ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 - HOUSING

Civil Engineering – Land development

- 883CL Site formation and infrastructure works for public housing development near Chai Wan Swimming Pool, Chai Wan
- 880CL Site formation and infrastructure works for public housing development at A Kung Ngam Village, Eastern
- 776CL Site formation and infrastructure works for public housing developments at Kam Tin South, Yuen Long Phase 2

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of **883CL** to Category A at an estimated cost of \$646.7 million in money-of-the-day (MOD) prices;
- (b) the upgrading of **880**CL to Category A at an estimated cost of \$572.3 million in MOD prices; and
- (c) the upgrading of **776CL** to Category A at an estimated cost of \$43.8 million in MOD prices.

PROBLEM

We need to carry out the following projects –

- (a) **883CL** to carry out site formation and infrastructure works to support the proposed public housing development near Chai Wan Swimming Pool, Chai Wan;
- (b) **880CL** to carry out site formation and infrastructure works to support the proposed public housing development at A Kung Ngam Village, Eastern; and
- (c) remainder of **776CL** to carry out site formation and infrastructure works to support the proposed public housing development at Site 4a-2 of Kam Tin South, Yuen Long.

PROPOSAL

- 2. The Director of Civil Engineering and Development, with the support of the Secretary for Housing, proposes to upgrade the following projects to Category A
 - (a) **883CL** at an estimated cost of \$646.7 million in MOD prices for the site formation and infrastructure works;
 - (b) **880CL** at an estimated cost of \$572.3 million in MOD prices for the site formation and infrastructure works; and
 - (c) remainder of **776CL** at an estimated cost of \$43.8 million in MOD prices for the site formation and infrastructure works.
- 3. Details of **883CL**, **880CL** and **776CL** are provided at **Enclosures 1** to 3 respectively.

Housing Bureau February 2025

883CL – Site formation and infrastructure works for public housing development near Chai Wan Swimming Pool, Chai Wan

PROJECT SCOPE AND NATURE

The proposed scope of works of **883CL** comprises –

- (a) formation of about 2.3 hectares works site and construction of associated retaining walls and slopes;
- (b) construction of a single two-lane carriageway with a length of about 150 metres (m) and a width of about 8.2 m, and a roundabout; provision of a new lay-by and associated road improvement works connecting San Ha Street and the proposed public housing development;
- (c) construction of a covered footbridge (including associated lift facilities) with a length of about 60 m and a width of about 3 m, and a covered walkway with a length of about 95 m and a width of about 3 m connecting Siu Sai Wan Road and the road mentioned in item (b) above;
- (d) road improvement works at (i) the junction of Wing Ping Street/Chai Wan Road, (ii) the junction of Wing Ping Street/San Ha Street, (iii) the junction of Chai Wan Road/ San Ha Street and (iv) the roundabout of Chai Wan Road, Wan Tsui Road and Island Eastern Corridor; and
- (e) ancillary works, including reprovision of skateboard ground, drainage, sewerage, water supply and landscaping works.
- 2. The location, site plan and sections of the proposed works are at

 Annex 1 to Enclosure 1.
 - 3. We plan to commence the proposed works upon obtaining approval from the Legislative Council Finance Committee (FC). It is expected that the site formation works will be completed in around four and a half years and the formed land will be handed over to the Hong Kong Housing Authority (HKHA) for construction of public housing while the infrastructure will be completed in around

five years. In order to meet the tight construction programme, we have invited tenders in parallel to enable early commencement of the proposed works. The returned tender prices have been reflected in the estimated cost of the proposed project. The relevant contract will only be awarded after obtaining FC's funding approval.

JUSTIFICATION

- 4. **883CL** is aimed at providing formed land and constructing associated infrastructure for the public housing development near Chai Wan Swimming Pool, Chai Wan. The key development parameters and the conceptual plan of the development are at **Annex 2** and **Annex 3 to Enclosure 1** respectively.
- 5. According to the findings of the traffic impact assessment (TIA), we propose to carry out the road improvement works as listed in paragraphs 1(b) to (d) above to accommodate the traffic and transport needs arising from the development.

FINANCIAL IMPLICATIONS

covered walkway

6. We estimate the capital cost of the proposed works to be \$646.7 million in money-of-the-day (MOD) prices, broken down as follows –

		(in MOD prices)
(a)	Site formation and associated works	253.5
	 (i) site formation (ii) associated retaining wall and slopes¹ 	132.1 121.4
(b)	Road improvement works	16.0
(c)	Covered footbridge (including associated lifts facilities) and	121.4

/(d)

\$ million

Including removal of existing slopes, construction of mass concrete retaining wall and slopes, and installation of soil nails.

\$ million (in MOD prices)

(d)	Ancillary works (including reprovision of skateboard ground, drainage, sewerage, water supply and landscaping works ²)		116.2
	(i) reprovision of skateboard ground	9.6	
	(ii) drainage and sewerage works	89.3	
	(iii) water supply works	9.4	
	(iv) landscaping works	7.9	
(e)	Consultants' fee for		11.6
	(i) contract administration ³	9.1	
	(ii) management of resident site staff (RSS)	2.5	
(f)	Remuneration of RSS		69.2
(g)	Contingencies		58.8
	Total		646.7

7. The design of the site formation works is affected by various factors, including the location of the site, terrain, geotechnical conditions, and the proposed site formation levels, etc. Therefore, the cost of site formation and associated works varies across different projects. As mentioned in paragraph 1(a) above, for the proposed site formation and associated works, the contractor is required to carry out site formation works and construct associated retaining wall on slopes, which the associated retaining wall is relatively simple mass concrete wall. Therefore, the construction cost of proposed site formation and associated works is about \$211 million (in September 2024 prices), i.e. the unit cost is about \$92 million per hectare (in September 2024 prices) for other public works projects of similar nature and scale in recent years⁴. Amongst these, the

Including tree survey, preservation and protection of trees, tree removal works, tree transplanting and tree planting works, etc.

Including administration of site progress, quality and project expenditure, etc.

Including the following relevant projects for which funding has been approved – **848CL** - Site formation and infrastructure works for public housing developments at Chak On Road South and Pak Tin Extension, Sham Shui Po (2023), **771CL** - Site formation and infrastructure works for development of ex-Cha Kwo Ling Kaolin Mine Site (Phase 2) (2023), **778CL** - Site formation and infrastructure works for public housing developments at Chung Nga Road and Area 9, Tai Po – Phase 2 (2023), **811CL** - Site formation and infrastructure works for public housing developments at Tuen Mun Central – Phase 2 (2023), etc.

811CL, which has the lowest unit cost per hectare, has relatively gentle slope gradient within the site and a reduced scale and complexity of the works, resulting in a lower unit cost per hectare while the **848CL**, which has the highest unit cost per hectare, involves site formation of two sites situated on a steep slope of about 40 m in height. The narrow site configuration significantly affects the excavation efficiency, leading to a relatively higher unit cost per hectare.

- 8. We propose to engage consultants to undertake contract administration and site supervision for the proposed project. A breakdown of the estimates for consultants' fees and RSS costs by man-months is at **Annex 4 to Enclosure 1**.
- 9. Subject to funding approval, we plan to phase the expenditure as follows –

Year	\$ million (in MOD prices)
2025-26	81.5
2026-27	129.3
2027-28	144.2
2028-29	135.8
2029-30	84.1
2030-31	29.1
2031-32	26.5
2032-33	16.2
	646.7

10. 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 2025 to 2033. Civil Engineering and Development Department (CEDD) will deliver the proposed

works under New Engineering Contract ⁵ (NEC). The contract will provide clauses for price adjustments.

- 11. We estimate the annual recurrent expenditure arising from the proposed project to be about \$5.38 million.
- 12. As the site of the proposed project is located on the existing hillside near Chai Wai Swimming Pool, we have to carry out site formation works and construct associated slopes to form platforms for the construction of public housing by HKHA. We have optimised site formation design by adopting stepped platforms along the hillside to lower the height of slopes and reduce the generation of inert construction wastes. This measure not only reduces the construction cost, but also shortens the construction period so that the works can be completed and the formed land for the development can be provided as early as possible.
- 13. The preliminary estimate of the capital cost of the proposed project was about \$744.4 million in MOD prices when we consulted the Legislative Council Panel on Housing in May 2024. As mentioned in paragraph 3 above, the returned tender prices and breakdowns have been reflected in this discussion paper with reference to the returned tender prices. The latest estimate of the capital cost is about \$646.7 million in MOD prices, with a reduction of about \$97.7 million (around 13%) compared to the preliminary estimate of the capital cost. HKHA will continue to collaborate with CEDD during the detailed design stage to further optimise the design of site formation works so as to reduce the construction cost.

PUBLIC CONSULTATION

- 14. CEDD consulted the Planning, Works and Housing Committee of the Eastern District Council on the proposed works on 28 February 2023. The Committee had no objection to the proposed works.
- On 28 July 2023, CEDD gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (RO) and the proposed sewerage works under the RO as applied by Section 26 of the Water Pollution Control (Sewerage) Regulation (Cap. 358AL). After the gazettal, CEDD did not receive any objection. The notice of authorisation was subsequently gazetted on 27 October 2023.

/16.

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

- 16. CEDD consulted the Advisory Committee on the Appearance of Bridges and Associated Structures⁶ (ACABAS) about the aesthetic design of the proposed footbridge and walkway in 2024. ACABAS members accepted the proposed aesthetic design.
- 17. We briefed the Members of the Legislative Council Panel on Housing on 6 May 2024 on the proposal to upgrade **883CL** to Category A. The Panel supported the submission of the funding proposal for the proposed project to the Public Works Subcommittee for consideration. We provided supplementary information to the Panel on Housing on 18 June 2024 and 12 February 2025.

