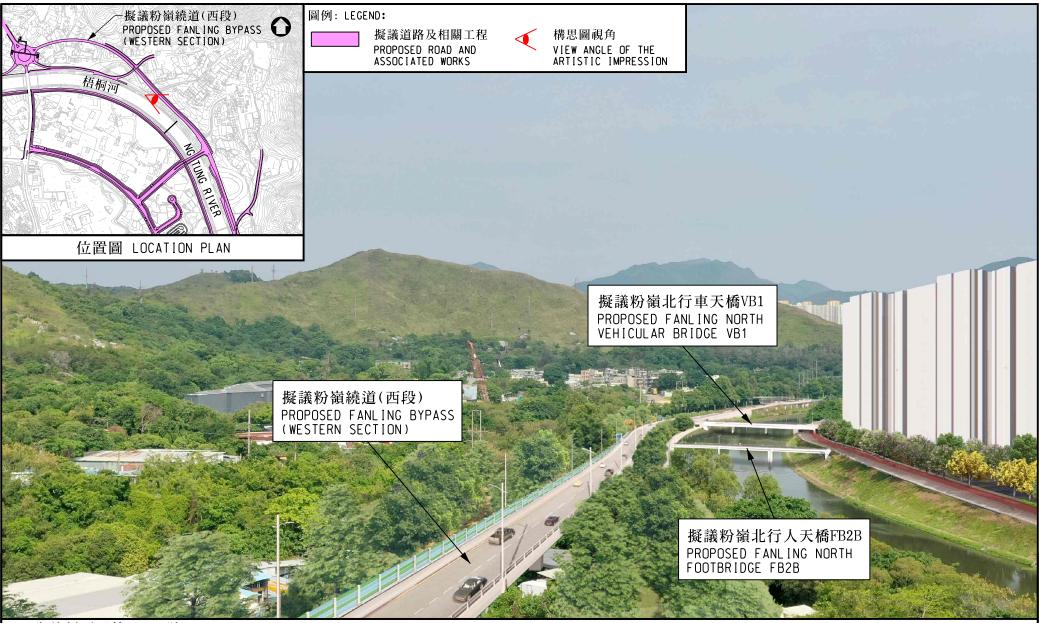
構思圖視角 VIEW ANGLE OF THE ARTISTIC IMPRESSION

工務計劃項目第828CL號

古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 - 擬議粉嶺北行人天橋FB3的平面圖及構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA —
LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED FANLING NORTH FOOTBRIDGE FB3



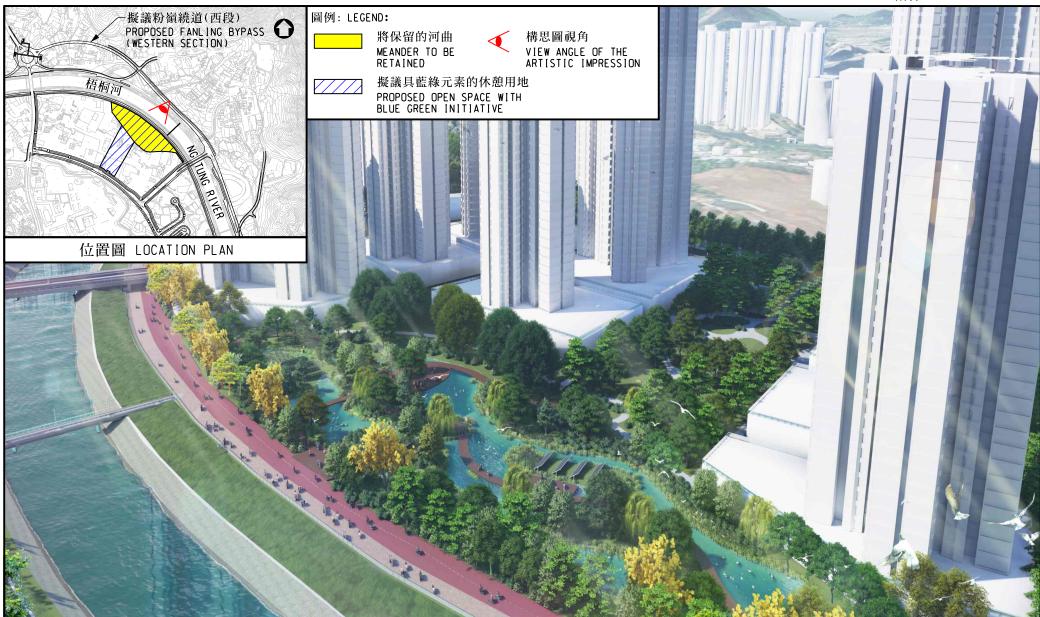
古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 -

擬議粉嶺繞道(西段)、粉嶺北行車天橋VB1及粉嶺北行人天橋FB2B的平面圖及構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA — LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED FANLING BYPASS (WESTERN SECTION).

