

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 705 – CIVIL ENGINEERING

Civil Engineering – Land development

841CL – Site formation and associated infrastructural works for development of columbarium at Siu Ho Wan on Lantau Island

Members are invited to recommend to the Finance Committee the upgrading of **841CL** to Category A at an estimated cost of \$182.0 million in money-of-the-day prices.

PROBLEM

To meet the demand for public niches, we need to carry out site formation and associated infrastructural works to support the proposed columbarium development at Siu Ho Wan on Lantau Island.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Food and Health, proposes to upgrade **841CL** to Category A at an estimated cost of \$182.0 million in money-of-the-day (MOD) prices for the site formation and associated infrastructural works for the proposed columbarium development at Siu Ho Wan on Lantau Island.

PROJECT SCOPE AND NATURE

3. The scope of works of **841CL** comprises –

/(a)

- (a) site formation for the columbarium development at Siu Ho Wan;
- (b) widening and re-alignment of a section of the existing Sham Shui Kok Drive to provide pick-up/drop-off points and footpaths;
- (c) provision of lay-bys and footpaths as pick-up/drop-off points at Sunny Bay Road and Cheung Tung Road;
- (d) construction of drainage works for the site formation area and proposed roads, and sewerage works; and
- (e) construction of ancillary works including waterworks, geotechnical and landscaping works.

4. Plans of the project are at **Annexes 1 to 2**.

5. We plan to commence the proposed works after obtaining funding approval from the Finance Committee for target completion in 4 years, during which the Civil Engineering and Development Department (CEDD) will complete the site formation in around 2.5 years in order to enable the Architectural Services Department (ArchSD) to begin the building works for the columbarium development¹ as early as possible.

6. For the building works on provision of columbarium and related facilities at Siu Ho Wan, separate funding applications will be submitted in due course after the completion of design for columbarium.

JUSTIFICATION

7. With a growing and ageing population in Hong Kong, the number of deaths and cremations has been rising year by year. According to the projection based on the latest demographic data, the number of deaths will reach 75 500 in 2040, an increase by almost 50% as compared with the death toll of 50 653 in 2020. The cumulative number of cremations is estimated to be around 1.2 million in the coming 20 years (from 2021 to 2040). There is a growing demand from the public for facilities and services for handling the cremated ashes of the deceased.

/8.

¹ Subject to completion of columbarium design, it is preliminarily estimated that the construction period is 3 years. In other words, assuming ArchSD can begin the building works in 2023, its target is to complete the columbarium development by 2026.

8. In response to the public demand, the Government is taking forward the burial policy in a three-pronged approach, namely, increasing the supply of public niches, regulating private columbaria² and promoting green burial³. On increasing the supply of public niches, the Government strives to implement the district-based columbarium development scheme under which all districts will collectively share the responsibility of developing columbarium facilities. The sites announced under the scheme include the one at Siu Ho Wan, Lantau Island.

9. The site at Siu Ho Wan⁴, which is located at the western part of Sham Shui Kok Drive and near to the North Lantau Refuse Transfer Station, is available for developing into a columbarium⁵ for providing about 33 500 niches⁶. It is necessary to carry out site formation and associated infrastructural works before proceeding with the columbarium development, including construction of roads to provide pick-up/drop-off points and footpaths, and laying of drainage and sewerage facilities for the columbarium.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$182.0 million in MOD prices, broken down as follows –

/\$ million

² Regarding the regulation of private columbaria, as at 25 May 2021, the Private Columbaria Licensing Board has approved/approved in principle the applications for specified instruments from 22 private columbaria, the sold niches of which are roughly estimated to account for more than half of the total number of private niches sold in the territory. In addition, the applications from 42 private columbaria have been refused/returned to or withdrawn by the applicants.

³ In recent years, the Government has stepped up its efforts to promote green burial by setting up more Gardens of Remembrance, establishing the Green Burial Central Register, and working in concert with various sectors of the community for its popularisation. While the number of green burial cases involving the scattering of ashes of the deceased is on the rise, interment of ashes in columbarium facilities remains a common approach adopted by the general public.

⁴ The size of the site for establishing the concerned columbarium in the Siu Ho Wan Outline Zoning Plan (No. S/I-SHW/2) is 9 300m², which is bigger than the area required for conducting site formation.

