ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING Civil Engineering – Land development 808CL – Site formation and infrastructure works for public housing developments at Tseung Kwan O

Members are invited to recommend to the Finance Committee the upgrading of **808CL** to Category A at an estimated cost of \$2,508.4 million in money-of-the-day prices.

PROBLEM

We need to carry out site formation and infrastructure works to support the proposed public housing developments at Tseung Kwan O.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Transport and Housing, proposes to upgrade **808CL** to Category A at an estimated cost of \$2,508.4 million in money-of-the-day (MOD) prices for the site formation and infrastructure works.

PROJECT SCOPE AND NATURE

3. The scope of works of **808CL** comprises –

- (a) site formation works and construction of associated retaining walls and slopes;
- (b) conversion of a roundabout at the junction of Ying Yip Road/Po Ning Road/Sheung Ning Road to a signal-controlled junction;
- (c) widening of Ying Yip Road to provide an additional north bound traffic lane, laybys and a footpath, and construction of associated retaining walls and slopes;
- (d) construction of a footbridge with an associated lift across Ying Yip Road;
- (e) installation of a noise barrier at Ying Yip Road;
- (f) construction of laybys at Pak Shing Kok Road;
- (g) widening/ improvement/ construction of footpaths at Yau Yue Wan Village Road, Po Lam Road North and Ngan O Road respectively and construction of a covered walkway at Po Fung Road;
- (h) construction/ improvement of pedestrian crossings at Yau Yue Wan Village Road, Po Lam Road North, Pak Shing Kok Road and Chiu Shun Road; and
- (i) ancillary works including drainage, sewerage, waterworks and landscaping works.
- 4. The location and site plans together with sections of the proposed works are at **Enclosure 1**.
- 5. We plan to commence the proposed works upon obtaining funding approval from the Finance Committee for target completion in around five years to support the public housing developments.

JUSTIFICATION

- 6. We propose to carry out **808CL** on three sites at Tseung Kwan O (i.e. Sites at Northwest of Ying Yip Road, West of Yau Yue Wan Village and East of Hong Kong Movie City) to provide formed land and associated infrastructure to support the public housing developments. The key development parameters and the conceptual plan of the public housing developments are at **Enclosure 2** and **Enclosure 3** respectively.
- 7. According to the findings of the traffic impact assessment (TIA), we also propose to carry out the road improvement works as listed in paragraph 3(b) to (h) above to accommodate the traffic and transportation needs arising from the proposed developments.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the proposed works to be \$2,508.4 million in MOD prices, broken down as follows –

		\$ million (in MOD prices)
(a)	Site formation works and associated retaining walls and slopes	1,237.1
(b)	Road works, a noise barrier and associated retaining walls and slopes	428.6
(c)	A footbridge with associated lift facilities	96.5
(d)	Ancillary works including drainage, sewerage, water supply and landscaping	319.5

			S million MOD prices)
(e)	Consultants' fee for		21.1
	(i) contract administration	10.2	
	(ii) management of Resident Site Staff (RSS)	10.9	
(f)	Remuneration of RSS		218.6
(g)	Contingencies		187.0
	Total		2,508.4
			•

- 9. In view of insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision of the proposed works. A breakdown of the estimates for consultants' fees and RSS costs by man-months is at **Enclosure 4**.
- 10. Subject to funding approval, we plan to phase the expenditure as follows -

Year	\$ million (in MOD prices)
2021 – 2022	20.2
2022 - 2023	360.8
2023 – 2024	721.9
2024 – 2025	555.0
2025 - 2026	450.2
2026 – 2027	229.0
2027 – 2028	171.3
	2,508.4

11. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2021 to 2028. Civil Engineering and Development Department (CEDD) will deliver the proposed works under New Engineering Contract¹. The contract will provide for price adjustments.

12. We estimate the annual recurrent expenditure arising from the proposed works to be about \$10.8 million.

PUBLIC CONSULTATION

13. We consulted the Traffic & Transport Committee (T&TC) of Sai Kung District Council (SKDC) about the proposed site formation and infrastructure works on 21 March 2019. The Committee expressed concerns about transport facilities and the public housing developments. As the relevant discussion involved various areas of issues, T&TC suggested referring the case to the full council of SKDC for further discussion. Subsequently, we consulted SKDC on 15 May 2019 on the proposed works and the concerned public housing developments. Although SKDC expressed that it would not oppose the Government identifying lands for housing developments, they expressed concerns about traffic and transportation impacts, recreational and community facilities² and site location for the public housing developments. SKDC also passed a motion against the concerned public housing developments. In response to the motion and SKDC's concerns, Housing Department and Development Bureau provided detailed written explanation to SKDC on 14 June 2019 and 18 June 2019 respectively.

/14.

New Engineering Contract is a suite of contracts developed by Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises cooperation, mutual trust and collaborative risk management between contracting parties.

