

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

**HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT**  
**Recreation, Culture and Amenities – Open spaces**  
**471RO – The Establishment of an Agricultural Park in Kwu Tung South**

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of part of **471RO**, entitled “The Establishment of an Agricultural Park in Kwu Tung South – Phase 1” to Category A at an estimated cost of \$176.6 million in money-of-the-day prices; and
- (b) the retention of the remainder of **471RO** in Category B.

### **PROBLEM**

We need to carry out land formation as well as associated road and infrastructural works for the establishment of the Agricultural Park (Agri-Park) Phase 1 in Kwu Tung South to promote the modernisation and sustainable development of local agriculture.

**/PROPOSAL.....**

## PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Food and Health, proposes upgrading part of **471RO** to Category A at an estimated cost of \$176.6 million in money-of-the-day (MOD) prices for the establishment of the Agri-Park Phase 1.

## PROJECT SCOPE AND NATURE

3. The part of **471RO**, which we propose upgrading to Category A (the proposed works) for the establishment of the Agri-Park Phase 1, comprises –

- (a) formation works for about 7.5 hectares (ha) of land;
- (b) related infrastructures including drainage, sewerage, irrigation, water supply, utilities and street lighting;
- (c) associated park facilities including basic lodging<sup>1</sup> and storage units; and
- (d) construction of about 900 metres (m) long access road and footpaths (including a culvert bridge of about 5 m wide; and two vehicular bridges with associated footpaths of about 20 m and 40 m long respectively) connecting the existing Tsiu Keng Road.

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The location plan of the proposed works is at Enclosure 1.

4. Subject to funding approval of the Finance Committee (FC), we plan to commence construction works in the third quarter of 2019 for completion in stages from the fourth quarter of 2020. To meet this schedule, the Civil Engineering and Development Department (CEDD) plans to invite tenders for the proposed works in around the first quarter of 2019, but the works contract will only be awarded after obtaining funding approval from the FC.

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<sup>1</sup> The basic lodging units aim to provide a resting place for farmers to carry out duties of managing the farm and produce, but are not meant for residential purpose. About 40 temporary lodging units of about 15 square metres (m<sup>2</sup>) in size will be provided in Phase 1. The size of each temporary lodging unit is equivalent to the size of a twenty-foot container. Permanent lodging units would be constructed in Phase 2.

5. We will retain the remainder of **471RO** in Category B, which mainly comprises the construction of related infrastructure (such as irrigation, permanent basic lodging and storage facilities) and roads; establishment of a visitor centre; and land formation works under the remaining phase (i.e. Phase 2) of the Agri-Park. A plan showing the tentative boundary of the whole Agri-Park (covering both phases) is at Enclosure 2. The timetable for Phase 2 will be subject to the progress of, and the operating experience gained in, Phase 1.

## JUSTIFICATION

6. Setting up the Agri-Park is one of the major initiatives underpinning the New Agriculture Policy (NAP). To be managed by the Agriculture, Fisheries and Conservation Department (AFCD), the Agri-Park aims to help nurture agro-technology and knowledge on modern farm management through leasing farmland and providing associated agricultural facilities for farmers to conduct commercial farming. The Agri-Park seeks to accommodate the following groups of the farming sector –

- (a) existing farmers operating within the area of the Agri-Park prior to its establishment;
- (b) farmers displaced by government development projects implemented within the same timeframe of the Agri-Park and who accept the Agri-Park's tenancy terms and conditions; and
- (c) farmers that could meet the Agri-Park's admission criteria.

7. A cluster of about 80 ha of farmland in Kwu Tung South in the New Territories has been identified as the potential site for the Agri-Park. The site is a traditional vegetable growing zone with active crop farming activities. In the Agri-Park, currently active farmland in the site will be preserved for farming purpose as far as practicable and some 50 ha of fallow farmland will be rehabilitated.

8. The area of the Agri-Park covers both government land and privately-owned land. The privately-owned land will be resumed for farming and the associated road works under the Lands Resumption Ordinance (Cap. 124) and the Roads (Works, Use and Compensation) Ordinance (Cap. 370) respectively. Most of the Agri-Park area will be used for agricultural activities, while the remaining part will be used for building infrastructural facilities and roads for supporting the Agri-Park. Taking into account its proposed scale, the Agri-Park is planned to be implemented in two phases. Phase 1 will be developed in a relatively small-scale (with an area of about 11 ha), with a view to enabling commissioning for use as early as possible.