FANLING NORTH VEHICULAR BRIDGE VB1 AND FANLING NORTH FOOTBRIDGE FB2B



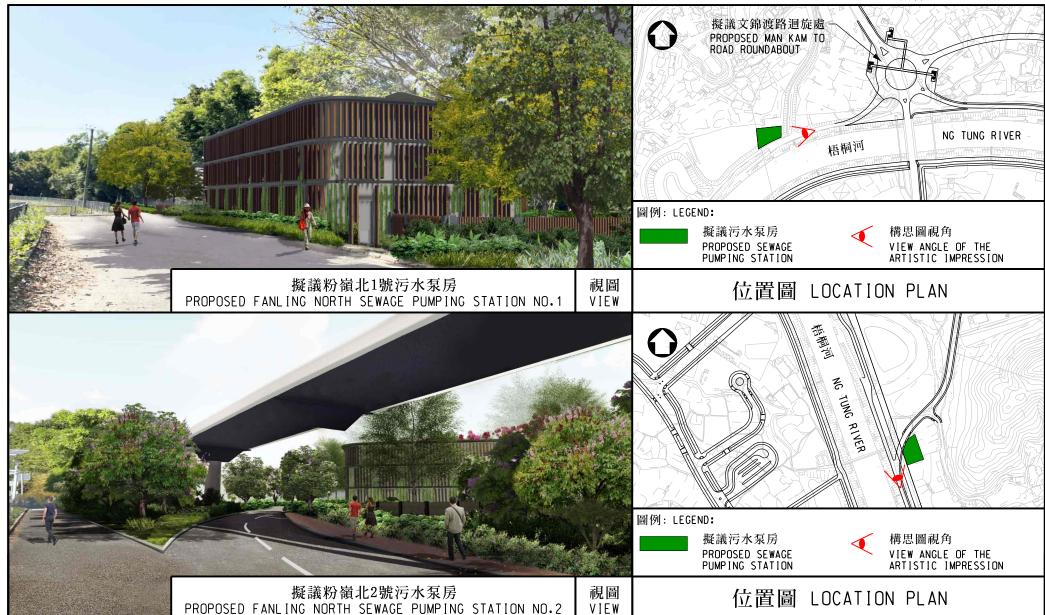
古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 -

擬議具藍綠元素的休憩用地構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA -

ARTISTIC IMPRESSION OF PROPOSED OPEN SPACE WITH BLUE GREEN INITIATIVE



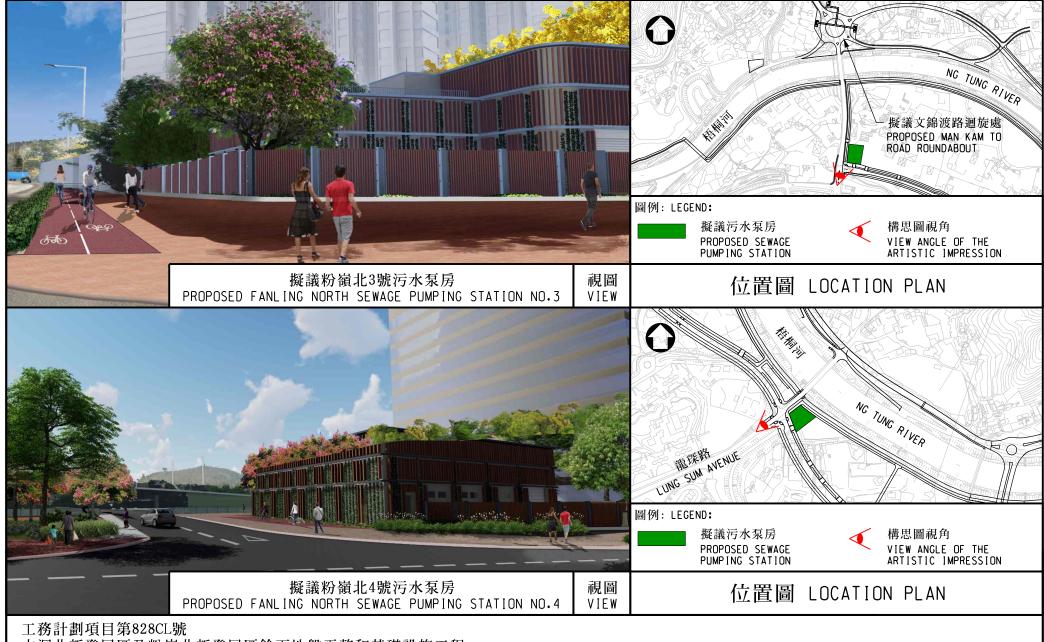
古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 -