ENVIRONMENTAL IMPLICATIONS

- 18. The proposed project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). CEDD has carried out a Preliminary Environmental Review (PER) for the project. The PER concluded that with the implementation of mitigation measures, the proposed project would not cause any adverse environmental impacts in the long run.
- 19. CEDD has stipulated conditions in the contract to require the contractor to implement appropriate mitigation measures and contain the environmental impacts during the construction period, in order to ensure compliance with established standards and guidelines. These measures include use of low-noise construction equipment and methods, silencers, mufflers, acoustic lining or shields for noisy construction activities to mitigate construction noise; frequent cleaning and watering of the work sites and the provision of sprinklers and wheel-washing facilities to minimise spread of dust; the use of temporary site drains and sedimentation tanks to collect site run-off for on-site treatment before discharge. We have included the associated cost in the project estimate for implementing various environmental mitigation measures.
- 20. At the planning and design stages, CEDD has considered different design options 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 to public fill

/reception

The ACABAS comprises representatives of the Hong Kong Institute of Architects, Hong Kong Institution of Engineers, 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 highway system, including noise barriers and semi-enclosures, from the aesthetic and visual impact points of view.

reception facilities⁷ (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 the generation of construction waste.

- 21. At the construction stage, CEDD will require the contractor to submit a plan setting out the waste management measures for approval by the Government. The plan is required to include appropriate mitigation measures 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 the 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 for disposal through a trip-ticket system.
- CEDD estimates that the proposed project will generate in total about 494 000 tonnes of construction waste. Of these, CEDD will reuse about 8 000 tonnes (2%) of inert construction waste on site and deliver 481 000 tonnes (97%) of inert construction waste to PFRF for subsequent reuse. CEDD will dispose of the remaining 5 000 tonnes (1%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated at about \$35.2 million for the proposed 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

23. The proposed project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures in the new list of proposed grading items, and Government historic sites identified by the Antiquities and Monuments Office.

TRAFFIC IMPLICATIONS

24. CEDD has conducted the TIA for the development. According to the findings of the TIA, CEDD will conduct the proposed road improvement works at the roads and junctions as mentioned in paragraphs 1(b) and (d). The road

/network

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

network in the vicinity will be able to accommodate the traffic and transport needs arising from the development after completion of the improvement works. During the construction period of the proposed works, CEDD will implement temporary traffic arrangements and appropriate control measures on construction vehicles to minimise traffic impact of the proposed works on nearby roads.

LAND ACQUISITION

25. The proposed project does not require any resumption of private land. To complement the proposed project, we will clear about 2.7 hectares of Government land. The Government conducted the pre-clearance survey within the proposed works area on 12 May 2023. One business undertaking will be affected and 12 temporary structures will be cleared on the concerned Government land. For a sting grave on the Government land, its descendant has completed its relocation voluntarily on 20 May 2024. The Government will offer various prevailing administrative ex-gratia allowances to affected eligible persons in accordance with the prevailing general ex-gratia compensation arrangement. The cost of land clearance, estimated at about \$1.4 million, will be charged to Head 701 – Land Acquisition. A breakdown of the land acquisition cost of the proposed project is at Annex 5 to Enclosure 1.

BACKGROUND INFORMATION

- 26. CEDD engaged consultants in December 2022 to undertake the detailed design and site investigation for **883CL** at a cost of about \$22.34 million in MOD prices. The cost was 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". The related detailed design and investigation works can help finalise the project scope and the cost estimate for seeking Legislative Council's funding approval.
- 27. Of the about 1 057 trees within the project site boundary, about 78 trees will be preserved. The proposed project will involve felling of about 971 trees and transplanting of eight trees. Among the above trees, there are six trees of particular interest 8 affected by the works, details of which are /summarised

Trees of particular interest are defined in paragraph 3.3 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 and 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 the overall tree sizes, shape and any special features);

summarised at **Annex 6 to Enclosure 1**. We will incorporate planting proposals into the proposed works, in which planting eight trees, about 360 whips and about 20 000 shrubs is included.

28. We estimate that **883CL** will create about 90 jobs (70 for labours and another 20 for professional or technical staff) providing a total employment of about 4 970 man-months.

⁽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 Agriculture, Fisheries and Conservation Department;

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

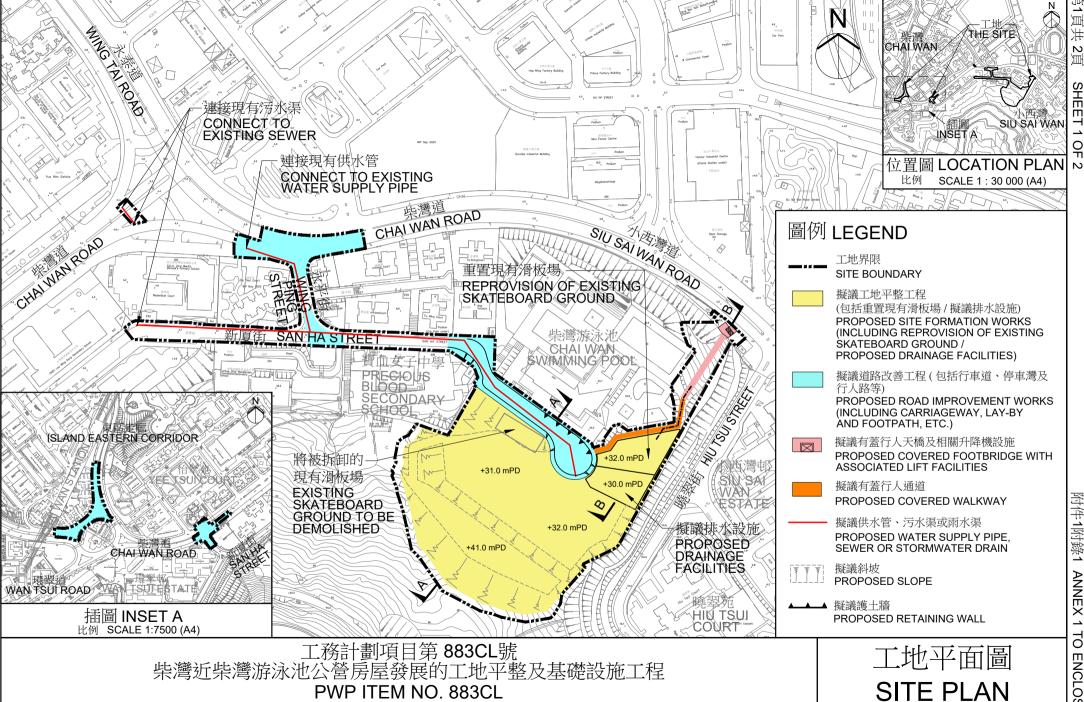
⁽g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);

⁽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.

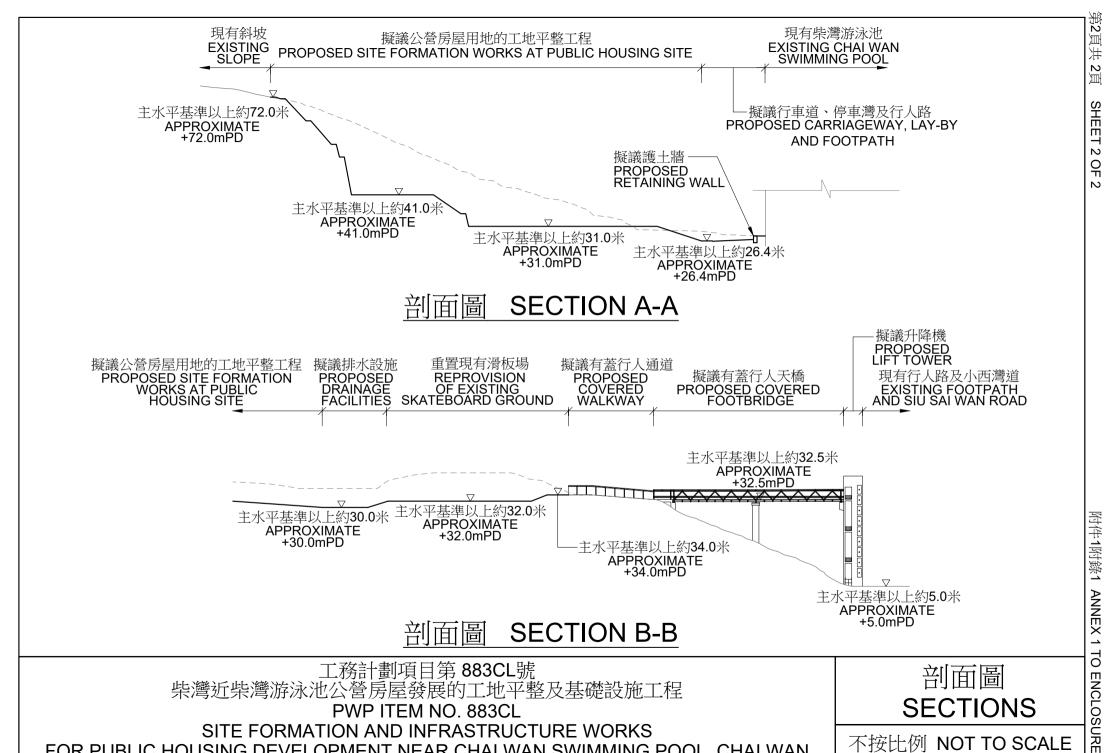


SITE FORMATION AND INFRASTRUCTURE WORKS

FOR PUBLIC HOUSING DEVELOPMENT NEAR CHAI WAN SWIMMING POOL, CHAI WAN

附件1附錄1 **ANNEX 1** Б **ENCLOSURE**

比例 SCALE 1:3000 (A4)