**/FINANCIAL .....**

**FINANCIAL IMPLICATIONS**

9. We estimate the cost of the proposed works to be \$176.6 million in MOD prices, with the following breakdown –

	<b>\$ million (in MOD prices)</b>
(a) Road works	64.6
(b) Related infrastructures (drainage, sewerage, irrigation, water supply, utilities, street lighting, etc.)	37.9
(c) Associated park facilities	35.7
(d) Formation of land	4.4
(e) Consultants' fees for	2.0
(i) contract administration	1.4
(ii) management of resident site staff (RSS)	0.6
(f) Remuneration of RSS	14.3
(g) Contingencies	17.7
Total	<u>176.6</u>

10. We propose engaging consultants to undertake the contract administration and site supervision for the proposed works. A breakdown of the estimates for the consultants' fees and RSS costs is at Enclosure 3.

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

<b>Year</b>	<b>\$ million (MOD)</b>
2019-2020	39.9
2020-2021	71.6
2021-2022	45.8
2022-2023	19.3
	<u>176.6</u>

12. 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 2019 to 2023. We will deliver the proposed works under New Engineering Contract (NEC) form<sup>2</sup> with provision for price adjustments.

13. We estimate the annual recurrent expenditure arising from the proposed works to be about \$8.0 million.

## **PUBLIC CONSULTATION**

14. The public expressed support in the public consultation in 2015 to adopting a more proactive approach towards the modernisation and sustainable development of the local agriculture, including the establishment of the Agri-Park. The North District Council (NDC) was consulted on 27 July 2017 on the implementation of the Agri-Park project. NDC members supported the project and requested the Government to provide more details on land resumption and compensation as well as the management and operation of the Agri-Park. Subsequently, the relevant departments consulted the local stakeholders between July and October 2017, including the Sheung Shui District Rural Committee, local villagers and village representatives, landowners, farmers, representatives from the vegetables marketing industry, relevant business operators and concern groups and explained to the aforesaid parties the specific details of the Agri-Park and issues relating to the proposed road works. The Government reported the outcome of the consultations to NDC at its meeting on 12 October 2017. NDC expressed support to the proposed works. In addition, AFCD and CEDD consulted the Crop Farming Sub-committee of the Advisory Committee on Agriculture and Fisheries and invited representatives from the agricultural sector, farming organisations, green groups and concern groups to express views on the overall design and infrastructure support of the Agri-Park in August and December 2018. The agricultural sector in general supports the objectives and design of the Agri-Park.

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<sup>2</sup> 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. The road scheme for the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) was gazetted on 3 November 2017 and 10 November 2017. During the statutory objection period, a total of 57 objections<sup>3</sup> were received. The objectors were concerned about the necessity and the alignment of the proposed road<sup>4</sup>, the impact of the construction works on existing farmers, farmland and environment, as well as the planning of the entire Agri-Park. After we arranged objection resolving meetings and provided written responses to objectors, two objections were withdrawn while 55 objections remain unresolved. On 27 November 2018, the Chief Executive in Council authorised the proposed road scheme and approved the resumption of land for the establishment of Phase 1. The authorisation notice of the proposed road scheme was gazetted on 21 December 2018 and 28 December 2018.

16. The Advisory Committee on the Appearance of Bridges and Associated Structures<sup>5</sup> was consulted by CEDD and accepted the aesthetic design of the proposed vehicular bridges under the project.

17. The phased development of the Agri-Park and its implementation timetable were reported to the Legislative Council Panel on Food Safety and Environmental Hygiene (FSEH Panel) in 2017 and 2018<sup>6</sup>. A deputation meeting on the Agri-Park was held by the FSEH Panel on 5 October 2018. The FSEH Panel was consulted on the proposed works for the Agri-Park Phase 1 on 8 January 2019. Members supported the submission of funding proposal to the Public Works Subcommittee.

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<sup>3</sup> Three objections are identical to another three objections in content, but are counted as separate ones.