The amount of existing and planned Government, Institution or Community facilities have mostly met the demand of the planned population (including the additional population arising from the proposed public housing developments). Social welfare and retail facilities will also be provided in the proposed public housing developments to serve the residents in the district. Preliminary information of the relevant facilities is at Enclosure 2.

14. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (RO) and the proposed sewerage works under RO as applied by Section 26 of the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) on 3 January 2020. After the gazettal, we received 16 objections to the proposed road works whereas no objection was received regarding the proposed sewerage works. We met the objectors to explain the details of the works. In the end, two objectors withdrew their objections unconditionally, while the remaining 14 objections were not withdrawn. The unresolved objections are mainly related to traffic and transport, recreational and community facility issues. We subsequently submitted the objections and the correspondence with the objectors (including meeting minutes) to the Chief Executive in Council (CE in C) for consideration. On 1 December 2020, the CE in C authorised the proposed road works and proposed sewerage works without modification. The notice of authorisation was subsequently gazetted on 18 December 2020.

- 15. Besides, CEDD consulted the Advisory Committee on the Appearance of Bridges and Associated Structures³ (ACABAS) about the aesthetic design of the footbridge, the noise barrier, the covered walkway and the retaining structures. The Committee accepted the design in principle and provided some suggestions on the appearance of the structures. We will refine the aesthetic design of the relevant structures according to the suggestions and will continue to consult ACABAS.
- 16. We briefed Members the Legislative Council Panel on Housing on 1 February 2021 on the Government's proposal to upgrade **808CL** to Category A. The Panel supported the submission of the funding proposal for the proposed works to the Public Works Subcommittee for consideration.

/ENVIRONMENTAL

The ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, an academic institution, Architectural Services Department, Highways Department, Housing Department, and Civil Engineering and Development Department. It is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and semi-enclosure, from aesthetic and visual impact points of view.

ENVIRONMENTAL IMPLICATIONS

- 17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). CEDD has completed the Preliminary Environmental Review (PER) for the project. The PER concluded that the project would not cause any long-term adverse environmental impacts with the implementation of mitigation measures including roadside noise barriers.
- 18. We will control noise, dust and site run-off nuisances during construction to within established standards and guidelines in the relevant construction contract(s). These measures include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the work sites and the provision of wheel-washing facilities. We have included in the project estimate the cost to implement the mitigation measures recommended in the PER.
- 19. At the planning and design stages, CEDD has considered the design levels and layout of the proposed site formation so as to reduce the generation of construction waste where possible. In addition, CEDD will require the contractor to reuse inert construction waste (e.g. excavated soil and rock fill) on site or at other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities⁴ (PFRF). CEDD will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce generation of construction waste.
- 20. At the construction stage, CEDD will require the contractor to submit for approval a plan setting out the waste management measures by the Government, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. CEDD will ensure that the day-to-day operations on site comply with the approved plan. CEDD will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. CEDD will control the disposal of inert construction waste and non-inert construction waste at PFRF and landfills respectively through a trip-ticket system.

/21.

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

21. CEDD estimates that **808CL** will generate in total about 650 000 tonnes of construction waste. Of these, CEDD will reuse about 56 000 tonnes (8.6%) of inert construction waste on site and deliver 543 000 tonnes (83.5%) of inert construction waste to PFRF for subsequent reuse. CEDD will dispose of the remaining 51 000 tonnes (7.9%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated to be about \$48.8 million for this project (based on a unit charge rate of \$71 per tonne for disposal at PFRF and \$200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N).

HERITAGE IMPLICATIONS

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

TRAFFIC IMPLICATIONS

23. CEDD has conducted the TIA for the proposed developments. Apart from assessing the traffic impacts of the proposed public housing developments on the roads in the vicinity, it has also reviewed the situation of the trunk roads to and from the urban areas and Tseung Kwan O after population intake of the proposed public housing developments. According to the findings of the TIA, after the completion of Tseung Kwan O-Lam Tin Tunnel and Cross Bay Link, the traffic condition between Tseung Kwan O and urban area would be at acceptable level (both Tseung Kwan O Tunnel and Tseung Kwan O-Lam Tin Tunnel have reserved capacity). With the implementation of the proposed traffic improvement measures, the local traffic conditions of the district are generally manageable to accommodate the traffic needs arising from the proposed public housing developments. During the construction period, CEDD will implement temporary traffic arrangement and appropriate control on construction vehicles to minimise traffic impact on nearby roads.

LAND ACQUISITION

- 24. We will resume about 190 square metres of private land and clear about 17 hectares of government land. The clearance will involve eight graves and 23 temporary structures⁵, of which no domestic structure was involved.
- 25. The land acquisition cost, estimated at about \$8.8 million including payment to eligible land owners, and payment for land clearance, will be charged to **Head 701 Land Acquisition**. A breakdown of the estimate land acquisition cost is at **Enclosure 5**.