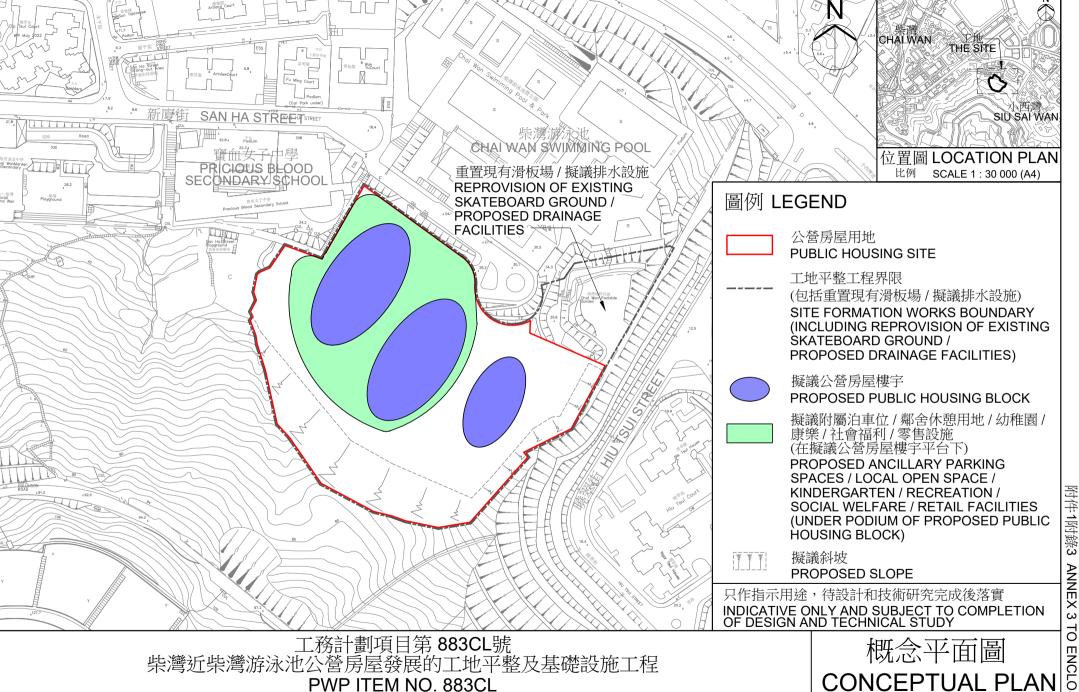
FOR PUBLIC HOUSING DEVELOPMENT NEAR CHAI WAN SWIMMING POOL, CHAI WAN

不按比例 NOT TO SCALE

Key development parameters of the public housing development near Chai Wan Swimming Pool, Chai Wan

Public housing site area	About 2 hectares ^(Note 1)				
Permitted Plot ratio	8				
Building height restriction	190 metres above Principal Datum				
No. of domestic blocks	3 (Note 2)				
No. of flats	About 2 700 (Note 2)				
Projected population	About 7 300 (Note 2)				
Completion date	2034/35				
Non-domestic facilities	Ancillary parking spaces, local open spaces, kindergarten, recreational, social welfare (Note 3) and retail facilities etc.				

- Note 1: The limit of public housing site is at **Annex 3 to Enclosure 1**.
- Note 2: The number of domestic blocks, number of flats and projected population are only preliminary information and will be finalised after the completion of the design and technical studies.
- Note 3: The Hong Kong Housing Authority is discussing with the Social Welfare Department about the details of the welfare facilities. According to the preliminary concept, facilities such as Residential Care Home for the Elderly cum Day Care Unit, Day Care Centre for the Elderly, Integrated Community Centre for Mental Wellness, Hostel for Severely Mentally handicapped Persons, and Day Activity Centre will be provided.



SITE FORMATION AND INFRASTRUCTURE WORKS

FOR PUBLIC HOUSING DEVELOPMENT NEAR CHAI WAN SWIMMING POOL, CHAI WAN

CONCEPTUAL PLAN

比例 SCALE 1:2000 (A4)

883CL – Site formation and infrastructure works for public housing development near Chai Wan Swimming Pool, Chai Wan

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2024 prices)

		Estimate man-months	Average MPS* salary point	Multiplier (Note 1)		ited fee Illion)
(a) Consultants' fees for	Professional	-	-	-		6.3
contract administration (Note 2)	Technical	-	-	-		1.6
				Sub-total		7.9#
(b) Resident site staff	Professional	210	38	1.6		31.3
(RSS) costs (Note 3)	Technical	615	14	1.6		32.9
Comprising –				Sub-total	-	64.2
(i) Consultants' fees for management of RSS					2.2#	
(ii) Remuneration of RSS					62.0#	
				Total	_	72.1

* MPS = Master Pay Scale

Notes

- 1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the staff cost of RSS supplied by the consultants (as at now, MPS salary point 38 = \$93,255 per month and MPS salary point 14 = \$33,405 per month).
- 2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade 883CL 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 figure marked with # are shown in money-of-the-day prices in paragraph 6 of the main paper of **Enclosure 1**.

883CL - Site formation and infrastructure works for public housing development near Chai Wan Swimming Pool, Chai Wan

Breakdown of land acquisition cost

(I)	ensation in	\$ million 0.62	
(II)	Estimated cost for land clearance		0.65
	(a) 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.)	0.22	
	(b) Other EGAs (e.g. crop compensation, disturbance allowance for miscellaneous cultivator, EGA for miscellaneous permanent improvements to farms, EGA for shops, workshops, godowns, slipways, schools, churches and ornamental fish breeding undertakings; EGA for open-air/outdoor business undertakings, EGA for graves and urns ("Kam Taps") etc.)	0.43	
(III)	Interest and contingency payment		0.13
		Total	1.40

The above estimated land acquisition cost is based on the ex-gratia compensation rates for resumed land as at mid-2024 and at the valuation.

883CL – Site formation and infrastructure works for public housing development near Chai Wan Swimming Pool, Chai Wan Summary of "trees of particular interest" affected

Tree ref.	Specie	es	М	easureme	nts	Amenity value ³	Form	Health condition	Structural condition	S	uitability for Transplanting ⁴	Conservation		Maintenance department to provide comments on TPRP		Additional remarks
no.1	Scientific name	Chinese name	Height (m)	DBH ² (mm)	Crown spread (m)	(High / Medium / Low)	(Good	/ Average	/ Poor)	(High / Medium / Low)	Medium / Remarks		(Retain / Transplant / Remove)	Before	After	
T0041	Ailanthus fordii	常綠臭椿	9	350	6	Medium	Average	Average	Average	Low	The survival rate after transplant is low.	RPPHK Cap 586	Retain	LCSD	LCSD	
T0042	Ailanthus fordii	常綠臭椿	11	267	2.5	Medium	Poor	Average	Average	Low	The survival rate after transplant is low.	RPPHK Cap 586	Retain	LCSD	LCSD	
T0043	Ailanthus fordii	常綠臭椿	8	274	3.5	Medium	Poor	Poor	Average	Low	The survival rate after transplant is low.	RPPHK Cap 586	Retain	LCSD	LCSD	
T0044	Ailanthus fordii	常綠臭椿	10	379	4	Medium	Poor	Average	Average	Low	The survival rate after transplant is low.	RPPHK Cap 586	Retain	LCSD	LCSD	
T0092	Ficus virens	大葉榕	10	1400	10	Low	Average	Average	Average	Low	The tree of particular interest has low ornamental value, and in very large size. Additionally, it is located on slope, making it technically difficult to dig up a suitable root ball for transplanting.	-	Remove	ArchSD	-	-
T1116	Aquilaria sinensis	土沉香	7	380	2	Medium	Average	Average	Average	Medium	Tree of particular interest (rare species); on slope.	RPPHK Cap 586, IUCN:VU	Transplant	LandsD	LCSD	-

Note

- 1. There are no trees within site boundary in the Register of Old and Valuable Trees.
- 2. DBH of a tree refers to its diameter at breast height (i.e. measured at 1.3 m above ground level).
- 3. Amenity value of a tree should be 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.
- 4. Assessment shall take 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).
- 5. Conservation status is based on the rarity and protection status of the species under relevant ordinances in Hong Kong, such as
 - RPPHK Species included in AFCD 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; and
 - IUCN:VU "Vulnerable" under IUCN Red List of Threatened Species.

880CL – Site formation and infrastructure works for public housing development at A Kung Ngam Village, Eastern

PROJECT SCOPE AND NATURE

The proposed scope of works of **880CL** comprises –

- (a) formation of about 2.4 hectares works site, including demolition of an industrial building, and construction of associated retaining walls and slopes;
- (b) widening A Kung Ngam Village Lane into a single twolane carriageway of about 7.3 metres (m) and associated road works, including construction of a road junction, footpaths and pedestrian crossing facilities, etc. for connecting to the proposed public housing development; and
- (c) ancillary works, including drainage, sewerage, water supply, land decontamination and landscaping works.
- 2. The location, site plan and sections of the proposed project are at

 Annex 1 to Enclosure 2.
 - 3. We plan to commence the proposed works upon obtaining approval from the Finance Committee (FC). It is expected that the first phase of the site formation works will be completed in around three years and the formed land will be handed over to the Hong Kong Housing Authority (HKHA) for construction of public housing while the infrastructure and remaining site formation works will be completed in around five years. In order to meet the tight construction programme, we have invited tenders in parallel to enable early commencement of the proposed works. The returned tender prices have been reflected in the estimated cost of the proposed project. The relevant contract will only be awarded after obtaining FC's funding approval.

JUSTIFICATION

4. **880CL** is aimed at providing formed land and constructing associated infrastructure for the public housing development at A Kung Ngam Village, Eastern. The key development parameters and the conceptual plan of the development are at **Annex 2** and **Annex 3** to **Enclosure 2** respectively.

\$ million

5. We propose to carry out the road works as listed in paragraph 1(b) above in order to provide suitable pedestrian and vehicular accesses to accommodate the traffic and transport needs arising from the development.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the proposed project to be \$572.3 million in money-of-the-day (MOD) prices, broken down as follows –

		(in MOD prices)				
(a)	Site formation and associated works	295.0				
	(i) site formation ¹	92.4				
	(ii) demolition of an industrial building	6.7				
	(iii) associated retaining walls and slopes ²	195.9				
(b)	Road works	9.6				
(c)	Ancillary works (including drainage, sewerage, water supply and landscaping works ³)	151.3				
	(i) drainage and sewerage works	70.0				
	(ii) water supply works	61.6				
	(iii) landscaping works	19.7				
(d)	Consultants' fee for	7.1				
	(i) contract administration ⁴	5.9				
	(ii) management of resident site staff (RSS)	1.2				
		/(e)				

Including land decontamination works. The land decontamination will be carried out in accordance with the Environmental Protection Department's "Guidance Note for Contaminated Land Assessment and Remediation", "Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management" and "Practice Guide for Investigation and Remediation of Contaminated Land".