<sup>4</sup> During the objection resolving period, we explained the necessity of construction of the proposed road (a single two-lane carriageway) connecting the Agri-Park with Tsiu Keng Road and Fan Kam Road, in order to meet the long-term operational needs and overall objectives of the Agri-Park. The proposed road would facilitate farmers to transport produce and equipment (such as farming machinery and farm tools). The proposed road would be opened to the public and visitors for farming-related activities such as educational, interactive and experiential activities. To fulfill the need of traffic demand and safety requirement, the proposed road would be designed to a Rural Road type standard of 7.3 m wide single two-lane carriageway in accordance with the Transport Planning and Design Manual (TPDM) issued by the Transport Department.

<sup>5</sup> Comprising representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, academic institutions, the Architectural Services Department, the Highways Department, the Housing Department and CEDD, the Committee is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

<sup>6</sup> Since its announcement of the NAP, we reported the implementation progress of the NAP to FSEH Panel in January 2016, January 2017, July 2017, October 2017, February 2018 and July 2018. (LC Paper Nos. CB(2)767/15-16(03), CB(2)659/16-17(01), CB(2)1857/16-17(01), CB(2)43/17-18(01), CB(2)721/17-18(01) and CB(2)1745/17-18(01)).

## TRAFFIC IMPLICATIONS

18. The Traffic Impact Assessment concluded that the proposed works will not cause any significant traffic impact to the surrounding area.

## ENVIRONMENTAL IMPLICATIONS

19. The project is not a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). An Environmental Review Report (ERR) for Phase 1 has been carried out, including impacts on the air quality, water quality, ecology, landscape, noise and waste management. The ERR concluded that long term environmental impacts could be controlled to within the established criteria. Key environmental mitigation measures include off-site treatment of sewage, compensatory planting by seed collection of affected plant species of conservation importance, and translocation of eggs/larvae of a rare butterfly if found on the identified patch, before commencement of construction works.

20. Mitigation measures, estimated to cost around \$0.4 million in MOD prices, have been included in the estimates. During construction, we will control construction noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures, such as the use of silenced plants or quality powered mechanical equipment, movable barrier and/or semi-enclosures on powered mechanical equipment, erection of noise barrier along the work zone, and provision of solid working platform above watercourses. Protection zones with bright colour fencing would also be set up to protect important vegetation outside but near the works boundary.

21. Measures have been planned in the proposed works and construction sequences to reduce generation of construction waste where possible. In addition, we will require the contractors to reuse inert waste (e.g. materials excavated within site area for backfilling use) on site or in other suitable construction sites as far as possible, in order to minimise disposal of inert waste to public fill reception facilities<sup>7</sup>. We will encourage the contractors to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further minimise the generation of construction waste. The contractors will be required to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste.

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<sup>7</sup> Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

22. At the construction stage, we will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractors to separate inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

23. We estimate that the proposed works will generate in total about 44 800 tonnes of construction waste. Of these, we will reuse about 4 550 tonnes (10 %) of inert construction waste on site and deliver 25 800 tonnes (58%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 14 450 tonnes (32%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites for the proposed works is estimated to be about \$4.7 million (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

## HERITAGE IMPLICATIONS

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

## LAND ACQUISITION

25. We have reviewed the design of the project to minimise the extent of land acquisition. The project requires the resumption of about 79 950 square metres (m<sup>2</sup>) of private land. In addition, about 29 460 m<sup>2</sup> government land will be included in the Agri-Park Phase 1. There are 67 temporary structures to be cleared for implementing the proposed works, of which three are domestic structures being occupied by three families in Lands Department's estimation. Rehousing arrangement in accordance with the prevailing General Ex-gratia compensation and rehousing arrangements and domestic removal allowances will be offered to eligible households. Ex-gratia allowances (EGA) will be paid to the displaced farmers under the current EGA policy.

26. The land acquisition cost, estimated at \$563.5 million, will be charged to **Head 701** "Land Acquisition". A breakdown of the estimated land acquisition cost is at Enclosure 4.

**BACKGROUND INFORMATION**

27. After the public consultation in 2015, the Government announced in the 2016 Policy Address the implementation of the NAP, including the establishment of the Agri-Park. We reiterated this policy commitment in the 2018 Policy Address.