BACKGROUND INFORMATION

- 26. We upgraded **808CL** to Category B in September 2016.
- 27. CEDD engaged consultants in October 2017 to undertake the detailed design and site investigation for **808CL** at an estimated cost of about \$29.00 million in MOD prices. This amount is charged to the Block Allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". CEDD has substantially completed the detailed design for **808CL**.

/28.

Including a fence wall, a dwarf wall, several steps of staircases, a fence, gates and abandoned beehive

28. Of the 8 337 numbers of trees within the project site boundary
2 614 numbers of trees will be preserved. The proposed project will involve the
removal of 5 723 numbers of trees, including 5 658 numbers of trees to be felled
and 65 numbers of trees to be transplanted. Among the affected trees, 65 number
of trees are important trees 6, of which the details were summarised a
Enclosure 6. We will incorporate planting proposals as part of the proposed
works, including estimated quantities of about 5 700 numbers of whips and about
2 800 numbers of shrubs.

29.	V	Ve	estin	nate	that	808CL	will	create	about	460	jobs	(370	for
labourers	and	and	other	90	for p	profession	nal or	techni	cal stat	ff) pr	ovidii	ng a	total
employme	ent of	24	700	man	-mon	iths.							

Transport and Housing Bureau February 2021

⁶ "Important trees" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

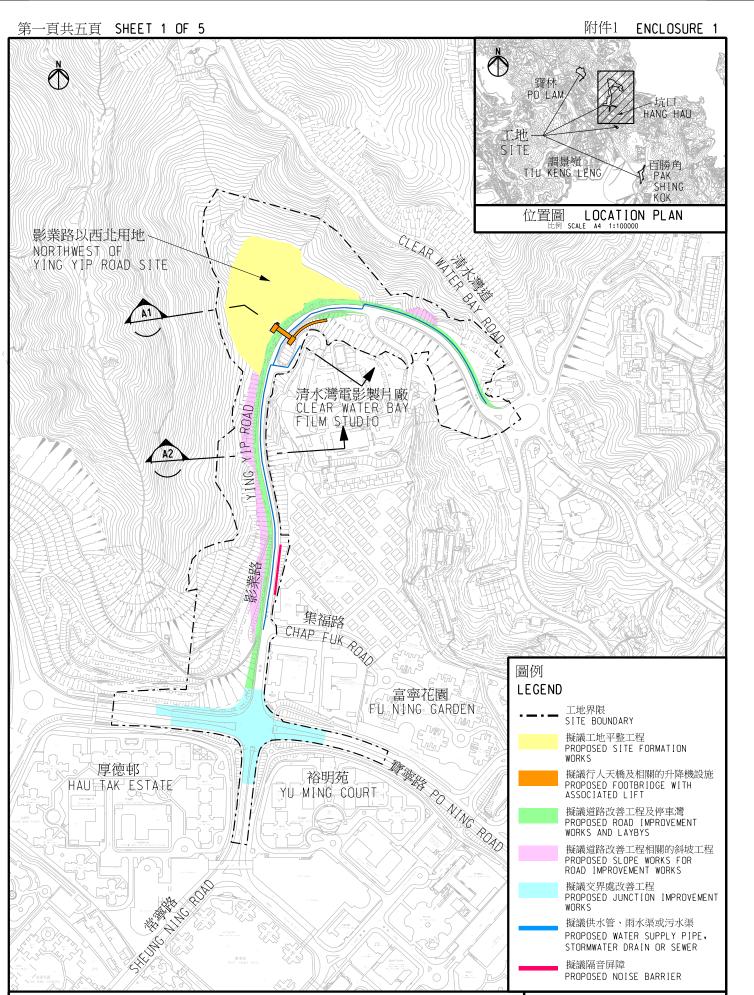
⁽a) trees of 100 years old or above;

⁽b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;

⁽c) trees of precious or rare species;

⁽d) trees of outstanding form (taking account of the overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