Including removal of existing retaining walls and slopes, construction of L-shaped retaining walls, soldier pile walls and slopes, and installation of soil nails.

Including tree survey, preservation and protection of trees, tree removal works and tree planting works, etc.

Including administration of site progress, quality and project expenditure, etc.

\$ million

			(in MOD prices)
(e)	Remuneration of RSS		57.3
(f)	Contingencies		52.0
		Total	572.3

7. The design of the site formation works is affected by various factors, including the location of the site, terrain, geotechnical conditions, and the proposed site formation levels, etc. Therefore, the cost of site formation and associated works varies across different projects. As mentioned in paragraph 1(a) above, for the proposed site formation and associated works, the contractor is required to carry out site formation works and construct associated retaining walls on slopes. proposed site has a steep terrain, requiring extensive preliminary works, including constructing temporary access roads within the site on the hillside, as well as extensive excavation works involving rock strata. Furthermore, due to the presence of existing buildings or structures along the site boundary, retaining walls with a total length of about 160 m is required to be constructed along the edges of Around 30% of these are soldier pile walls, which involve more complicated construction works, with a maximum supporting height of about 8 m. Therefore, the cost of the proposed site formation and associated works is about \$248.2 million (in September 2024 prices), i.e. the unit cost is about \$103.4 million per hectare (in September 2024 prices). This unit cost falls within the range of about \$86 million to \$143 million per hectare (in September 2024 prices) for other public works projects of similar nature and scale in recent years⁵. Amongst these, the 811CL, which has the lowest unit cost per hectare, has relatively gentle slope gradient within the site and a reduced scale and complexity of the works, resulting in a lower unit cost per hectare while the 848CL, which has the highest unit cost per hectare, involves site formation of two sites situated on a steep slope of about 40 m in height. The narrow site configuration significantly affects the excavation efficiency, leading to a relatively higher unit cost per hectare.

8. We propose to engage consultants to undertake contract administration and site supervision for the proposed project. A breakdown of the estimates for consultants' fees and RSS costs by man-months is at **Annex 4 to Enclosure 2**.

/9.

Including the following relevant projects for which funding has been approved – **848CL** - Site formation and infrastructure works for public housing developments at Chak On Road South and Pak Tin Extension, Sham Shui Po (2023), **771CL** - Site formation and infrastructure works for development of ex-Cha Kwo Ling Kaolin Mine Site (Phase 2) (2023), **778CL** - Site formation and infrastructure works for public housing developments at Chung Nga Road and Area 9, Tai Po – Phase 2 (2023), **811CL** - Site formation and infrastructure works for public housing developments at Tuen Mun Central – Phase 2 (2023), etc.

9. Subject to funding approval, we plan to phase the expenditure as follows –

Year	\$ million (in MOD prices)
2025-26	78.6
2026-27	97.6
2027-28	124.7
2028-29	104.4
2029-30	90.2
2030-31	32.4
2031-32	27.5
2032-33	16.9
	572.3

- 10. 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 2025 to 2033. Civil Engineering and Development Department (CEDD) will deliver the proposed works under New Engineering Contract ⁶ (NEC). The contract will provide clauses for price adjustments.
- 11. We estimate the annual recurrent expenditure arising from the proposed project to be about \$0.24 million.
- 12. As the site of the proposed project is located on the existing hillside of A Kung Ngam Village, we have to carry out site formation works and construct

/associated

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

associated slopes and retaining walls to form platforms for the construction of public housing by HKHA. We have optimised the site formation design by adopting stepped platforms along the hillside to lower the height of retaining walls and reduce the generation of inert construction wastes. These measures not only reduce construction costs, but also shorten the construction period so that the works can be completed and the formed land for the development can be provided as early as possible.

13. The preliminary estimate of the capital cost for the proposed project was about \$631.1 million in MOD prices when we consulted the Legislative Council Panel on Housing in May 2024. As mentioned in paragraph 3 above, the returned tender prices and breakdowns have been reflected in this discussion paper with reference to the returned tender prices. The latest estimate of the capital cost is about \$572.3 million in MOD prices, with a reduction of about \$58.8 million (about 9%) compared to the preliminary estimate of the capital cost. HKHA will continue to collaborate with CEDD during the detailed design stage to further optimise the design of the site formation works so as to reduce construction cost.

PUBLIC CONSULTATION

- 14. CEDD consulted the Planning, Works and Housing Committee of the Eastern District Council on the proposed works on 25 April 2023. The Council had no objection to the proposed works.
- 15. On 4 August 2023, CEDD gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (RO) and the proposed sewerage works under the RO as applied by Section 26 of the Water Pollution Control (Sewerage) Regulation (Cap. 358AL). After the gazettal, CEDD did not receive any objection to the proposed sewerage works, and the notice of authorisation was gazetted on 10 November 2023. For the proposed road works. CEDD received one objection. The objector was mainly concerned about the gazettal procedures, the purpose and alternative scheme for the proposed road works, and compensation issues related to the resumption of private land. CEDD explained the details of the works to the objector by meeting and exchange of correspondence. In the end, the objection was not withdrawn. We subsequently submitted the objection and the correspondence with the objector (including meeting minutes) to the Chief Executive in Council (CE in C) for consideration. CE in C authorised the proposed road works without modification and the notice of authorisation was subsequently gazetted on 26 July 2024.

16. We briefed the Members of the Legislative Council Panel on Housing on 6 May 2024 on the proposal to upgrade **880CL** to Category A. The Members supported the submission of the funding proposal for the proposed project to the Public Works Subcommittee for consideration. We provided supplementary information to the Panel on Housing on 18 June 2024 and 12 February 2025.

ENVIRONMENTAL IMPLICATIONS

- 17. The proposed project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). CEDD has carried out a Preliminary Environmental Review (PER) for the project. The PER concluded that with the implementation of mitigation measures, the proposed project would not cause any adverse environmental impacts in the long run.
- 18. CEDD has stipulated conditions in the contract to require the contractor to implement appropriate mitigation measures and contain the environmental impacts during the construction period, in order to ensure compliance with established standards and guidelines. These measures include use of low-noise construction equipment and methods, silencers, mufflers, acoustic lining or shields for noisy construction activities to mitigate construction noise; frequent cleaning and watering of work sites, and the provision of sprinklers and wheel-washing facilities to minimise spread of dust; the use of temporary site drains and sedimentation tanks to collect site run-off for on-site treatment before discharge. We have included the associated cost in the project estimate for implementing various environmental mitigation measures.
- 19. At the planning and design stages, CEDD has considered different design options 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 to public fill reception facilities⁷ (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 the generation of construction waste.
- 20. At the construction stage, CEDD will require the contractor to submit a plan setting out the waste management measures for approval by the Government. The plan is required to include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. CEDD will ensure that the day-to-day

operations

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

operations on site comply with the approved plan. CEDD will require the contractor to separate the inert portion from the 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 for disposal through a trip-ticket system.

21. CEDD estimates that the proposed project will generate in total about 340 600 tonnes of construction waste. Of these, CEDD will reuse about 19 800 tonnes (6%) of inert construction waste on site and deliver 305 300 tonnes (89%) of inert construction waste to PFRF for subsequent reuse. CEDD will dispose of the remaining 15 500 tonnes (5%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated at about \$24.8 million for the proposed 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. CEDD has conducted a heritage impact assessment (HIA) for the site formation and infrastructure works of the proposed public housing development in accordance with the prevailing requirements, and submitted the HIA report to the Antiquities Advisory Board (AAB). The members supported the findings and recommendations presented in the HIA report at the AAB meeting on 14 December 2023. CEDD will ensure that the relevant construction works and mitigation measures comply with the stipulations outlined in the report.

TRAFFIC IMPLICATIONS

23. CEDD has conducted a traffic impact assessment (TIA) for the proposed development. According to the findings of the TIA, the road network in the vicinity will be able to accommodate the traffic and transport needs arising from the proposed development. As mentioned in paragraph 1(b) above, CEDD will widen the A Kung Ngam Village Lane to connect to the proposed public housing development. During the construction period of the proposed works, CEDD will implement temporary traffic arrangements and appropriate control measures on construction vehicles to minimise traffic impact of the proposed works on nearby roads.

LAND ACQUISITION

24. To complement the proposed project, we will resume about 0.2 hectares of private land, and clear about 5.4 hectares of Government land. The

Government conducted the pre-clearance survey within the proposed works area on 23 June 2023. A total of about 130 households (involving about 307 persons) and about ten business undertakings will be affected, and about 250 temporary structures (including nine urns) will be relocated/ demolished on the relevant private and Government land. The Government will offer statutory compensation under the relevant ordinances, various prevailing administrative ex-gratia allowances to affected eligible land owners and users, and rehousing arrangements to affected eligible domestic households, in accordance with the prevailing general ex-gratia compensation and rehousing arrangements.

25. The land acquisition cost, estimated at about \$479.7 million including payments to eligible land owners and users. The expenditure will be charged to **Head 701 – Land Acquisition.** A breakdown of the land acquisition cost of the proposed project is at **Annex 5 to Enclosure 2**.