28. We upgraded **471RO** to Category B in September 2016.

29. CEDD engaged a consultant to carry out an engineering feasibility study for the Agri-Park project at an estimated cost of \$1.29 million in MOD prices. The cost was charged to the block allocation **Subhead 7100CX** “New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme”. The relevant feasibility study has been completed.

30. On 20 March 2017, CEDD engaged another consultant to carry out the detailed design and site investigation for the Agri-Park project at an estimated cost of \$10.8 million in MOD prices. The consultancy fees and site investigation works were charged to block allocation **Subhead 7100CX** “New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme”. The detailed design for the Agri-Park Phase 1 has been completed.

31. Of the 366 trees within the boundary of the proposed works, 131 trees will be preserved. The proposed works will require the removal of 235 trees, including 231 trees to be felled and 4 trees to be transplanted, none of them are important trees<sup>8</sup>. We will incorporate planting proposals as part of the proposed works, including planting of 246 trees.

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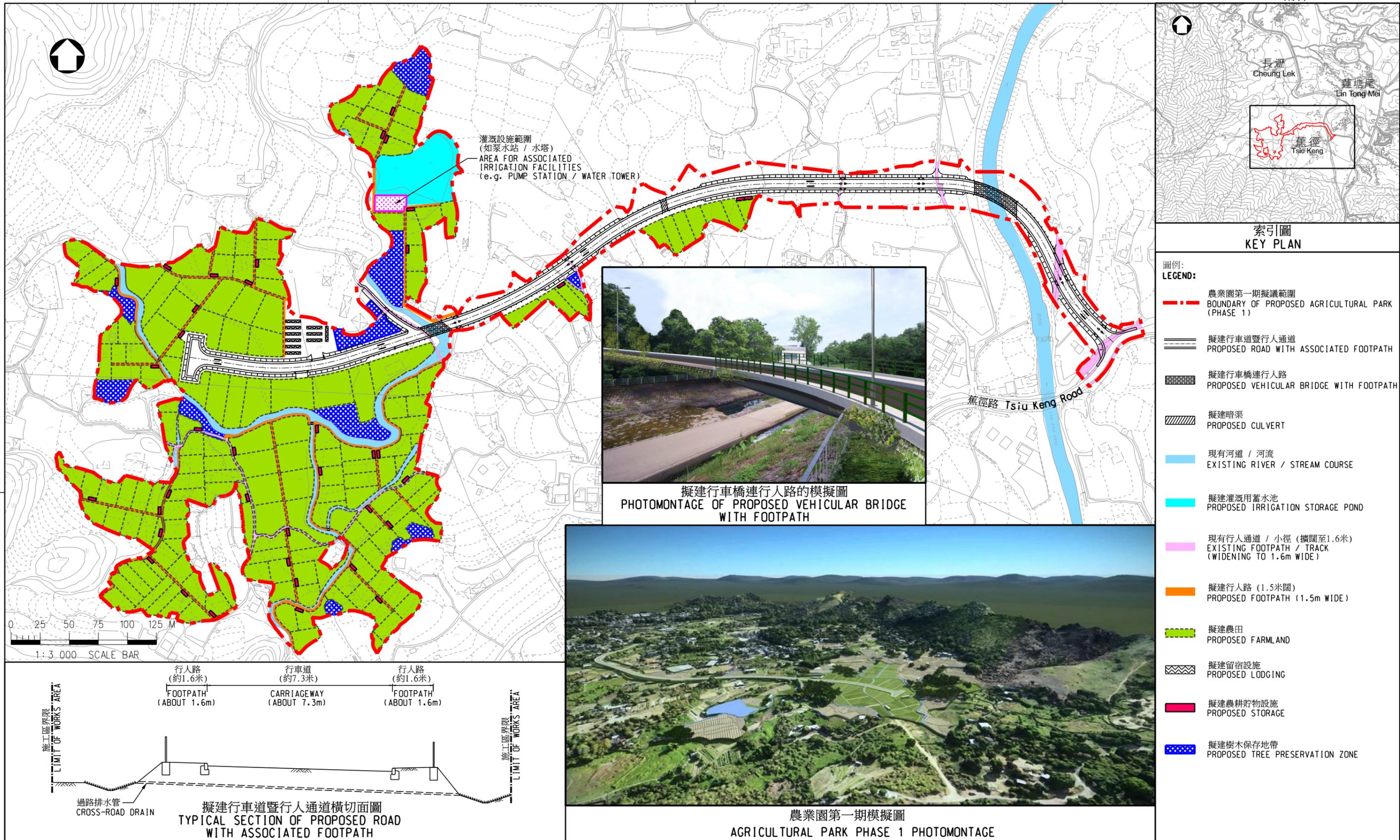
<sup>8</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, 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 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 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m.