⁵ Building works of the proposed columbarium would also provide a Garden of Remembrance and parking spaces inside the columbarium site.

⁶ The Government is actively exploring the feasibility of further increasing the number of niches. More information will be provided in the funding applications for the building works of the columbarium development.

	\$ million (in MOD prices)
(a) Site formation works	3.3
(b) Road works	86.1
(c) Drainage and sewerage works	58.8
(d) Ancillary works including waterworks, geotechnical and landscaping works	17.3
(e) Contingencies	16.5
Total	182.0

11. CEDD will undertake contract administration and site supervision of the project by in-house resources.

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

Year	\$ million (in MOD prices)
2021 – 22	2.0
2022 – 23	21.9
2023 – 24	42.8
2024 – 25	56.6
2025 – 26	30.6
2026 – 27	21.2
2027 – 28	4.0
2028 – 29	2.9
	182.0

13. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2021 to 2029. Subject to funding approval, CEDD will deliver the proposed works under New Engineering Contract⁷ with provision for price adjustments.

14. We estimate the annual recurrent expenditure arising from the proposed works to be about \$1.74 million.

PUBLIC CONSULTATION

15. On 29 November 2016, we briefed the Tsuen Wan District Council⁸ (TWDC) on the proposal of building columbarium facilities at the eastern and western ends of Sham Shui Kok Drive. The TWDC supported the proposal⁹. After review, we incorporated a piece of vacant land adjacent to the western end of Sham Shui Kok Drive into the project to extend the scale of the columbarium development. Upon conducting feasibility study and traffic impact assessment, we confirmed that the extended site at Sham Shui Kok Drive could provide around 33 500 niches. With the consent of the TWDC and the Islands District Council (IsDC) at the meetings on 30 January and 12 February 2018 respectively, the extended development was incorporated into the Siu Ho Wan Outline Zoning Plan (No. S/I-SHW/2) which was approved in 2019.

16. In March 2020, we issued an information paper on the latest progress of the extended columbarium development at the western end of Sham Shui Kok Drive to the TWDC and received no objection. On 29 December 2020, we organised a site visit for TWDC members.

/17.

⁷ 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 between contracting parties.

⁸ The site at Siu Ho Wan is situated at north Lantau and is within Tsuen Wan District.

⁹ The design proposal at that time included two sites (one at the eastern end and the other at the western end of Sham Shui Kok Drive) which could provide 26 000 niches in total. The TWDC supported the proposal and there were views suggesting the Government to concentrate the facilities using the site at the western end and its adjacent vacant land and to look into the feasibility of building more niches.

17. In response to the concerns raised by some IsDC members on the traffic implications, we issued information papers on the project to the IsDC in December 2016, January 2017 and June 2020 for members' reference. A site visit was also organised for IsDC members on 5 January 2017. We did not receive any objection against the project from the IsDC.

18. The road scheme of the project was gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 12 June 2020. No objection was received. Subsequently, the road scheme was authorised on 18 December 2020.

19. We consulted the Legislative Council Panel on Food Safety and Environmental Hygiene on 20 April 2021. Members supported submitting the funding proposal to the Public Works Subcommittee. On 26 May 2021, we provided supplementary information to the Panel as requested by members at the meeting.

ENVIRONMENTAL IMPLICATIONS

20. The project is not a designated project under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). Preliminary Environmental Review (PER) was conducted for the project. The PER concluded that the project will not cause long-term adverse environmental impacts. We undertake to provide the mitigation measures as recommended in the PER during construction stage, including frequent cleaning and watering of the work sites and the provision of wheel-washing facilities. We have included in the project estimate the cost to implement the mitigation measures.

21. At planning and design stages, CEDD have considered design levels and layout of the proposed site formation so as to reduce the generation of construction waste where possible. In addition, CEDD will require the contractors to reuse inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste to public fill reception facilities¹⁰. CEDD will encourage the contractors to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further reduce generation of construction waste.

/22.

¹⁰ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

22. At the construction stage, CEDD will require the contractors 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. CEDD will ensure the day-to-day operations on site comply with the approved plan. CEDD will require the contractors 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 public fill reception facilities and landfills respectively through a trip-ticket system.