BACKGROUND INFORMATION

- 26. CEDD engaged consultants in September 2022 to undertake the detailed design and site investigation for **880CL** at a cost of about \$14.75 million in MOD prices. The cost was 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". The related detailed design and investigation works can help finalise the project scope and the cost estimate for seeking Legislative Council's funding approval.
- 27. Of the about 1 095 trees within the project site area, about 400 trees will be preserved. The proposed project will involve felling of about 695 trees. Among the above trees, there are nine trees of particular interest⁸ affected by the

/works

- (a) Old and 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 the 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 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

Trees of particular interest are defined in paragraph 3.3 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 –

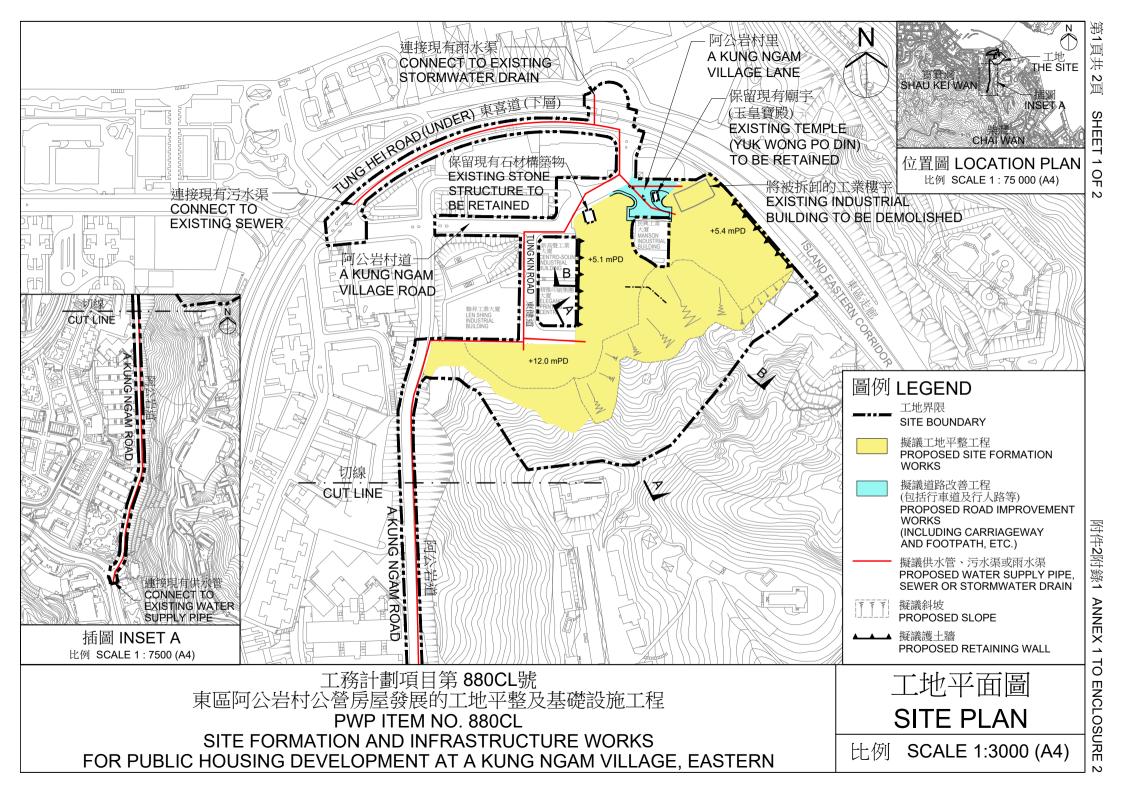
works, details of which are summarised at **Annex 6 to Enclosure 2**. We will incorporate planting proposals into the proposed works, in which planting 41 trees and about 60 whips is included.

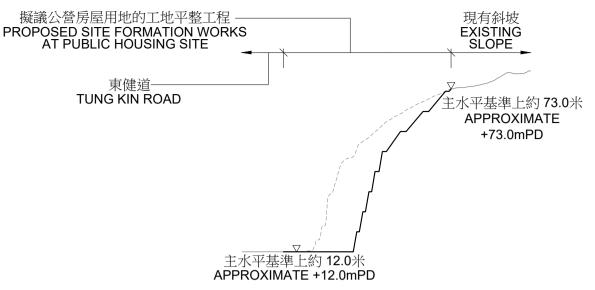
28. We estimate that **880CL** will create about 80 jobs (60 for labours and another 20 for professional or technical staff) providing a total employment of about 4 100 man-months.

the trees;

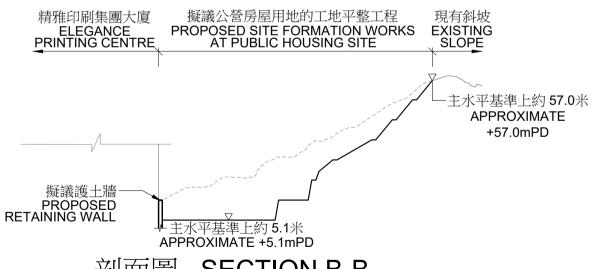
⁽j) Trees which may arouse widespread public concerns; and

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





剖面圖 SECTION A-A



剖面圖 SECTION B-B

工務計劃項目第 880CL號 東區阿公岩村公營房屋發展的工地平整及基礎設施工程

PWP ITEM NO. 880CL
SITE FORMATION AND INFRASTRUCTURE WORKS
FOR PUBLIC HOUSING DEVELOPMENT AT A KUNG NGAM VILLAGE, EASTERN

剖面圖 SECTIONS

不按比例 NOT TO SCALE

Key development parameters of the public housing development at A Kung Ngam Village, Eastern

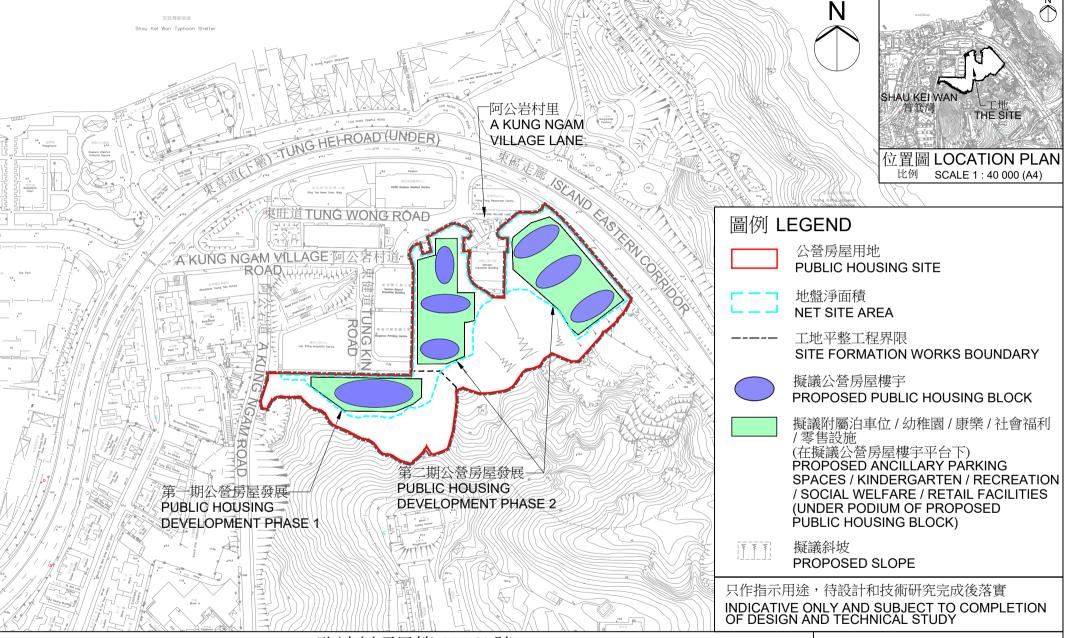
Public housing site area (Net site area)	About 2.4 hectares ^(Note 1) (About 1.4 hectares ^(Note 1))				
Maximum gross floor area	Not more than 85 800m ²				
Building height restriction	110 metres above Principal Datum				
No. of domestic blocks	7 (Note 2)				
No. of flats	About 1 500 (Note 2)				
Projected population	About 4 000 (Note 2)				
Completion date	In phases from 2032/33				
Non-domestic facilities	Ancillary parking spaces, local open spaces, kindergarten, recreational, social welfare (Note 3) and retail facilities etc.				

- Note 1: The limits of public housing site and net site area are at **Annex 3 to Enclosure 2**.
- Note 2: The number of domestic blocks, number of flats and projected population are only preliminary information and will only be finalised upon the completion of the design and technical studies.
- Note 3: The Hong Kong Housing Authority is discussing with the Social Welfare Department about the details of the welfare facilities. According to the preliminary concept, facilities such as Day Care Centre for the Elderly, Centre for Home Care Services for Frail Elderly Persons, Community Rehabilitation Day Centre, Integrated Community Centre for Mental Wellness, and District Support Centre for Persons with Disabilities will be provided.



ANNEX 3

TO ENCLOSURE



工務計劃項目第 880CL號 東區阿公岩村公營房屋發展的工地平整及基礎設施工程

PWP ITEM NO. 880CL SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT A KUNG NGAM VILLAGE, EASTERN

比例 SCALE 1:3000 (A4)

CONCEPTUAL PLAN

880CL – Site formation and infrastructure works for public housing development at A Kung Ngam Village, Eastern

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2024 prices)

		Estimate man- months	Average MPS* salary point	Multiplier (Note 1)	Estima (\$ mi	
(a) Consultants' fees for	Professional	_	point -	_		4.6
contract administration (Note 2)	Technical	-	-	-		0.6
				Sub-total	-	5.2#
(b) Resident site staff	Professional	178	38	1.6		26.5
(RSS) costs (Note 3)	Technical	472	14	1.6		25.2
Comprising –				Sub-total	-	51.7
(i) Consultants' fees for management of RSS					1.1#	
(ii) Remuneration of RSS					50.6#	
				Total	-	56.9

* MPS = Master Pay Scale

Notes

- 1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the staff cost of RSS supplied by the consultants (as at now, MPS salary point 38 = \$93,255 per month and MPS salary point 14 = \$33,405 per month).
- 2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade 880CL 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 figure marked with # are shown in money-of-the-day prices in paragraph 6 of the main paper of **Enclosure 2**.

880CL - Site formation and infrastructure works for public housing development at A Kung Ngam Village, Eastern

Breakdown of land acquisition cost

(I)	Estimated cost for land acquisition		\$ million 411.4
(II)	Estimated cost for land clearance		24.7
	(a) 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, and EGA for legal occupiers of domestic properties, etc.)	13.0	
	(b) Other EGAs (e.g. crop compensation; EGA for miscellaneous permanent improvements to farms; EGA for shops, workshops, godowns, slipways, schools, churches and ornamental fish breeding undertakings; EGA for open-air/outdoor business undertakings, EGA for legal occupiers of industrial properties, etc.)	11.7	
(III)	Interest and contingency payment		43.6
		Total	479.7

The above estimated land acquisition cost is based on the prevailing rates as at July 2024. The actual land acquisition costs will be calculated based on the compensation rate applicable on the day of posting the land resumption notice.