32. We estimate that the proposed works will create some 90 jobs (75 for labourers and 15 for professional or technical staff) providing a total employment of 1 850 man-months.

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Food and Health Bureau  
March 2019



灌溉設施範圍  
(如泵水站 / 水塔)  
AREA FOR ASSOCIATED  
IRRIGATION FACILITIES  
(e.g. PUMP STATION / WATER TOWER)



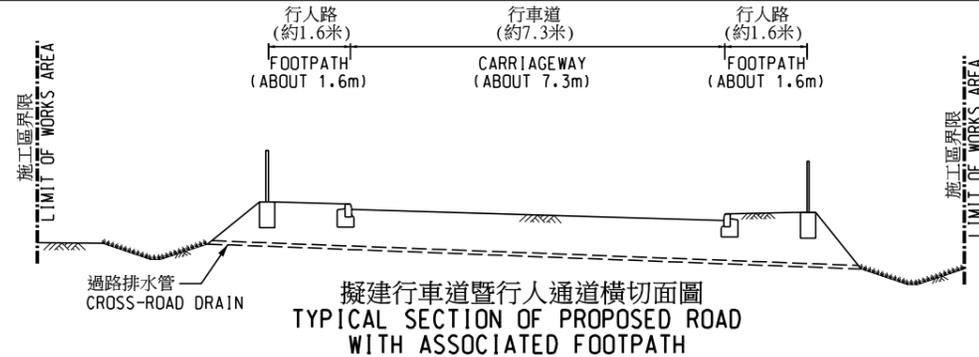
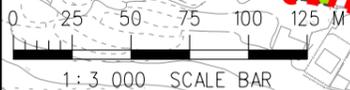
擬建行車橋連行人路的模擬圖  
PHOTOMONTAGE OF PROPOSED VEHICULAR BRIDGE  
WITH FOOTPATH