23. We estimate that the proposed works will generate about 33 500 tonnes of construction waste. Of these, we will reuse about 2 700 tonnes (8%) of inert construction waste on site and deliver about 14 600 tonnes (44%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 16 200 tonnes (48%) of non-inert construction waste at landfills. The total cost for disposal for the construction waste at public fill reception facilities and landfill sites is estimated to be about \$4.28 million for the project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities 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

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

LAND ACQUISITION

25. The project does not require any land acquisition.

/TRAFFIC

TRAFFIC IMPLICATIONS

26. The traffic impact assessment study has been completed. According to the study, the additional traffic and pedestrian volume arising from the proposed columbarium development during the Ching Ming Festival, Chung Yeung Festival¹¹ and ordinary days¹² could be managed with the implementation of appropriate traffic and transport arrangements. After the commissioning of the columbarium facilities, the Food and Environmental Hygiene Department (FEHD) will work closely with the Hong Kong Police Force (HKPF) and other relevant departments to ensure the implementation of effective traffic and crowd control measures, as well as public transport service arrangements for carrying members of the public to and from the columbarium facilities.

27. For the arrangement of metered parking spaces, a total of 23 metered parking spaces would be provided at the pick-up/drop-off points at Sham Shui Kok Drive and Cheung Tung Road. The Government will also provide additional metered parking spaces at the spaces near the proposed columbarium. As a preliminary estimation, more than 10 metered parking spaces could be added, thus providing a total of more than 33 metered parking spaces¹³ outside the columbarium.

/28.

¹¹ To cope with the expected visitor volume during festive periods, we would arrange special bus services at Sunny Bay MTR Station for carrying grave sweepers from the proposed pick-up/drop-off points at Sunny Bay Road to and from the columbarium via Sunny Bay Road, Cheung Tung Road and Sham Shui Kok Drive. Moreover, to facilitate grave sweepers from Tung Chung direction, we would also arrange special bus services from Tung Chung MTR Station to and from the columbarium via Cheung Tung Road and Sham Shui Kok Drive.

During festive periods, there will be vehicle control measures at Sham Shui Kok Drive. Sham Shui Kok Drive will be closed to all vehicles, except special buses, taxis, emergency vehicles and refuse collection vehicles going to North Lantau Transfer Station. Grave sweepers may take special buses or taxis for direct access to the columbarium facilities. Grave sweepers going to the columbarium by private cars should alight at the proposed pick-up/drop-off points at Cheung Tung Road, and walk along Cheung Tung Road and Sham Shui Kok Drive to the proposed columbarium. The walking distance is around 600m.

¹² On ordinary days, families of the deceased who go to the columbarium to deposit ashes in niches or visitors may take New Lantau Bus Route 36 at Tat Tung Road Bus Terminus in Tung Chung. After alighting near Siu Ho Wan, they can walk along Cheung Tung Road and Sham Shui Kok Drive to the columbarium. The walking distance is around 600m. Alternatively, they may go to the columbarium by private cars or taxis.

¹³ Private car drivers can park at these metered parking spaces, which will be closed to serve as pick-up/drop-off points during festive periods.

28. According to the completed technical feasibility study, there will be 10 parking spaces available inside the columbarium site to suit the operational needs. These parking spaces can accommodate 5 private cars (including 1 accessible pick-up/drop-off space), 2 mini buses, 2 emergency vehicles and 1 refuse collection vehicle. The parking spaces inside the site mentioned above is expected to be sufficient to meet the operational needs. As for the views of providing public parking spaces inside the columbarium, ArchSD will study the feasibility of the proposal at the design stage of the columbarium.

29. During the construction stage, we will set up a Traffic Management Liaison Group and work closely with the Transport Department, the HKPF and other stakeholders, with a view to assessing the effectiveness of various proposals on temporary traffic arrangements and minimising the traffic implications caused by the proposed works.

BACKGROUND INFORMATION

30. We upgraded **841CL** to Category B in August 2019.

31. CEDD undertook the detailed design and site investigation for **841CL** at an estimated cost of \$1.94 million in MOD prices. This amount is charged to the Block Allocation **Subhead 5101CX** “Civil engineering works, studies and investigations for items in Category D of the Public Works Programme”. CEDD has substantially completed the detailed design for **841CL**.