擬議粉嶺北1號及2號污水泵房構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA -

ARTISTIC IMPRESSION OF PROPOSED FANLING NORTH SEWAGE PUMPING STATIONS NO.1 AND NO.2



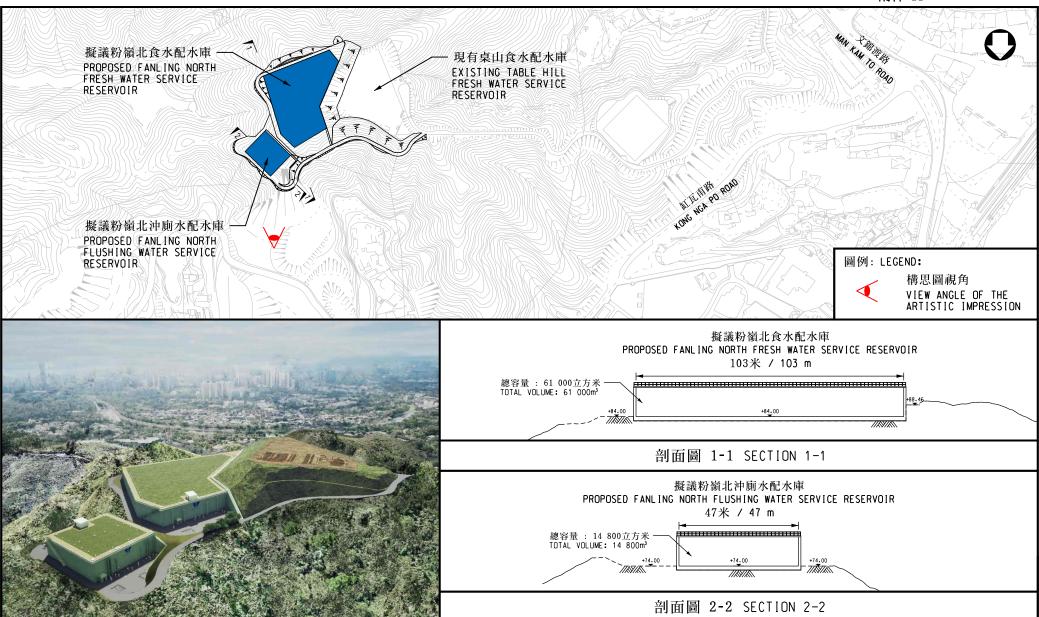
古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 -

擬議粉嶺北3號及4號污水泵房構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA -

ARTISTIC IMPRESSION OF PROPOSED FANLING NORTH SEWAGE PUMPING STATIONS NO.3 AND NO.4



古洞北新發展區及粉嶺北新發展區餘下地盤平整和基礎設施工程 - 擬議粉嶺北食水配水庫及沖廁水配水庫的剖面圖及構思圖

PWP ITEM NO. 828CL

REMAINING PHASE OF SITE FORMATION AND ENGINEERING INFRASTRUCTURE WORKS AT KWU TUNG NORTH NEW DEVELOPMENT AREA AND FANLING NORTH NEW DEVELOPMENT AREA — SECTIONS AND ARTISTIC IMPRESSION OF PROPOSED FANLING NORTH FRESH WATER SERVICE RESERVOIR AND FLUSHING WATER SERVICE RESERVOIR

828CL – Remaining Phase of Site Formation and Engineering Infrastructure Works at Kwu Tung North New Development Area and Fanling North New Development Area – Construction

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2023 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for contract administration ^(Note 2)	Professional Technical	- -	-	- -	48.8 19.5
					Sub-total	68.3#
(b)	Consultants' fees for environmental monitoring and audit programme ^(Note 3)	Professional Technical	191 287	38 14	2.0 2.0	34.6 18.6
	programme				Sub-total	53.2#
(c)	Resident site staff (RSS) costs ^(Note 3)	Professional Technical	5 333.6 18 952	38 14	1.6 1.6 Sub-total	772.6 983.4 1,756.0
	Comprising - (i) Consultants' fees for management of RSS				109.4#	
	(ii) Remuneration of RSS				1,646.6#	
					Total	1,877.5
	* MPS = Master Pay	Scale				

Notes

- 1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of RSS supplied by the consultants. 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 the staff employed in the consultants' offices (as at now, MPS point 14 = \$32,430 per month and MPS point 38 = \$90,540 per month).
- 2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction for the Remaining Phase works. The construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade the remainder of 828CL to Category A.
- 3. The actual man-months and actual costs will only be known after completion of the construction works.
- 4. The cost figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 22 of the main paper.