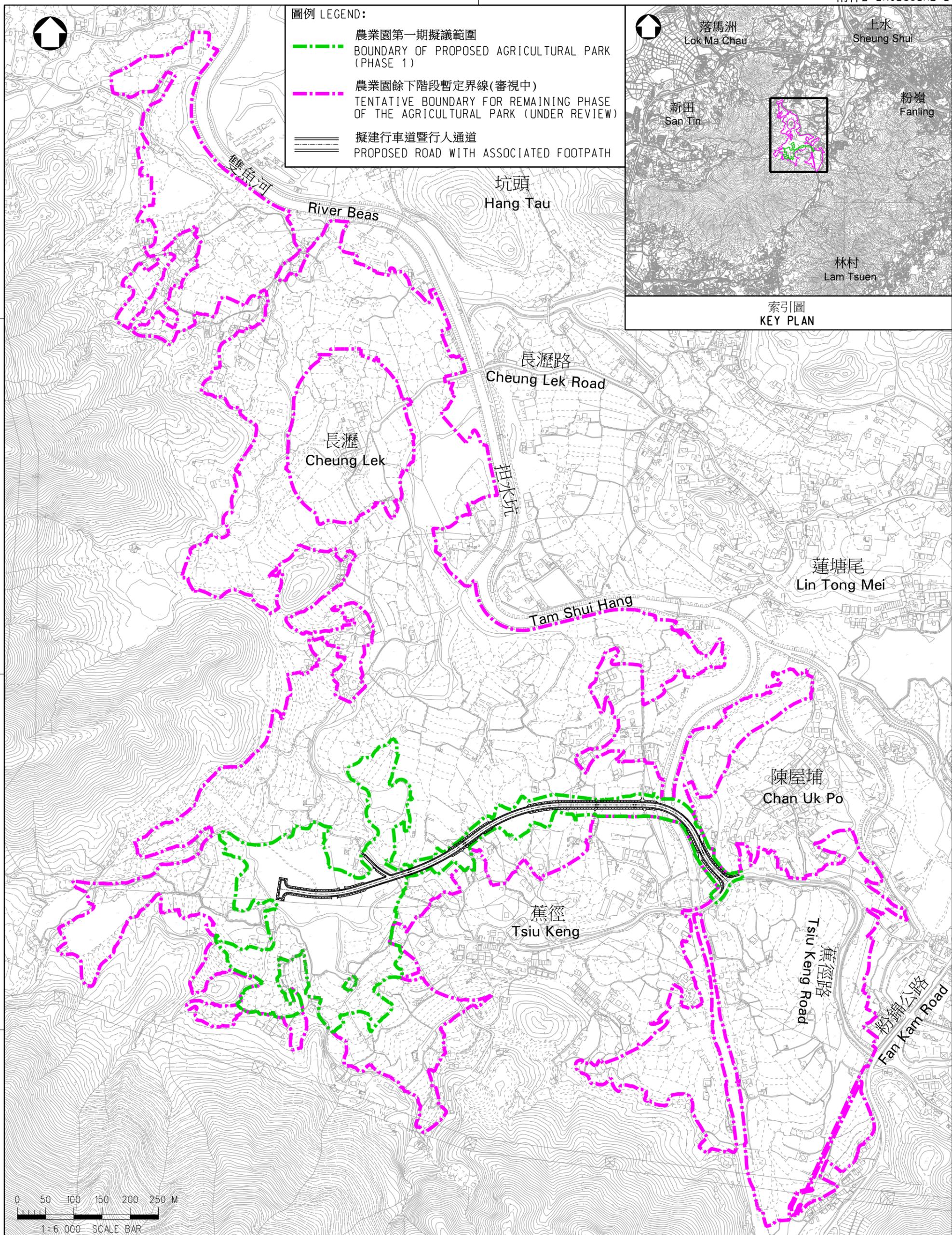
農業園第一期模擬圖  
AGRICULTURAL PARK PHASE 1 PHOTOMONTAGE

索引圖  
KEY PLAN

- 圖例:  
LEGEND:
- - - 農業園第一期擬議範圍  
BOUNDARY OF PROPOSED AGRICULTURAL PARK (PHASE 1)
  - 擬建行車道暨行人通道  
PROPOSED ROAD WITH ASSOCIATED FOOTPATH
  - 擬建行車橋連行人路  
PROPOSED VEHICULAR BRIDGE WITH FOOTPATH
  - 擬建暗渠  
PROPOSED CULVERT
  - 現有河道 / 河流  
EXISTING RIVER / STREAM COURSE
  - 擬建灌溉用蓄水池  
PROPOSED IRRIGATION STORAGE POND
  - 現有行人通道 / 小徑 (擴闊至1.6米)  
EXISTING FOOTPATH / TRACK (WIDENING TO 1.6m WIDE)
  - 擬建行人路 (1.5米闊)  
PROPOSED FOOTPATH (1.5m WIDE)
  - 擬建農田  
PROPOSED FARMLAND
  - 擬建留宿設施  
PROPOSED LODGING
  - 擬建農耕貯物設施  
PROPOSED STORAGE
  - 擬建樹木保存地帶  
PROPOSED TREE PRESERVATION ZONE