880CL – Site formation and infrastructure works for public housing development at A Kung Ngam Village, Eastern Summary of "trees of particular interest" affected

Tree ref.	Specie	s	Me	easureme	ents	Amenity value ³	Form		Structural condition	Sı	uitability for Transplanting ⁴	Conservation		Maintenance department to provide comments on TPRP		Additional
no.¹	Scientific name	Chinese name	Height (m)	DBH ² (mm)	Crown spread (m)	(High / Medium / Low)	(Good	/ Average	/ Poor)	(High / Medium / Low)	Remarks	status ⁵	(Retain / Transplant / Remove)	Before	After	remarks
T123	Ficus virens	大葉榕	11	1100	16	High	Average	Average	Average	Low	The tree is located on the slope and concrete. It is difficult to dig out appropriate root ball for transplantation. In addition, extensive pruning will be required due to the large original tree crown, which may hinder the tree's ability to regain its original appearance after transplanting.	-	Retain	LandsD	LandsD	-
T124	Ficus microcarpa	細葉榕	15	1200	20	High	Average	Average	Average		The tree is located on the slope and concrete. It is difficult to dig out appropriate root ball for transplantation. In addition, extensive pruning will be required due to the large original tree crown, which may hinder the tree's ability to regain its original appearance after transplanting.	-	Retain	LandsD	LandsD	-
T136	Artocarpus hypargyreus	白桂木	8	225	6	Medium	Poor	Average	Average	Low	Poor tree form and the tree is located on the slope. It is difficult to dig out appropriate root ball for transplantation.	RPPHK	Retain	LandsD	LandsD	-

Tree ref.	Species				Measurements		Measurements		Measurements		Measurements		Measurements				Amenity value ³ Form Health condition Structural condition Suitability for Transpla	uitability for Transplanting ⁴	_Conservation	Recommendation	Maintenance department to provide comments on TPRP		Additional
no.1	Scientific name	Chinese name Height name Crown name Cr		/ Remarks	status ⁵	(Retain / Transplant / Remove)	Before	After	remarks														
T138	Artocarpus hypargyreus	白桂木	6	120	5	Medium	Poor	Average	Average	Low	Poor tree form and the tree is located on the slope. It is difficult to dig out appropriate root ball for transplantation.	RPPHK	Retain	LandsD	LandsD	-							
T177	Ficus microcarpa	細葉榕	15	2000	20	High	Average	Average	Average	Low	The tree is located on the slope and concrete. It is difficult to dig out appropriate root ball for transplantation. In addition, extensive pruning will be required due to the large original tree crown, which may hinder the tree's ability to regain its original appearance after transplanting.	-	Remove	LandsD	LandsD	-							
T350	Ficus microcarpa	細葉榕	17	1085	22	High	Average	Average	Average	Low	The tree is located on the slope and concrete. It is difficult to dig out appropriate root ball for transplantation. In addition, extensive pruning will be required due to the large original tree crown, which may hinder the tree's ability to regain its original appearance after transplanting.	-	Remove	LandsD	LandsD	-							
T351	Artocarpus hypargyreus	白桂木	9	240	6	Medium	Poor	Average	Average	Low	Poor tree form and the tree is located on the slope. It is difficult to dig out appropriate root ball for transplantation.	RPPHK	Retain	LandsD	LandsD	-							

Tree ref.	Species		Measurements		Amenity value ³	Form Health condition Structural		Silitability for Transhianting		Conservation	Recommendation Maintenance department to provide comments on TPRP		Additional			
no.1	Scientific name	Chinese name	Height (m)	DBH ² (mm)	Crown spread (m)	(High / Medium / Low)	(Good	/ Average	/ Poor)	(High / Medium / Low)	Remarks	status ⁵	(Retain / Transplant / Remove)	Before	After	remarks
T372A	Artocarpus	白桂木	7	95	4	Medium	Average	Average	Average		The tree is located on the slope.	RPPHK	Retain	LandsD	LandsD	-
	hypargyreus										It is difficult to dig out					
											appropriate root ball for					
											transplantation.					
T723	Ficus	細葉榕	15	1800	22	High	Good	Average	Average		The tree is located on the slope	-	Remove	LandsD	LandsD	-
	microcarpa										and concrete. It is difficult to dig					
											out appropriate root ball for					
											transplantation. In addition,					
											extensive pruning will be					
											required due to the large original					
											tree crown, which may hinder					
											the tree's ability to regain its					
											original appearance after					
											transplanting.					

Note

- 1. There are no trees within site boundary in the Register of Old and Valuable Trees.
- 2. DBH of a tree refers to its diameter at breast height (i.e. measured at 1.3 m above ground level).
- 3. Amenity value of a tree should be 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.
- 4. Assessment shall take 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).
- 5. Conservation status is based on the rarity and protection status of the species under relevant ordinances in Hong Kong, such as
 - RPPHK Species included in AFCD 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; and
 - IUCN:VU "Vulnerable" under IUCN Red List of Threatened Species.

PROJECT SCOPE AND NATURE

 $$\operatorname{\textsc{The}}$$ proposed scope of the remainder (Phase 2 works) of 776CL comprises –

- (a) formation of about 1.3 hectares works site;
- (b) construction of associated retaining walls and slopes; and
- (c) carrying out drainage works.
- 2. The location, site plan and sections of the proposed works are at

 Annex 1 to Enclosure 3.
 - 3. We plan to commence the proposed works upon obtaining approval from the Legislative Council Finance Committee (FC). It is expected that the proposed works will be completed in around one and a half years and the formed land will be handed over to the Hong Kong Housing Authority (HKHA) for construction of public housing. The returned tender price has been reflected in the estimated cost of the proposed project. We will commence the works after obtaining FC's funding approval.

JUSTIFICATION

- 4. To complement the public housing developments at Kam Tin South, Yuen Long, 776CL is carried out in two phases. The works of Phase 1, including the site formation and infrastructure works for the public housing developments at Sites 1, 4a-1 and 6 of Kam Tin South, Yuen Long, were upgraded to Category A in 2021 with the approved project estimate of \$907.1 million in money-of-the-day (MOD) prices. The works of Phase 1 (858CL) commenced in 2021, the formed lands have also been handed over to HKHA in phases since 2023. The basic information of the works of Phase 1 and key development parameters of the related public housing developments are at Annex 2 and Annex 3 to Enclosure 3 respectively.
- 5. The works of Phase 2 works include site formation and infrastructure works for the public housing development at Site 4a-2 of Kam Tin South,

/Yuen

\$ million

Yuen Long. We take forward the works of Phase 2 to provide formed land and construct associated infrastructure for the associated public housing development. The key development parameters and the conceptual plan of the development are at **Annex 4** and **Annex 5** to **Enclosure 3** respectively.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the proposed works to be \$43.8 million in MOD prices, broken down as follows –

		(in MOD prices)
(a)	Site formation and associated works	19.9
	(i) site formation	13.5
	(ii) associated retaining walls and slopes	6.4
(b)	Drainage works	14.3
(c)	Consultants' fee	0.9
	(i) contract administration ¹	0.6
	(ii) management of resident site staff (RSS)	0.3
(d)	Remuneration of RSS	4.8
(e)	Contingencies	3.9
	Total	43.8

7. The design of site formation works is affected by various factors, including the location of the site, terrain, geotechnical conditions, and the proposed site formation levels, etc. Therefore, the cost of site formation and associated works varies across different projects. To suit the future ground level of the adjoining public housing Site 4a-1, we propose the site formation level of Site 4a-2 at 7.5 metres above Principal Datum to achieve the pedestrian and vehicular connectivity between two sites. As mentioned in paragraphs 1(a) and (b) above, for the proposed site formation and associated works (including the construction

/of

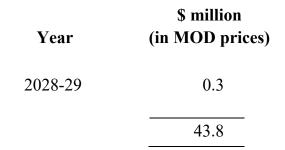
Including administration of site progress, quality and expenditure, etc.

of retaining walls and slopes), the construction cost is about \$18.8 million (in September 2024 prices), i.e. the unit cost is about \$14.4 million per hectare (in September 2024 prices). To compare with the unit cost of about \$4.5 million per hectare (in September 2024 prices) of another similar recent project (850CL²), the two projects involve different height of earth filling. For example, 850CL with the maximum height of earth filling of about 0.3 metres (m) only, and the average height of earth filling of the proposed works of about 1.3 m. Therefore, we consider the current estimated unit cost of the proposed works reasonable.

- 8. Besides, if comparing with the other two proposed works projects in this paper (883CL at Enclosure 1 and 880CL at Enclosure 2), this proposed project is to raise the ground level on relatively flat land to provide a suitable site platform to HKHA for public housing construction, mainly involving earth filling of an average height of about 1.3 m and a retaining wall of maximum height of about 2.5 m. 883CL and 880CL are to form site platforms on the existing hillside, including the construction of a terraced platforms built against the hillside and the construction of relatively large-scale retaining walls and slope works involving the removal of part of the existing hillside and the construction of larger-scale retaining walls and slope works, with the level difference between the highest and lowest points of the site being more than 40 m. As 883CL and 880CL are of similar nature and scale, therefore four similar recent public works projects (848CL, 771CL, 778CL and 811CL) are selected for comparison, while another recent project (850CL) similar to this proposed project is selected for comparison.
- 9. We propose to engage consultants to undertake contract administration and site supervision for the proposed works. A breakdown of the estimates for consultants' fees and RSS costs by man-months is at **Annex 6 to Enclosure 3**.
- 10. Subject to funding approval, we plan to phase the expenditure as follows –

Year	\$ million (in MOD prices)	
2025-26	18.4	
2026-27	21.8	
2027-28	3.3	/Year
		/ I cal

² **850CL** – Site formation and infrastructure works for public housing development at Choi Shun Street, Sheung Shui (2023).