Unit costs for other projects of a similar scale and nature and works value in the past few years

Overall cost and works categories

Overall cost and works categories	Unit costs in other projects of similar scale and nature (\$)
Overall development cost	$9,900 - 17,400 \text{ per m}^2$
Site clearance and formation works	$1,200 - 3,300 \text{ per m}^2$
Roadworks (including associated noise mitigation measures)	308,900 – 435,500 per m
Other engineering infrastructures	4,200 – 6,700 per m ²

Individual key items

Individual key items	Unit costs in other projects of similar scale and nature (\$)
Road works	
- At-grade roads	65,700 – 100,500 per m
- Road widening	261,100 – 684,600 per m
- Cycle tracks	5,000 – 10,000 per m
- Footbridges	1,160,000 – 1,275,000 per m
- Vehicular bridges	511,500 – 1,081,400 per m
- Noise barriers	$22,400 - 63,000 \text{ per m}^2$
Other engineering infrastructure	works
- Drainage system	
• drains	29,500 – 43,200 per m
 box culverts 	$33,000 - 39,800 \text{ per m}^2$
- Sewerage system	
 sewage pumping stations 	$7,300 - 10,800 \text{ per m}^3/\text{day}$
 gravity sewer and rising mains 	10,400 - 23,000 per m
- Water supply system	
 fresh/flushing water 	23,800 – 32,200 per m
mains	
- Open spaces and landscaping works	$8,000 - 18,000 \text{ per m}^2$

Note

- 1. Other projects of a similar scale and nature include the approved funding applications for 787CL and 829CL Second Phase Development of Hung Shui Kiu/Ha Tsuen New Development Area ("HSK/HT NDA") (2024), 817CL and 872CL Stage 1 and First Phase of Stage 2 Development of Yuen Long South NDA (2022), 856CL Main Works Package 1 of Development of Lok Ma Chau Loop (2020), 845CL and 796CL First Phase Development of HSK/HT NDA (2020), 786CL First Phase Development of Tung Chung New Town Extension (2020), 759CL and 747CL First Phase Development of Kwu Tung North/Fanling North NDA (2019); road widening projects with additional one lane at each direction including 853TH Widening of Castle Peak Road Castle Peak Bay (2020), 804TH and 861TH Widening and Retrofitting of Noise Barriers on Tai Po Road (Sha Tin Section) (2018) and 703TH Dualling of Hiram's Highway between Clear Water Bay Road and Marina Cove and Improvement to Local Access to Ho Chung (2015); as well as other engineering infrastructure works (including PWP nos. 332CL, 201TB, 409DS, 355WF, 356WF and 765CL).
- 2. The projects to which the above figures relate may be different in individual circumstances, and the quoted unit costs are for reference only.
- 3. The quoted unit costs above are corrected to the price level of September 2023 and converted to money-of-the-day (MOD) prices.

828CL – Remaining Phase of Site Formation and Engineering Infrastructure Works at Kwu Tung North New Development Area and Fanling North New Development Area – Construction

\$ million **(I)** Estimated cost for land acquisition 17,610.31 **(II) Estimated cost for land clearance** 1,297.61 allowances ("EGAs") for 619.07 (a) Ex-gratia domestic occupiers (e.g. EGA permitted occupiers of licensed structures and surveyed squatters affected clearance and domestic removal allowance. etc.); EGA for shops, workshops, godowns, slipways, schools, churches and ornamental fish breeding undertakings EGA and for open-air/outdoor business undertakings 678.54 (b) Other clearance costs (e.g. crop compensation, disturbance allowance for cultivators, EGA for miscellaneous permanent improvements to farms, EGA for clearance of graves, urns ("Kam Taps") and shrines and EGA for "Tun Fu" ceremonial fees, etc.) (III)**Interest and Contingency Payment** 1,890.79 **Total** 20,798.71

Note

The Lands Department posted notices of land resumption and acquisition for the Remaining Phase Development of Kwu Tung North/Fanling North New Development Area on 11 January 2024. The above estimated land acquisition cost is based on the applicable compensation rates at the time of posting of notices (i.e. the compensation rates in effective on 1 October 2023).