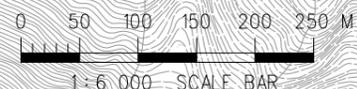
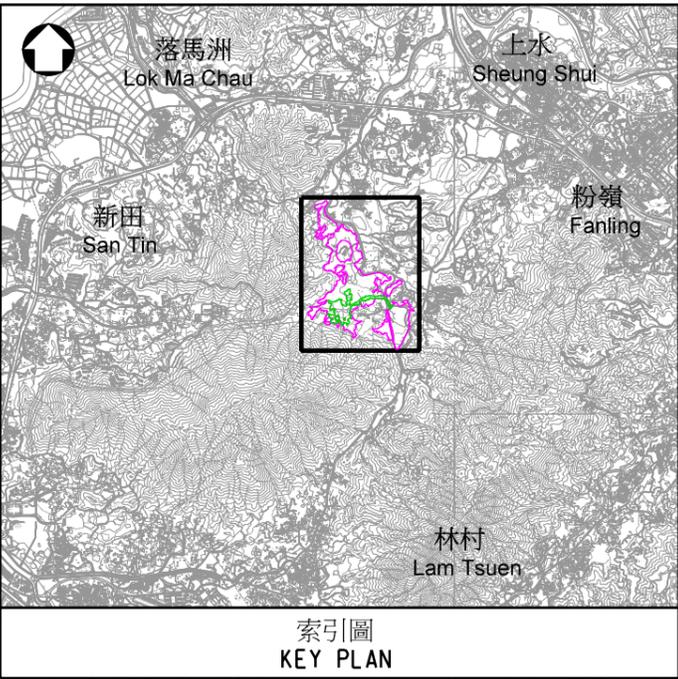


圖則名稱 Drawing Title  
工務計劃項目第471R0號  
在古洞南設立農業園 — 第一期  
— 布局設計圖  
PWP ITEM NO. 471R0  
THE ESTABLISHMENT OF AN AGRICULTURAL PARK IN KWU TUNG SOUTH - PHASE 1  
- LAYOUT PLAN



圖例 LEGEND:

- 農業園第一期擬議範圍  
BOUNDARY OF PROPOSED AGRICULTURAL PARK (PHASE 1)
- 農業園餘下階段暫定界線(審視中)  
TENTATIVE BOUNDARY FOR REMAINING PHASE OF THE AGRICULTURAL PARK (UNDER REVIEW)
- 擬建行車道暨行人通道  
PROPOSED ROAD WITH ASSOCIATED FOOTPATH



圖則名稱 Drawing Title  
 工務計劃項目第471R0號  
 在古洞南設立農業園 — 餘下階段暫定界線  
 PWP ITEM NO. 471R0  
 THE ESTABLISHMENT OF AN AGRICULTURAL PARK IN KWU TUNG SOUTH  
 - TENTATIVE BOUNDARY OF REMAINING PHASE

**471RO (Part) – The Establishment of an Agricultural Park  
in Kwu Tung South – Phase 1**

**Breakdown of the estimates for consultants’ fees and resident site staff costs  
(in September 2018 prices)**

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants’ fees for Contract administration (Note 2)	Professional	-	-	-	0.90
	Technical	-	-	-	0.38
	Sub-total				1.28#
(b) Resident site staff (RSS) costs (Note 3)	Professional	54	38	1.6	7.08
	Technical	136	14	1.6	6.25
	Sub-total				13.33
Comprising –					
(i)	consultants’ fee for management of RSS			0.51#	
(ii)	remuneration of RSS			12.82#	
	<b>Total</b>				<b>14.61</b>

\* MPS = Master 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 salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month).
2. The consultants’ staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the investigation, design and construction of **471RO**. The construction phase of the assignment will only be executed upon Finance Committee’s approval to upgrade part of **471RO** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

**Remarks**

The figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 9 of this paper.

**471RO (Part) – The Establishment of an Agricultural Park  
in Kwu Tung South – Phase 1**

**Breakdown of Land Acquisition Cost**

	<b>\$ million</b>
<b>(I) Estimated cost for land compensation</b>	483.59
<b>(II) Estimated cost for land clearance</b>	28.68
(a) Ex-gratia allowances (EGA) for domestic occupiers (e.g. EGA for permitted occupiers of licenced structures and surveyed squatters affected by clearance and domestic removal allowance.)	3.67
(b) Other EGAs (e.g. crop compensation, disturbance allowance for cultivators, EGA for miscellaneous permanent improvements to farms, EGA for “Tun Fu” ceremonies fees.)	25.01
<b>(III) Interest and Contingency Payment</b>	51.26
<b>Total</b>	<b>563.53</b>

The above estimated land acquisition cost is based on the prevailing rates as at 10/2018.