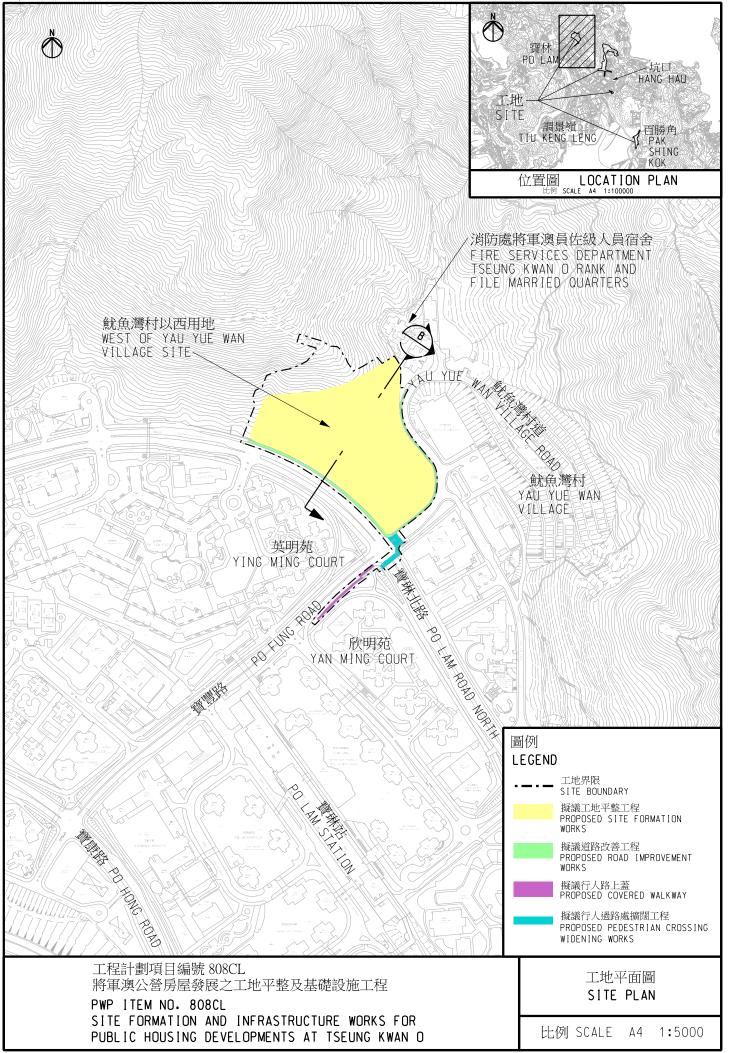
⁽e) trees with trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

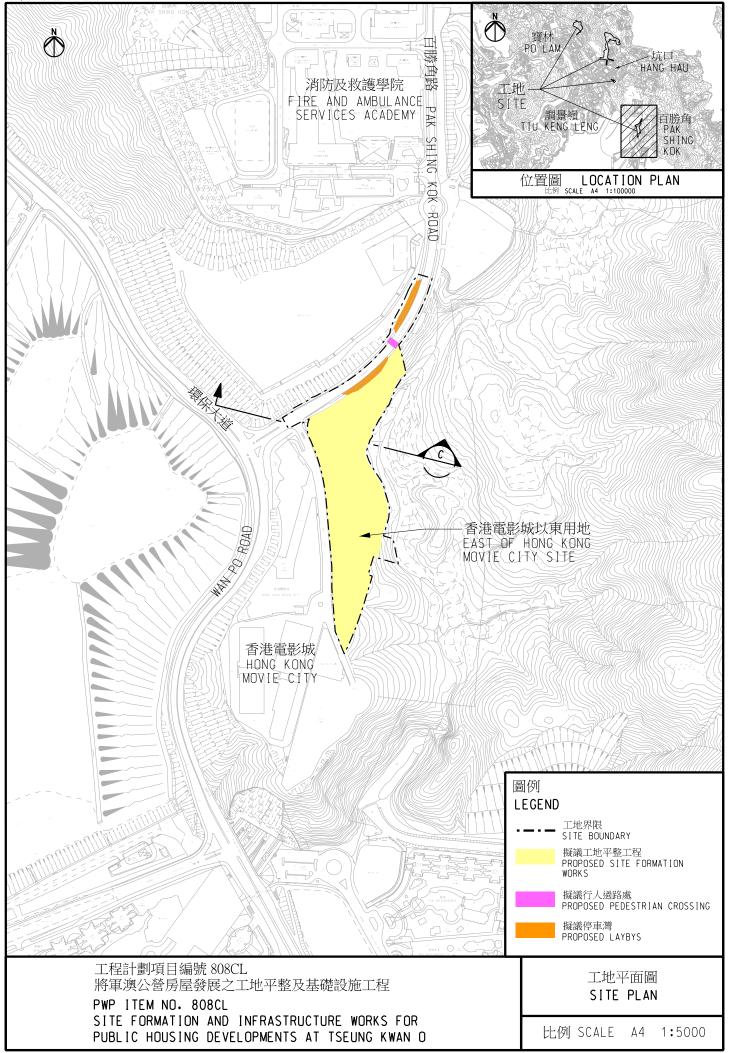


工程計劃項目編號 808CL 將軍澳公營房屋發展之工地平整及基礎設施工程 PWP ITEM NO. 808CL SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENTS AT TSEUNG KWAN O