828CL – Remaining phase of site formation and engineering infrastructure works at Kwu Tung North New Development Area and Fanling North New Development Area Summary of "Trees of Particular Interest" Affected

Tree Ref	Spec	cies	М	easureme	ents	Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	provide comp Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	/ Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE18/2019- B2T-0162	Ficus microcarpa	榕樹 (細葉榕)	13	1376	11	Medium	Average	Average	Average	Low	The existing tree has an average form, health and structural condition. It is therefore recommended to be transplanted.		Transplant	Lands Department	Leisure and Cultural Services Department	DBH over 1m
CE18/2019- B2T-0684	Ficus virens	黄葛樹	9	1159	9	Low	Poor	Average	Average	Low	The existing tree has an average health and structural condition. It is therefore recommended to be transplanted.		Transplant	Lands Department	Drainage Services Department	DBH over 1m
CE18/2019- B2T-1377	Ficus virens	黄葛樹	12	1038	10	Low	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highway Department	Highway Department	DBH over 1m
CE18/2019- B2T-1740	Ficus microcarpa	榕樹 (細葉榕)	11	1036	10	Medium	Poor	Average	Average	Low	The existing tree has an average health and structural condition. It is therefore recommended to be transplanted.	No	Transplant	Leisure and Cultural Services Department	Drainage Services Department	DBH over 1m
CE18/2019- B2T-1791	Ficus microcarpa	榕樹 (細葉榕)	14	1092	14	Medium	Poor	Average	Average	Low	The existing tree has an average health and structural condition. It is therefore recommended to be transplanted.	No No	Transplant	Lands Department	Leisure and Cultural Services Department	DBH over 1m

Tree Ref	Spec	cies	М	easureme		Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	provide com Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	/ Average	/ Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE18/2019- B3T-1090	Dalbergia assamica	南嶺黃檀	6	158	5	Low	Poor	Average	Poor	Low	The tree is identified with low amenity value, poor forms and structural conditions. It is therefore not recommended to be transplanted.	Cap. 586	Remove	Lands Department	Leisure and Cultural Services Department	The existing tree was found with poor structure and form. Codominant trunks were found, with one of them been cut. Severe leaning is observed.
CE18/2019- B3T-1412	Cordia dichotoma	破布木	15	1429	14	Low	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Lands Department	Leisure and Cultural Services Department	DBH over 1m
CE18/2019- B2-TG17	Ficus microcarpa	榕樹 (細葉榕)	Nil	1500	Nil	Medium	Poor	Average	Average	Low	The information of this tree in Tree Group No. B2-TG17 could only be confirmed after land resumption/clearance.		Remove or Transplant	Lands Department	N/A	DBH over 1m
CE18/2019 -B2T-0945	Ficus virens	黃葛樹	14	1140	14	Low	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Leisure and Cultural Services Department	Leisure and Cultural Services Department	DBH over 1m
CE18/2019 -B2T-1506	Ficus virens	黄葛樹	15	1061	15	Low	Poor	Poor	Poor	Low	Existing tree is recommended to be retained.	No	Retain	Leisure and Cultural Services Department	Leisure and Cultural Services Department	DBH over 1m
CE18/2019 -B2T-1523	Ficus microcarpa	榕樹 (細葉榕)	17	1242	21	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Leisure and Cultural Services Department	Leisure and Cultural Services Department	DBH over 1m
CE19/2019- LS-T-072	Ficus microcarpa	榕樹 (細葉榕)	10	1020	7.5	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Lands Department	Lands Department	DBH over 1m

Tree Ref	Spec	cies	М	leasureme		Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	Maintenance provide comr Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T00873	Ficus microcarpa	榕樹 (細葉榕)	13	1070	11	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Leisure and Cultural Services Department	N/A	DBH over 1m
CE19/2019 -T00875	Ficus microcarpa	榕樹 (細葉榕)	16	1432	20	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T00876	Ficus microcarpa	榕樹 (細葉榕)	16	1155	16	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	easureme		Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	Maintenance provide comr Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T00880	Ficus microcarpa	榕樹 (細葉榕)	17	2416	17	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T00881	Ficus microcarpa	榕樹 (細葉榕)	15	1311	9	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T00882	Ficus microcarpa	榕樹 (細葉榕)	15	2328	11	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	easureme		Amenity Value ²	Form	Health Condition	Structural Condition		, ,	Conservation Status ⁴	Recommendation	Maintenance provide comr Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T01002	Ficus microcarpa	榕樹 (細葉榕)	12	2323	20	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Leisure and Cultural Services Department	N/A	DBH over 1m
CE19/2019 -T01117	Ficus elastica	印度榕 (印度橡樹)	16	1020	18	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T01983	Ficus elastica	印度榕(印度橡樹)	16	1060	25	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Leisure and Cultural Services Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	easureme	ents	Amenity Value ²	Form		Structural Condition		, ,	Conservation Status ⁴	Recommendation	Maintenance provide comr Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T02151	Cinnamomum camphora	樟	14	1040	16	Medium	Average	Average		Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T02287	Ficus microcarpa	榕樹 (細葉榕)	6	1025	14	Medium	Poor	Average	Average	Low	The existing tree has a poor form. It is therefore not recommended to be transplanted.	No	Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T02349	Ficus microcarpa	格樹 (細葉榕)	10	1282	13	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T02411	Ficus microcarpa	榕樹 (細葉榕)	11	1120	11	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Highways Department	N/A	DBH over 1m