- 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 2025 to 2029. Civil Engineering and Development Department (CEDD) will deliver the proposed works under New Engineering Contract³ (NEC). The contract will provide for price adjustments.
- 12. We estimate the annual recurrent expenditure arising from the proposed project to be about \$0.1 million.
- 13. The site of proposed works is located to the east of Kam Po Road. We have to carry out site formation works and construct associated retaining walls and slopes to form platform. To reduce the overall construction cost, HKHA will work cooperatively in the building design and architectural layout of public housing to reduce the extent and height of retaining walls. After we have enhanced the site formation design, not only the construction cost and the generation of inert construction wastes are reduced, but also the construction period is shortened so that the works can be completed as early as possible and the formed land for the development can be provided as soon as possible. During the detailed design stage, HKHA will continue working collaboratively with CEDD to further enhancing the design of the site formation works so as to reduce construction costs.

PUBLIC CONSULTATION

14. CEDD briefed the Kam Tin Rural Committee and the Pat Heung Rural Committee on the proposed works on 12 December 2024 and obtained their support. CEDD consulted the Housing Committee of the Yuen Long District Council on 20 December 2024 and obtained its support.

/15.

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

15. We briefed the Members of the Legislative Council Panel on Housing on 3 February 2025 on the proposal to upgrade **776CL** to Category A. The Panel supported the submission of the funding proposal for the proposed works to the Public Works Subcommittee for consideration. We provided supplementary information to the Panel on Housing on 12 February 2025.

ENVIRONMENTAL IMPLICATIONS

- 16. The proposed project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). CEDD has carried out a Preliminary Environmental Review (PER) for the project. The PER concluded that with the implementation of mitigation measures, the proposed project would not cause any adverse environmental impacts in the long run.
- 17. CEDD has stipulated conditions in the contract to require the contractor to implement appropriate mitigation measures and contain the environmental impacts during the construction period, in order to ensure compliance with established standards and guidelines. These measures include use of low-noise construction equipment and methods, silencers, mufflers, acoustic lining or shields for noisy construction activities to mitigate construction noise; frequent cleaning and watering of the work sites and the provision of sprinklers and wheel-washing facilities to minimise spread of dust; the use of temporary site drains and sedimentation tanks to collect site run-off for on-site treatment before discharge. We have included the associated cost in the project estimate for implementing various environmental mitigation measures.
- 18. At the planning and design stages, CEDD has considered different design options 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 to public fill reception facilities ⁴ (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 the generation of construction waste.
- 19. At the construction stage, CEDD will require the contractor to submit a plan setting out the waste management measures for approval by the Government. The plan is required to include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. CEDD will ensure that the day-to-day

operations

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

operations on site comply with the approved plan. CEDD will require the contractor to separate the inert portion from the 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 for disposal through a trip-ticket system.

20. CEDD estimates that proposed project will generate in total about 40 720 tonnes of construction waste. Of these, CEDD will reuse about 29 380 tonnes (72%) of inert construction waste on site and deliver 4 750 tonnes (12%) of inert construction waste to PFRF for subsequent reuse. CEDD will dispose of the remaining 6 590 tonnes (16%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated at about \$1.7 million for the proposed 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

21. The proposed project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures in the new list of proposed grading items, and Government historic sites identified by the Antiquities and Monuments Office.

TRAFFIC IMPLICATIONS

22. CEDD has conducted a Traffic Impact Assessment (TIA) for the proposed public housing developments at Sites 1, 4a (including 4a-1 and 4a-2) and 6 of Kam Tin South, Yuen Long. According to the findings of the TIA, we propose to carry out a series of road improvement works which have been included into the Kam Tin South advance works⁵ and Phase 1 works⁶. The public road networks in the vicinity will be able to accommodate the traffic and transport needs arising from the development after completion of the associated road improvement works. During the construction period of the proposed works, CEDD will implement temporary traffic arrangements and appropriate control measures on construction vehicles to minimise traffic impact of the proposed works on nearby roads.

/LAND

⁸⁰⁴CL - Site formation and infrastructure works for Development at Kam Tin South, Yuen Long – Advance Works was approved by FC on 15 June 2018. Details are in LegCo Paper No. PWSC(2018-19)17.

Road improvement works carried out under the works of Phase 1 (858CL) are at paragraphs 1(b) to (f) of Annex 2 to Enclosure 3.

LAND ACQUISITION

- 23. To complement the proposed project, we will resume about 0.9 hectares of private land, and clear about 0.4 hectares of Government land. The Government conducted the pre-clearance surveys within the proposed works area on 22 February 2019 and 6 June 2023 respectively. About six families (involving about seven persons) will be affected, and about 22 temporary structures will be removed. The Government will offer statutory compensation under relevant ordinances, and various prevailing administrative ex-gratia allowances to affected eligible land owners and users, and rehousing arrangements to affected eligible domestic households, in accordance with the prevailing general ex-gratia compensation and rehousing arrangements.
- 24. The land acquisition cost, estimated at about \$127 million including payments to eligible land owners and users. The expenditure will be charged to **Head 701 Land Acquisition.** A breakdown of the land acquisition cost of the proposed project is at **Annex 7 to Enclosure 3**.

BACKGROUND INFORMATION

- 25. CEDD engaged consultants in November 2014 to undertake the detailed design and site investigation for 776CL at a cost of about \$0.65 million in MOD prices for the Phase 2 works. The cost was 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". The related detailed design and investigation works can help finalise the project scope and the cost estimate for seeking Legislative Council's funding approval.
- 26. On 15 January 2021, FC approved upgrading the works of Phase 1 site formation and infrastructure works of **776CL** to Category A as **858CL**, entitled "Site formation and infrastructure works for the public housing developments at Kam Tin South, Yuen Long Phase 1", with approved project estimate of \$907.1 million in MOD prices to carry out associated site formation and infrastructure works.
- 27. About 118 trees are located within the site boundary of the Phase 2 works. The proposed work will involve the felling of 118 trees, all the trees to be felled are common species that are not of particular interest⁷. Together with

Trees of particular interest are defined in paragraph 3.3 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 and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;

1 318 trees to be felled under Kam Tin South advance works and 1 286 trees to be felled under the works of Phase 1, we will totally plant about 346 trees and about 7 500 shrubs under the works of Kam Tin South as a whole.

28. We estimate that Phase 2 works of **776CL** will create about 35 jobs (25 for labours and another 10 for professional or technical staff) providing a total employment opportunity of about 480 man-months.

⁽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 Agriculture, Fisheries and Conservation Department;

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

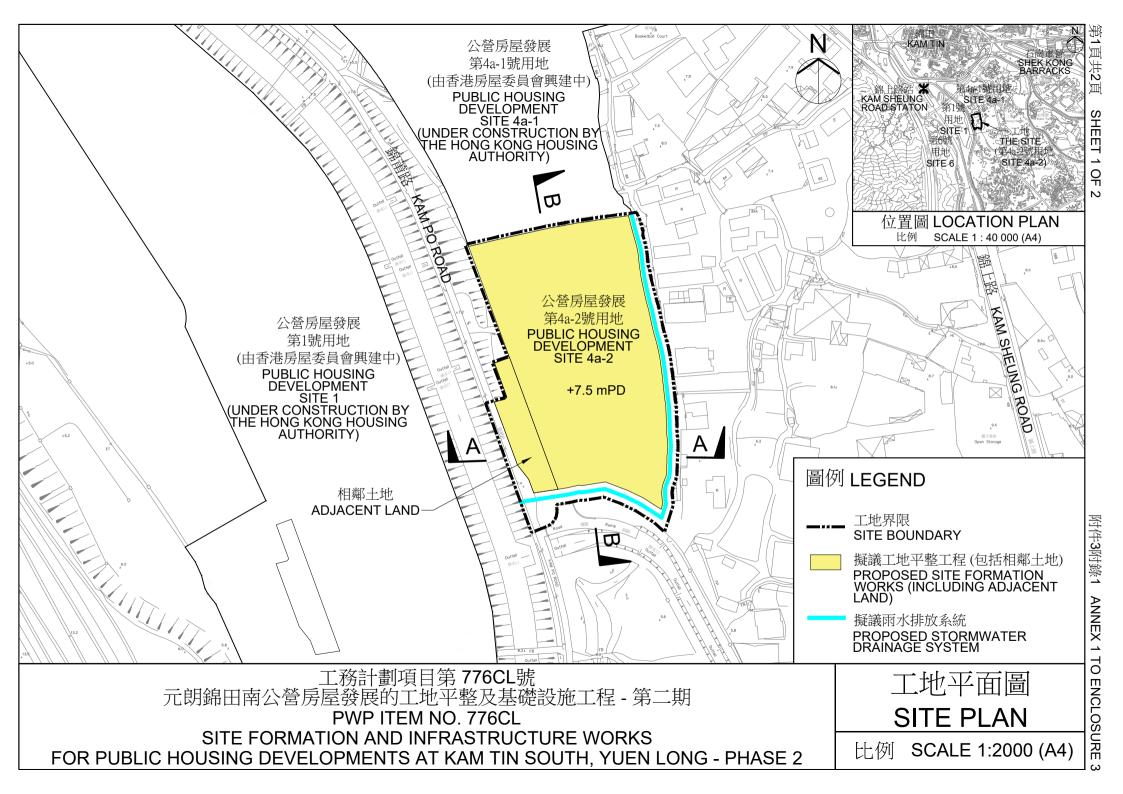
⁽g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);