工地平面圖 SITE PLAN

比例 SCALE A4 1:5000





PUBLIC HOUSING DEVELOPMENTS AT TSEUNG KWAN O

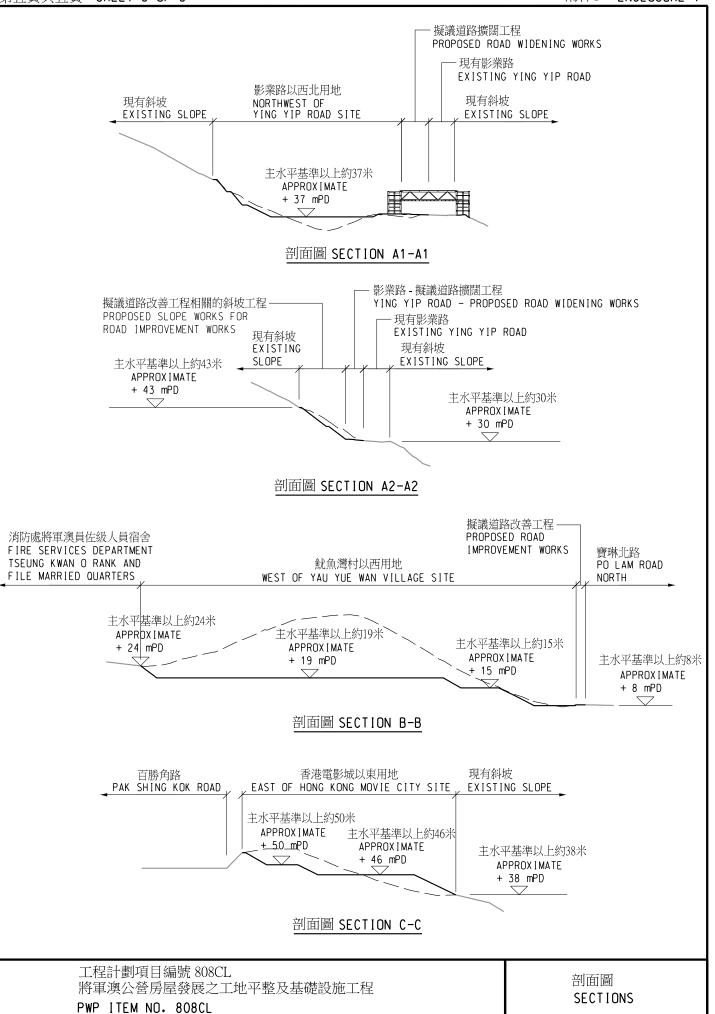
第四頁共五頁 SHEET 4 OF

比例 SCALE A4 1:2500

比例 SCALE

Α4

1:1500



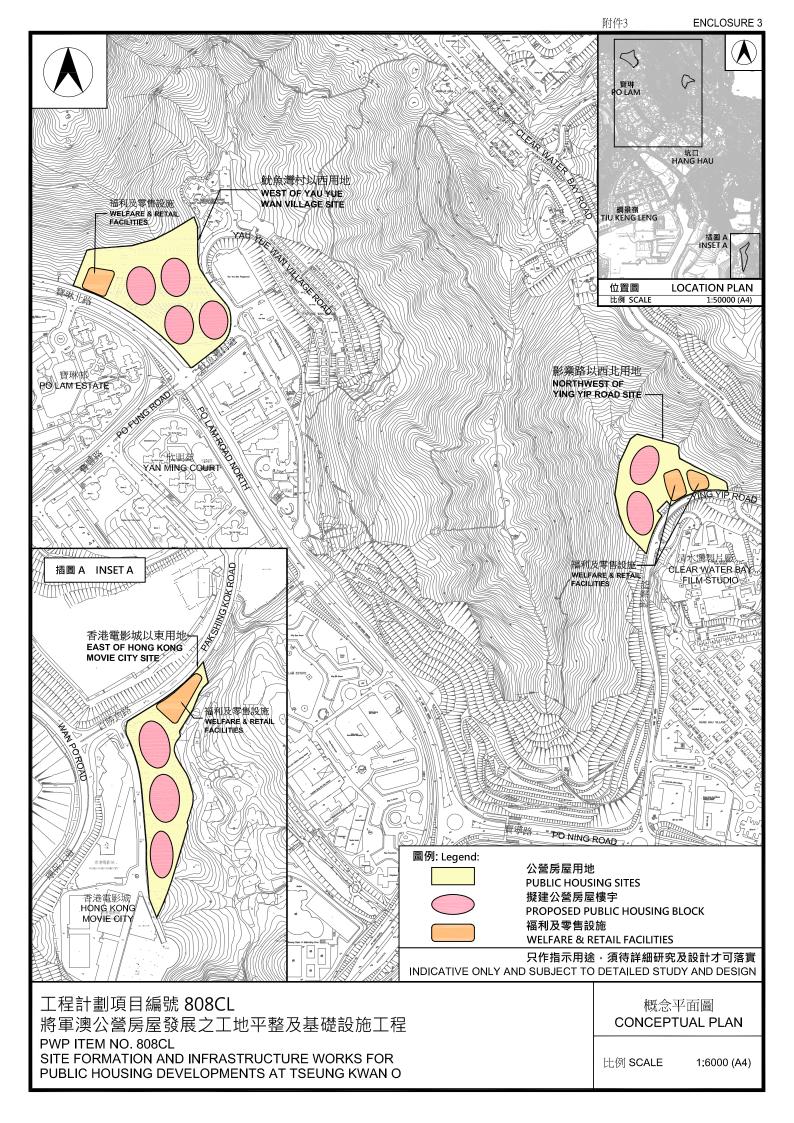
SITE FORMATION AND INFRASTRUCTURE WORKS FOR