Tree Ref	Spec	ries	M	easureme	ents	Amenity Value ²	Form	Health Condition	Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation		nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	,	l / Average		(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T02524	Ficus variegata	青果榕	14	1010	16	Medium	Average	Average	Average		In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T02571	Ficus virens	大葉榕	11	1050	12	Medium	Average	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. It is therefore not recommended to be transplanted.	No	Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T02712	Ficus microcarpa	榕樹 (細葉榕)	18	2403	23	Medium	Average	Poor	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor health condition. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	eies	М	easureme	ents	Amenity Value ²	Form	Health Condition	Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	Maintenance provide come Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	,	l / Average		(High / Medium / Low)			(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T02713	Ficus virens	大葉榕	15	1600	20	Medium	Average	Average	Average		In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T02714	Ficus virens	大葉榕	17	1607	16	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T02753	Ficus microcarpa	榕樹 (細葉榕)	12	1182	15	Medium	Poor	Average	Average		In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	eies	М	easureme		Amenity Value ²	Form		Structural Condition			Conservation Status ⁴	Recommendation	Maintenance provide come Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T03050	Eucalyptus urophylla	尾葉桉	30	710	16	Medium	Average	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. It is therefore not recommended to be transplanted.	No	Remove	Drainage Services Department	N/A	Height over 25m
CE19/2019 -T03053	Eucalyptus urophylla	尾葉桉	26	458	15	Medium	Poor	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Drainage Services Department	N/A	Height over 25m
CE19/2019 -T03063	Eucalyptus urophylla	尾葉桉	30	512	12	Medium	Average	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. It is therefore not recommended to be transplanted.	No	Remove	Drainage Services Department	N/A	Height over 25m

Tree Ref	Spec	cies	M	easureme		Amenity Value ²	Form	Health Condition	Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	Maintenance provide comi Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	/ Average	/ Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T03340	Aquilaria sinensis	土沉香	8	210	6	Medium	Poor	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T03574	Ficus elastica	印度榕(印度橡樹)	16	2300	16	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T03609	Cinnamomum parthenoxylon	黃樟	13	1101	11	Medium	Poor	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T03646	Aquilaria sinensis	土沉香	7	245	4	Medium	Poor	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A

Tree Ref	Spe	cies	М	easureme	ents	Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	provide comp Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T03666	Aquilaria sinensis	土沉香	8	172	4	Medium	Poor	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T03668	Aquilaria sinensis	土沉香	10	376	5	Medium	Poor	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T03772	Aquilaria sinensis	土沉香	5	181	4	Medium	Poor	Average	Poor	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T03775	Aquilaria sinensis	土沉香	7	146	4	Medium	Poor	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T03780	Aquilaria sinensis	土沉香	6	175	3	Medium	Poor	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A

Tree Ref	Spec	cies	М	easureme		Amenity Value ²	Form		Structural Condition		, ,	Conservation Status ⁴	Recommendation	provide com Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T03787	Aquilaria sinensis	土沉香	7	113	4	Medium	Poor	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T03815	Aquilaria sinensis	土沉香	6	115	4	Medium	Average	Average	Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.	Cap. 586	Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T03977	Ficus virens	大葉榕	10	1286	7	Medium	Poor	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T04071	Ficus microcarpa	榕樹(細葉 榕)	16	2561	26	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	easureme		Amenity Value ²	Form	Health Condition	Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	provide comp Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T04310	Celtis sinensis	朴樹	18	1027	14	Medium			Average		In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T04736	Aquilaria sinensis	土沉香	5	111	3	Medium	Poor		Average	Low	Existing tree is recommended to be transplanted as the proposed transplantation location has the same planting conditions as the existing location.		Transplant	Lands Department	Leisure and Cultural Services Department	N/A
CE19/2019 -T04993	Ficus microcarpa	榕樹 (細葉榕)	9	1900	12	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	easureme		Amenity Value ²	Form	Health Condition	Structural Condition			Conservation Status ⁴	Recommendation	Maintenance provide come Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T05086	Dalbergia odorifera	降香黃檀	10	357	10	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	N/A
CE19/2019 -T05166	Cinnamomum camphora	樟	7	1038	9	Medium	Poor	Poor	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has poor form and health condition. It is therefore not recommended to be transplanted.	No	Remove	Lands Department	N/A	DBH over 1m
CE19/2019 -T05231	Celtis sinensis	朴樹	9	1042	12	Medium	Poor	Poor	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has poor form and health condition. It is therefore not recommended to be transplanted.	No	Remove	Lands Department	N/A	DBH over 1m