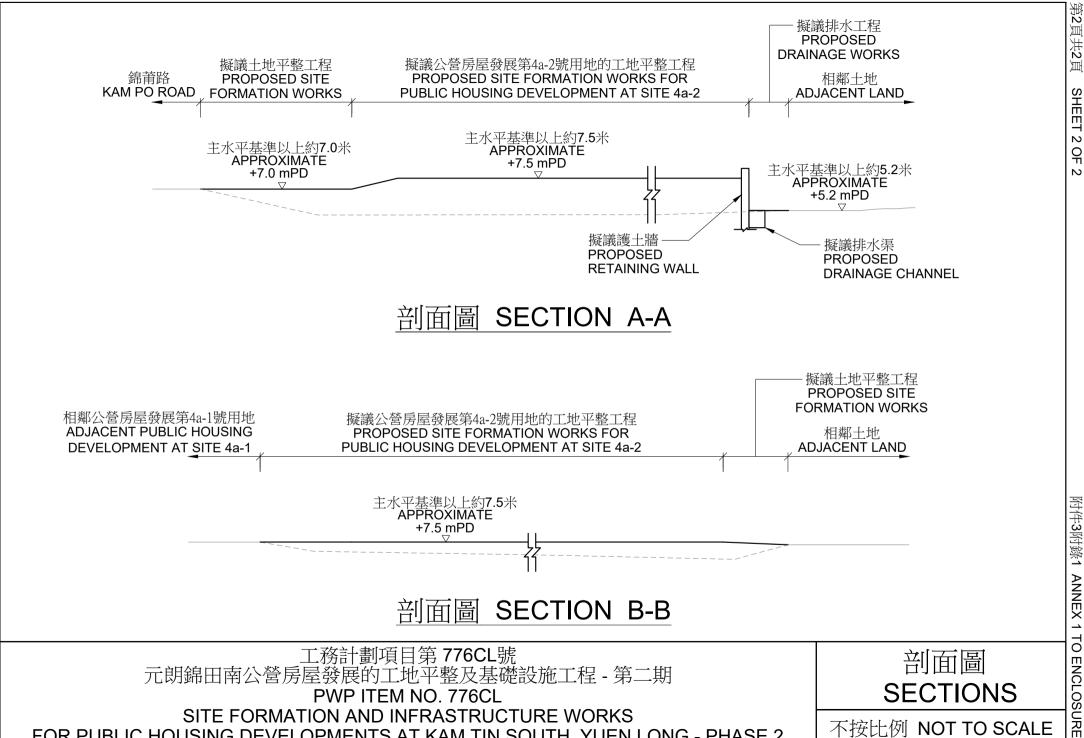
⁽h) Well-known Fung Shui trees;

⁽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.





FOR PUBLIC HOUSING DEVELOPMENTS AT KAM TIN SOUTH, YUEN LONG - PHASE 2

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PROJECT SCOPE AND NATURE

- 1. The project scope comprises
 - (a) site formation works and construction of associated retaining structures and slopes;
 - (b) construction of a single two-lane carriageway with footpaths connecting to Tung Wui Road at Site 1;
 - (c) widening of a section of Kam Po Road from an existing single lane road to a single two-lane carriageway with footpaths and a cycle track;
 - (d) improvement works at junction of Tung Wui Road and Kam Po Road;
 - (e) construction of a lay-by and road improvement works at Kam Ho Road;
 - (f) road improvement works at Tung Wui Road, and provision of a cycle parking area near Site 6; and
 - (g) ancillary works including drainage, sewerage, water supply and landscaping works.

FINANCIAL IMPLICATIONS

2. The capital cost of the proposed works is about \$907.1 million in money-of-the-day (MOD) prices, broken down as follows –

		\$ million (in MOD prices)
(a)	Site formation and construction of retaining structures and slopes	618.2
(b)	Road works	31.2
(c)	Ancillary works including drainage, sewerage, water supply and landscaping works	93.0
(d)	Consultants' fee for	8.7
	(i) contract administration	5.1
	(ii) management of resident site staff (RSS)	3.6
(e)	Remuneration of RSS	73.6
(f)	Contingencies	82.4
	Total	907.1

PWSC(2024-25)23 Annex 3 to Enclosure 3

Key development parameters^(Note 1) of the public housing development at Site 1, 4a-1 and 6 of Kam Tin South, Yuen Long

Site area	A total of about 13 hectares					
Total gross floor area	About 390 000 m ²					
Building height restriction	69 metres above Principal Datum					
No. of domestic blocks	22					
No. of flats	About 8 400					
Projected population	About 25 700					
Completion date	In phases from 2027					
Non-domestic facilities ^(Note 2)	Ancillary parking spaces, local open spaces, kindergartens, recreational, welfare (Note 3) and retail facilities, wet market, etc.					

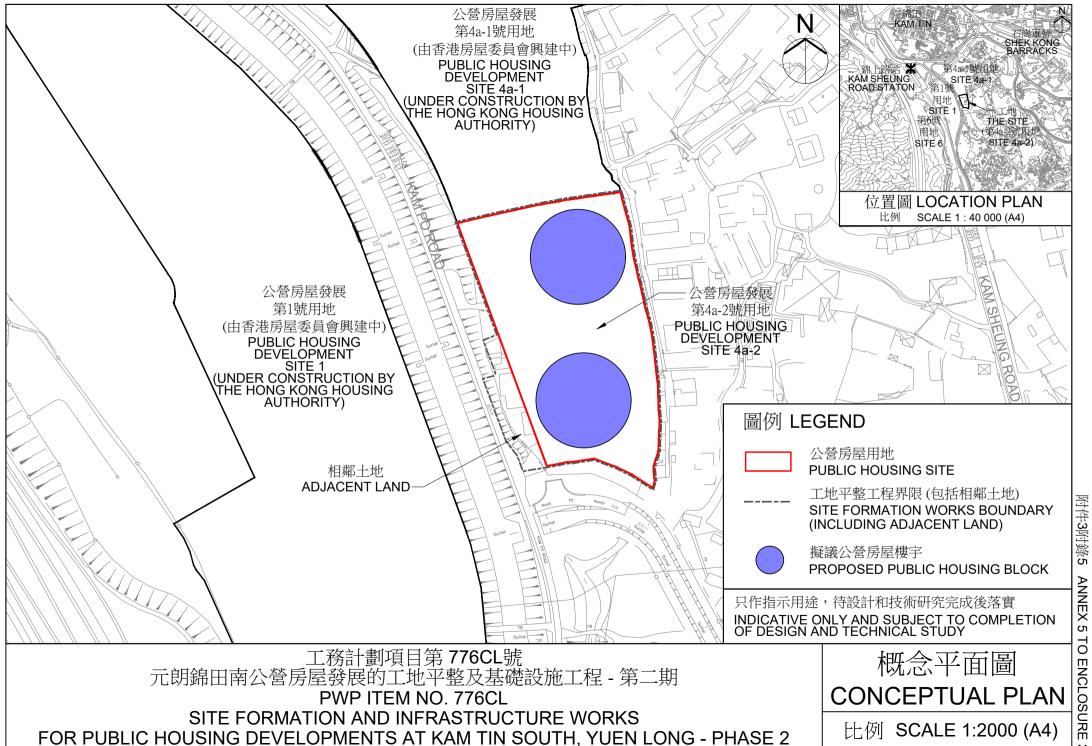
- Note 1: The above development parameters are based on the current latest design.
- Note 2: The "Government, Institution or Community" sites in Sites 1 and 6 with a total area of about 2.4 hectares will be reserved for supporting facilities including primary schools, an electricity sub-station as well as a community complex.
- Note 3: Social Welfare Department preliminary planned to provide the welfare facilities include 1 no. Day Care Centre for the Elderly, 1 no. District Elderly Community Centre, 1 no. Premises of Home Care Service for Frail Elderly Persons, 1 no. Integrated Family Service Centre, 1 no. Centre for Outreaching Team for Ethnic Minorities, 1 no. Community Rehabilitation Day Centre, 1 no. Care and Attention Home for Severely Disabled Persons, 1 no. Long Stay Care Home, 1 no. Supported Hostel for Mentally Handicapped Persons, 1 no. Hostel for Severely Mentally Handicapped Persons, 1 no. Day Activity Centre, 1 no. Integrated Children and Youth Services Centre and 2 nos. Child Care Centre.

PWSC(2024-25)23 Annex 4 to Enclosure 3

Key development parameters of the public housing development at Site 4a-2 of Kam Tin South, Yuen Long

Public Housing Site Area	About 1.1 hectares (Note 1)				
Permitted plot ratio	3				
Building height restriction	69 metres above Principal Datum (including roof top structures)				
No. of domestic blocks	2 (Note 2)				
No. of flats	About 700 (Note 2)				
Projected population	About 2 100 (Note 2)				
Completion date	2030/31				
Non-domestic facilities (Note 3)	Ancillary parking spaces				

- Note 1: The limit of public housing site is at **Annex 5 to Enclosure 3**.
- Note 2: The number of domestic blocks, number of flats and projected population are only preliminary information and will only be finalised upon the completion of the design and technical studies.
- Note 3: Other non-domestic facilities at Sites 1, 4a-1 and 6 are at **Annex 3 to Enclosure 3**.



ENCLOSURE

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2024 prices)

		Estimate man- months	Average MPS* salary point	Multiplier (Note 1)	Estima (\$ mi	
(a) Consultants' fees for contract administration (Note 2)	Professional Technical	- -	- -	-		0.3 0.2
				Sub-total	_	0.5#
(b) Resident site staff	Professional	20	38	1.6		3.0
(RSS) costs (Note 3)	Technical	32	14	1.6		1.7
Comprising –				Sub-total	_	4.7
(i) Consultants' fees for management of RSS					0.2#	
(ii) Remuneration of RSS					4.5#	
				Total	_	5.2

^{*} MPS = Master Pay Scale

Notes

- 1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the staff cost of RSS supplied by the consultants (as at now, MPS salary point 38 = \$93,255 per month and MPS salary point 14 = \$33,405 per month).
- 2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement. The construction phase of the agreement will only be executed upon Finance Committee's approval to upgrade the remainder of 776CL 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 figure marked with # are shown in money-of-the-day prices in paragraph 6 of the main paper of **Enclosure 3**.

Breakdown of land acquisition cost

(I)	Estimated cost for land acquisition		\$ million 113.0
(II)	Estimated cost for land clearance		2.4
	(a) 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.)	0.8	
	(b) Other EGAs (e.g. crop compensation; disturbance allowance for cultivators; EGA for miscellaneous permanent improvements to farms; EGA for shops, workshops, godowns, slipways, schools, churches and ornamental fish breeding undertakings; EGA for open-air/outdoor business undertakings, EGA for clearance of graves, urns (Kam Tags): and shires and EGA for "Tun Fu" ceremonial fee, etc.)	1.6	
(III)	Interest and contingency payment		11.5
		Total	126.9

The above estimated land acquisition cost is based on the prevailing rates as at April 2024. The actual land acquisition costs will be calculated based on the compensation rate applicable on the day of posting the land resumption notice.