PUBLIC HOUSING DEVELOPMENTS AT TSEUNG KWAN O

Key development parameters of the public housing developments at Northwest of Ying Yip Road, West of Yau Yue Wan Village and East of Hong Kong Movie City at Tseung Kwan O

Site area	A total of about 6.8 hectares
Plot ratio permitted	6.5
Building height restriction	Height bands of 140, 170 and 210 meters above Principal Datum
No. of domestic blocks	9 (subject to detailed design)
No. of flats	About 7 000
Projected population	About 19 600
Completion date	In phases from 2027
Non-domestic facilities	Ancillary parking spaces, local open spaces, kindergartens, recreational, welfare [#] and retail facilities, etc.

Hong Kong Housing Authority are discussing with Social Welfare Department regarding the details of relevant community/welfare facilities. Facilities which will be provided tentatively include: Day Care Center for the Elderly, Neighbourhood Elderly Centre, Home for the Elderly, Child Care Centre, Day Activity Centre, Special Child Care Centre cum Early Education and Training Centre, etc.



808CL - Site formation and infrastructure works for public housing developments at Tseung Kwan O

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2020 prices)

			Estimated man- months	Average MPS* Salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for	Professional				6.8
	contract administration (Note 2)	Technical				1.6
					Sub-total	8.4 #
(b)	Resident site staff (RSS)	Professional	720	38	1.6	98.9
	costs ^(Note 3)	Technical	1877	14	1.6	90.8
					Sub-total	189.7
	Comprising –					
(i)	Consultants fees for management of RSS				9.0#	
(ii)	Remuneration of RSS				180.7 #	
					Total	198.1
	*MPS = Mater Pay Scale				_	

Notes

- 1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS point 38 = \$85,870 per month and MPS point 14 = \$30,235 per month).
- 2. The consultants' staff cost for the contract administration is calculated in accordance with the existing consultancy agreement for the investigation, design and construction of **808CL**. The construction phase of the assignment will only be executed upon FC's approval to upgrade **808CL** to Category A.
- 3. We will only know the actual man-months and actual costs after completion of the construction works.

Remarks

The figures in this Annex 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 8 of the main paper.

808CL - Site formation and infrastructure works for public housing developments at Tseung Kwan O

Breakdown of land acquisition cost

(a)	Estimated cost for land acquisition		\$ million 5.61
(b)	Estimated cost for land clearance (i) Ex-gratia allowances (EGAs) for domestic occupiers (e.g. EGA for permitted occupiers of licensed structures and surveyed squatters affected by clearance and domestic removal allowance, etc.)	0	2.07
	(ii) Other ex-gratia allowances (e.g. crop compensation, disturbance allowance for cultivators, EGA for miscellaneous permanent improvements to farms, EGA for open-air/outdoor business undertakings and EGA for "Tun Fu" ceremonial fees, etc.)	2.07	
(c)	Interest and Contingency payment		1.15
		Total	8.83
			(say \$8.8)

The above estimated land acquisition cost is based on the prevailing rates and the valuation as at October 2020.

808CL - Site formation and infrastructure works for public housing development at Tseung Kwan O Summary of "important tree" affected

Tree ref.	Specie	es .	N	/Jeasurem	ents	Amenity Value ³	Form	Health condition	Structural condition	Suitabil	Suitability for Transplanting ⁴		Recommendation	Department to Provide Expert	
no. ¹	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Conservation Status ⁵	(Retain / transplant / fell)	Advice to Lands Department	Additional Remarks
T0340	Aquilaria sinensis	土沉香	9	120	4	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Co-dominant stems; Poor taper; Low live crown ratio
T0430	Aquilaria sinensis	土沉香	5.5	150	3	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T0436	Aquilaria sinensis	土沉香	6	160	2	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T0464	Aquilaria sinensis	土沉香	3	140	2	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio; Heavily vined
T0465	Aquilaria sinensis	土沉香	3	120	2	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio; Heavily vined
T0475	Aquilaria sinensis	土沉香	4	210	3	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Extensive bark lost / stripped at lower trunk; Poor taper; Low live crown ratio
T1042	Aquilaria sinensis	土沉香	1.3	170	0.5	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Topped; Only stump remains
T1043	Aquilaria sinensis	土沉香	1.3	130	0.5	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Topped; Only stump remains