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Tree Ref	Spec	cies	М	easureme		Amenity Value ²	Form		Structural Condition			Conservation Status ⁴	Recommendation	provide com Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)			(Retain / Transplant / Remove)	Before	After	
CE19/2019 -T05232	Ficus microcarpa	榕樹 (細葉榕)	16	2500	25		Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Lands Department	Leisure and Cultural Services Department	DBH over 1m
CE19/2019 -T05233	Ficus microcarpa	榕樹 (細葉榕)	12	2000	16	Medium	Average	Poor	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor health condition. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE20/2019 -T5	Ficus virens	大葉榕	14	1085	15	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T11	Ficus virens	大葉榕	18	1025	9	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T122	Ficus virens	大葉榕	20	1464	12	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Leisure and Cultural Services Department	Leisure and Cultural Services Department	DBH over 1m
CE20/2019 -T158	Melaleuca cajuputi subsp. cumingiana	白千層	18	1089	8	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Highways Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	leasureme	ents	Amenity Value ²	Form	Health Condition	Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	Maintenance provide common Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)			(Retain / Transplant / Remove)	Before	After	
CE20/2019 -T399	Ficus elastica	印度橡樹	15	1967	14			Average			In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Leisure and Cultural Services Department	N/A	DBH over 1m
CE20/2019 -T400	Ficus elastica	印度橡樹	16	3804	14	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Leisure and Cultural Services Department	N/A	DBH over 1m
CE20/2019 -T678	Ficus elastica	印度橡樹	17	1500	12	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	easureme	ents	Amenity Value ²	Form		Structural Condition		, ,	Conservation Status ⁴	Recommendation	provide comp Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE20/2019 -T688	Cinnamomum camphora	樟	14	1060	12		Average	C	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Highways Department	N/A	DBH over 1m
CE20/2019 -T690	Ficus microcarpa	榕樹 (細葉榕)	18	1890	14	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE20/2019 -T709	Melaleuca cajuputi subsp. cumingiana	白千層	14	1210	8	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Highways Department	N/A	DBH over 1m
CE20/2019 -T791	Ficus microcarpa	榕樹 (細葉榕)	14	2477	12	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Leisure and Cultural Services Department	Leisure and Cultural Services Department	DBH over 1m

Tree Ref	Spec	eies	М	easureme	ents	Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation		nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE20/2019 -T807	Cinnamomum camphora	樟	16	1286	10	Medium		Average	Poor	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor structural condition. It is therefore not recommended to be transplanted.		Remove	Highways Department	N/A	DBH over 1m
CE20/2019 -T840	Ficus virens	大葉榕	14	1232	12	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T844	Ficus virens	大葉榕	16	1123	15	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T883	Ficus benjamina	垂葉榕	16	1050	13	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T888	Ficus virens	大葉榕	14	1146	10	Medium	Average	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. It is therefore not recommended to be transplanted.	No	Remove	Highways Department	N/A	DBH over 1m
CE20/2019 -T1217	Ficus virens	大葉榕	16	1268	12	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m

Tree Ref	Spec	cies	М	easureme	ents	Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	provide comp Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	/ Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE20/2019 -T1218	Ficus virens	大葉榕	16	1929	14	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T1219	Ficus virens	大葉榕	13	1127	10	Medium	Poor	Poor	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T1220	Ficus virens	大葉榕	11	1401	9	Medium	Poor	Poor	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T1221	Ficus virens	大葉榕	14	1273	12	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T1222	Melaleuca cajuputi subsp. cumingiana	白千層	14	1114	10	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T1645	Aquilaria sinensis	土沉香 (牙香樹)	8	129	2	Medium	Average	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. It is therefore not recommended to be transplanted.	Cap. 586	Remove	Highways Department	N/A	N/A
CE20/2019 -T1959	Ficus virens	大葉榕	16	1519	25	Medium	Average	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m

Tree Ref	Spec	cies	М	easureme	ents	Amenity Value ²	Form	Health Condition	Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE20/2019 -T1960	Ficus microcarpa	榕樹 (細葉榕)	18	1235	22	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Highways Department	N/A	DBH over 1m
CE20/2019 -T1976	Melaleuca cajuputi subsp. cumingiana	白千層	14	1206	8	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Highways Department	Highways Department	DBH over 1m
CE20/2019 -T2030	Melaleuca cajuputi subsp. cumingiana	白千層	10	1238	8	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	No	Retain	Leisure and Cultural Services Department	Highways Department	DBH over 1m
CE20/2019 -T00241	Ficus virens	大葉榕	10	1391	14	Medium	Average	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. It is therefore not recommended to be transplanted.	No	Remove	Lands Department	N/A	DBH over 1m
CE20/2019 -T00245	Ficus microcarpa	榕樹 (細葉榕)	10	1478	15	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	cies	М	easureme	nts	Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	Maintenance provide comi Preservation Prop	nents on Tree and Removal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE20/2019 -T00509	Aquilaria sinensis	土沉香	7	137	3	Medium	Poor	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	N/A
CE20/2019 -T00662	Aquilaria sinensis	土沉香	7	231	7	Medium	Poor	Average	Average	Low	The existing tree is located on a sloping ground, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	N/A
CE20/2019 -T00696	Ficus virens	大葉榕	18	1971	16	Medium	Poor	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. Also, the existing tree has a poor form. It is therefore not recommended to be transplanted.		Remove	Lands Department	N/A	DBH over 1m
CE20/2019 -T00770	Ficus microcarpa	榕樹 (細葉榕)	13	1047	12	Medium	Poor	Average	Average	Low	The existing tree has a poor form. It is therefore not recommended to be transplanted.	No	Remove	Lands Department	N/A	DBH over 1m

Tree Ref	Spec	eies	М	easureme	ents	Amenity Value ²	Form		Structural Condition		lity for Transplanting ³	Conservation Status ⁴	Recommendation	provide com Preservation	department to ments on Tree and Removal posal	Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH ¹ (mm)	Crown Spread (m)	(High / Medium / Low)	(Good	l / Average	e / Poor)	(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
CE20/2019 -T03146	Ficus microcarpa	榕樹 (細葉榕)	21	3362	26	Medium	Average	Average	Average	Low	In view of the large size of the existing tree, the formation of a sizable root ball as recommended in the "Guidelines on Tree Transplanting" is impractical. The tree is therefore not recommended to be transplanted.		Remove	Home Affairs Department	N/A	DBH over 1m
CE20/2019 -T2018	Melaleuca cajuputi subsp. cumingiana	白千層	12	1369	13	Medium	Poor	Average	Poor	Low	Existing tree is recommended to be retained.	OVT (LCSD N/51)	Retain	Leisure and Cultural Services Department	Highways Department	N/A
CE20/2019 -T2019	Melaleuca cajuputi subsp. cumingiana	白千層	14	1528	9	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	OVT (LCSD N/50)	Retain	Leisure and Cultural Services Department	Highways Department	N/A
CE20/2019 -T2020	Melaleuca cajuputi subsp. cumingiana	白千層	12	751	5	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	OVT (LCSD N/49)	Retain	Leisure and Cultural Services Department	Highways Department	N/A
CE20/2019 -T2027	Melaleuca cajuputi subsp. cumingiana	白千層	20	1337	10	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	OVT (LCSD N/45)	Retain	Leisure and Cultural Services Department	Highways Department	N/A
CE20/2019 - -T2035	Melaleuca cajuputi subsp. cumingiana	白千層	19	1496	12	Medium	Poor	Average	Average	Low	Existing tree is recommended to be retained.	OVT (LCSD N/47)	Retain	Leisure and Cultural Services Department	Highways Department	N/A

Notes-

- DBH of a tree refers to its diameter at breast height (i.e. measurement at 1.3 m above ground level).
- Amenity value of the tree is assessed by its functional values for shade, seasonal interest, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories.
 - High (H): important trees which should be retained by adjusting the design layout accordingly.
 - Medium (M): trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "High" trees.
 - Low (L): trees that are dead, dying or potentially hazardous and should be removed.

- Assessment has taken into account conditions of an individual tree at the time of survey (including health, structure, age and root conditions), site conditions (including topography and accessibility), and intrinsic characters of tree species (survival rate after transplanting).
- Conservation status is based on the rarity and protection status of the species under relevant ordinances in Hong Kong, such as OVT Registered Old Valuable Trees:
 - RPPHK Species included in Agriculture, Fisheries and Conservation Department publication "Rare and Precious Plants of Hong Kong (2003)";
 - Cap. 586 Native plants listed in Protection of Endangered Species of Animals and Plants Ordinance, Cap. 586;
 - Cap. 96 Species listed in the Scheduled to the Forests and Countryside Ordinance, Cap 96; and
 - IUCN:VU "Vulnerable" under IUCN Red List of Threatened Species.