Tree ref.	Specie	es	N	Measurem	ents	Amenity Value ³	Form	Health condition	Structural condition	Suitabil	ity for Transplanting ⁴	Conservation	Recommendation	Department to Provide Expert	
no.1	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Status ⁵	(Retain / transplant / fell)	Advice to Lands Department	Additional Remarks
T1054	Aquilaria sinensis	土沉香	7	140	2	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Broken leader; Poor taper; Low live crown ratio
T1103	Aquilaria sinensis	土沉香	6	130	2	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T1416	Aquilaria sinensis	土沉香	5	260	4	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Moderately bent trunk; Poor taper; Low live crown ratio
T1446	Aquilaria sinensis	土沉香	9	190	5	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Extensive bark lost / stripped at lower trunk; Moderately leaning; Low live crown ratio
T0274	Aquilaria sinensis	土沉香	4	150	2	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Heavily pruned; Heavily leaning; Poor taper; Low live crown ratio
T0325	Aquilaria sinensis	土沉香	6	150	3	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T0347	Aquilaria sinensis	土沉香	3	150	2	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Topped; Only stump remains
T0353	Aquilaria sinensis	土沉香	5	150	3	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T0672	Aquilaria sinensis	土沉香	1.5	220	1.5	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Topped; Only stump remains

Tree ref.	Specie	es	N	Measurem	ents	Amenity Value ³	Form	Health condition	Structural condition	Suitabil	ity for Transplanting ⁴	Conservation	Recommendation	Department to Provide Expert	
no.1	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Status ⁵	(Retain / transplant / fell)	Advice to Lands Department	Additional Remarks
T0738	Aquilaria sinensis	土沉香	6	130	3	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio; Heavily vined
T0822	Aquilaria sinensis	土沉香	6	200	4	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily bent trunk; Poor taper; Low live crown ratio
T0826	Aquilaria sinensis	土沉香	8	300	5	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T0855	Aquilaria sinensis	土沉香	1.8	160	1.5	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Topped; Only stump remains
T0863	Aquilaria sinensis	土沉香	8	150	4	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T0898	Aquilaria sinensis	土沉香	7	110	3	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T1015	Aquilaria sinensis	土沉香	5	110	2	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T1025	Aquilaria sinensis	土沉香	9	250	4	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T1042	Aquilaria sinensis	土沉香	1	250	1	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Topped; Only stump remains
T1162	Aquilaria sinensis	土沉香	4	100	3	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Co-dominant stems; Poor taper; Low live crown ratio

Tree ref.	Specie	es	1	Measurem	ents	Amenity Value ³	Form	Health condition	Structural condition	Suitabil	ity for Transplanting ⁴	Conservation	Recommendation	Department to Provide Expert	
no. ¹	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Status ⁵	(Retain / transplant / fell)	Advice to Lands Department	Additional Remarks
T1234	Aquilaria sinensis	土沉香	5	130	3	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Heavily bent trunk; Low live crown ratio
T1445	Aquilaria sinensis	土沉香	7	140	4	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T1942	Aquilaria sinensis	土沉香	7	110	4	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T1951	Aquilaria sinensis	土沉香	2	130	1	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Topped; Only stump remains
T1958	Aquilaria sinensis	土沉香	5	110	3	Fair	Poor	Poor	Poor	Low	Poor form, health & structure	RPPHK; Cap.586; IUCN:VU	Fell	LCSD	Important Tree (rare species); On slope; Trunk snapped; Fallen down
T1998	Aquilaria sinensis	土沉香	8	190	5	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T2168	Aquilaria sinensis	土沉香	7	220	6	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Co-dominant stems; Heavily leaning
T2176	Aquilaria sinensis	土沉香	7	200	5	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T2194	Aquilaria sinensis	土沉香	6	140	4	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio

Tree ref.	Species ef.		Measurements			Amenity Value ³ Form Health Structural condition				Suitabil	ity for Transplanting ⁴	Conservation	Recommendation	Department to Provide Expert	
no.1	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Status ⁵	transplant / fell) Lands	Advice to Lands Department	Additional Remarks
T2195	Aquilaria sinensis	土沉香	6	110	3	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T2203	Aquilaria sinensis	土沉香	6	140	4	Good	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T2205	Aquilaria sinensis	土沉香	5	120	4	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T2208	Aquilaria sinensis	土沉香	7	320	6	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T2213	Aquilaria sinensis	土沉香	6	120	2.5	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T2240	Aquilaria sinensis	土沉香	7	140	4	Good	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Heavily leaning; Poor taper
T2245	Aquilaria sinensis	土沉香	7	100	3	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T2253	Aquilaria sinensis	土沉香	7	250	4	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T2293	Aquilaria sinensis	土沉香	5	120	3	Fair	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Co-dominant stems; Moderately leaning; Low live crown ratio

Tree ref.	Specie	Measurements			Amenity Value ³	Horm		Structural condition	Suitabil	ity for Transplanting ⁴	Conservation	Pro	Department to Provide Expert		
no.1	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Status ⁵	(Retain / transplant / fell)	Advice to Lands Department	Additional Remarks
T2295	Artocarpus hypargyreus	白桂木	8	380	3	Fair	Poor	Fair	Poor	Low	Poor form & structure	RРРНК	Fell		Important Tree (rare species); On slope; Moderately bent trunk; Severe asymmetric crown; Low live crown ratio
T2296	Ormosia pachycarpa	茸莢紅豆	8	160	4	Fair	Poor	Fair	Poor	Low	Poor form & structure	RРРНК	Fell		Important Tree (rare species); On slope; Co-dominant stems; Heavily vined
T2299	Aquilaria sinensis	土沉香	4	180	3	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T2307	Aquilaria sinensis	土沉香	6	140	3	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T2308	Aquilaria sinensis	土沉香	7.5	250	3	Fair	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Moderately leaning; Heavily bent trunk; Poor taper; Low live crown ratio
T2311	Aquilaria sinensis	土沉香	6.5	190	3	Fair	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Heavily bent trunk; Poor taper; Low live crown ratio
T2589	Aquilaria sinensis	土沉香	5	140	2.5	Fair	Poor	Fair	Poor	Low	Poor amenity value, form & structure	RPPHK; Cap.586; IUCN:VU	Fell		Important Tree (rare species); On slope; Co-dominant stems; Moderately leaning
T2808	Aquilaria sinensis	土沉香	7	170	4	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Poor taper; Low live crown ratio

Tree ref.	Species		N	Measurements			Form	Health condition	Structural condition		ity for Transplanting ⁴	Conservation	Recommendation	Department to Provide Expert	
no.1	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Status ⁵	(Retain / transplant / fell)	Advice to Lands Department	Additional Remarks
T2829	Aquilaria sinensis	土沉香	7	200	5	Fair	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Moderately leaning; Moderately bent trunk; Poor taper; Low live crown ratio
T2833	Aquilaria sinensis	土沉香	4	120	3	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T2836	Aquilaria sinensis	土沉香	4.5	130	4	Fair	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Heavily leaning; Poor taper; Low live crown ratio
T3016	Aquilaria sinensis	土沉香	6	200	3	Fair	Poor	Fair	Poor	Low	Poor form & structure	RPPHK; Cap.586; IUCN:VU	Fell	AFCD	Important Tree (rare species); On slope; Moderately leaning; Moderately bent trunk; Poor taper; Low live crown ratio
T0433	Artocarpus hypargyreus	白桂木	6	150	2	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK	Transplant	AFCD	Important Tree (rare species); On slope; Co-dominant stems; Poor taper; Low live crown ratio; Heavily vined
T0440	Ormosia pachycarpa	茸莢紅豆	10	120	3	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T0665	Aquilaria sinensis	土沉香	7	150	3	Fair	Poor	Fair	Poor	Med	Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant	AFCD	Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T0698	Ormosia pachycarpa	茸莢紅豆	7	240	5	Fair	Poor	Fair	Poor	Low	Poor form & structure; Tree with severe structural defect	RРРНК	Fell	AFCD	Important Tree (rare species); On slope; Co-dominant stems; Large wound on one stem; Poor taper; Low live crown ratio

Tree ref.	Species		Measurements		Amenity Value ³	Form	Health condition	Structural condition	Suitabil	ity for Transplanting ⁴	Conservation	Recommendation	Provide Expert		
	Scientific Name	Chinese Name	Height (m)	DBH ² (mm)	Crown Spread (m)		(Good /	Fair / Poor)		(High / Medium / Low)	Remarks	Status ⁵	(Retain / transplant / fell)	Advice to Lands Department	Additional Remarks
T0782	Aquilaria sinensis	土沉香	7	150	3	Fair	Poor	Fair	Poor		Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Poor taper; Low live crown ratio
T0786	Aquilaria sinensis	土沉香	7	120	4	Fair	Poor	Fair	Poor		Rare species with sub- optimal form and/or structure but still feasible for transplanting	RPPHK; Cap.586; IUCN:VU	Transplant		Important Tree (rare species); On slope; Moderately leaning; Poor taper; Low live crown ratio
T0887	Ormosia pachycarpa	茸莢紅豆	6	170	4	Fair	Poor	Fair	Poor		Poor form & structure; Multi-trunk tree subject to breakage during transplant handling	RРРНК	Fell		Important Tree (rare species); On slope; Co-dominant stems; Poor taper
T0895	Ormosia pachycarpa	茸莢紅豆	6	150	3	Fair	Poor	Fair	Poor		Poor form & structure; Multi-trunk tree subject to breakage during transplant handling	RРРНК	Fell		Important Tree (rare species); On slope; Co-dominant stems; Poor taper

- These 65 trees are not in the Register of Old and Valuable Trees.
- 2 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, shelter, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories.
 - Good: important trees which should be retained by adjusting the design layout accordingly.
 - Fair: trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "Good" trees.
 - Poor: trees that are dead, dying or potentially hazardous and should be removed.
- Assessment has taken into account conditions of individual trees 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).
- 5 Aquilaria sinensis, a precious or rare species. The species is protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586).