32. Of the 154 trees within the boundary of the project, 59 trees will be retained. The proposed project will involve the removal of 95 trees, including 56 trees to be felled and 39 trees to be transplanted. All trees to be removed are not important trees¹⁴. We will incorporate planting proposals of 56 trees under the subsequently proposed columbarium development project.

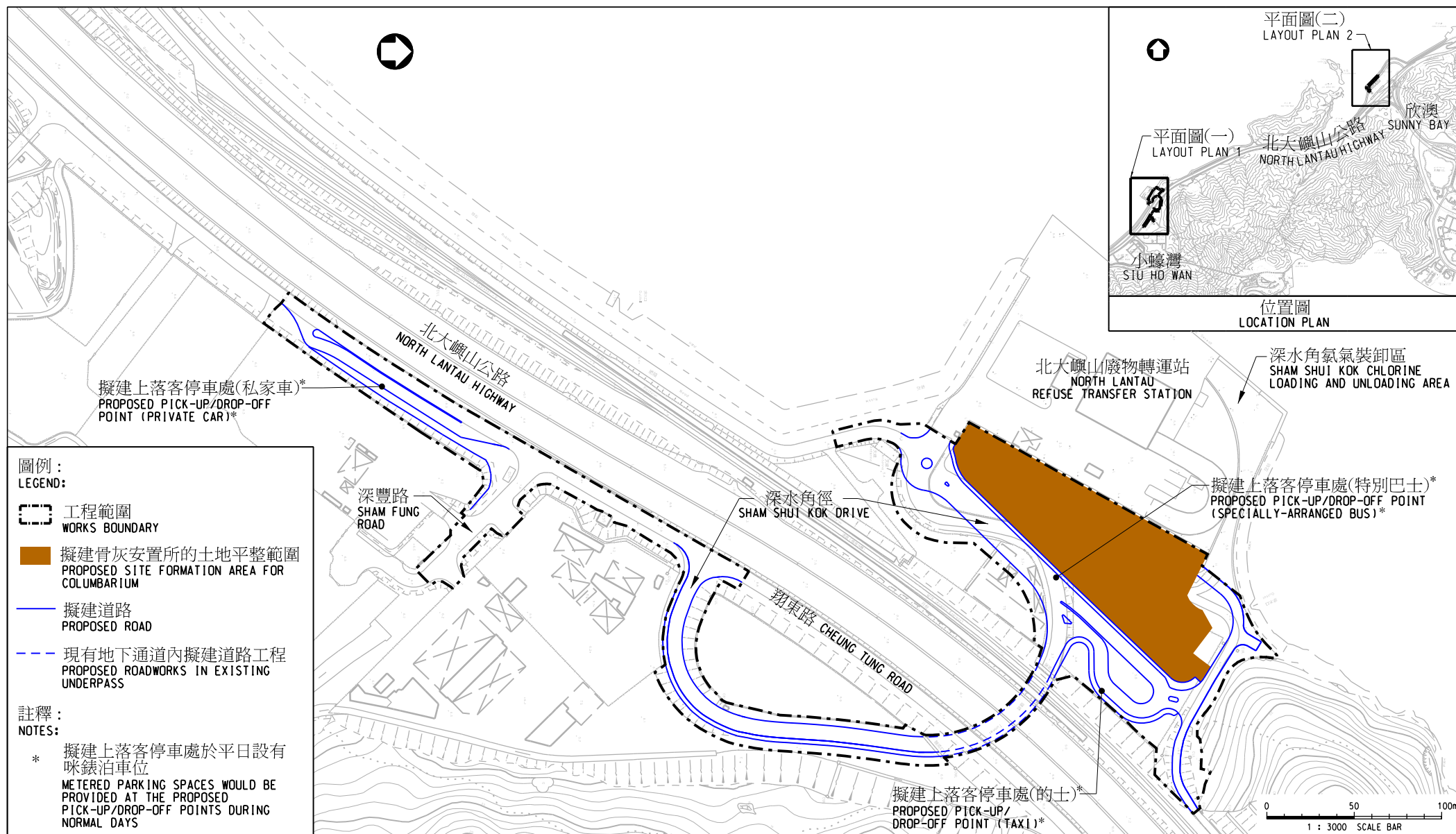
/33.

¹⁴ “Important trees” refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria:

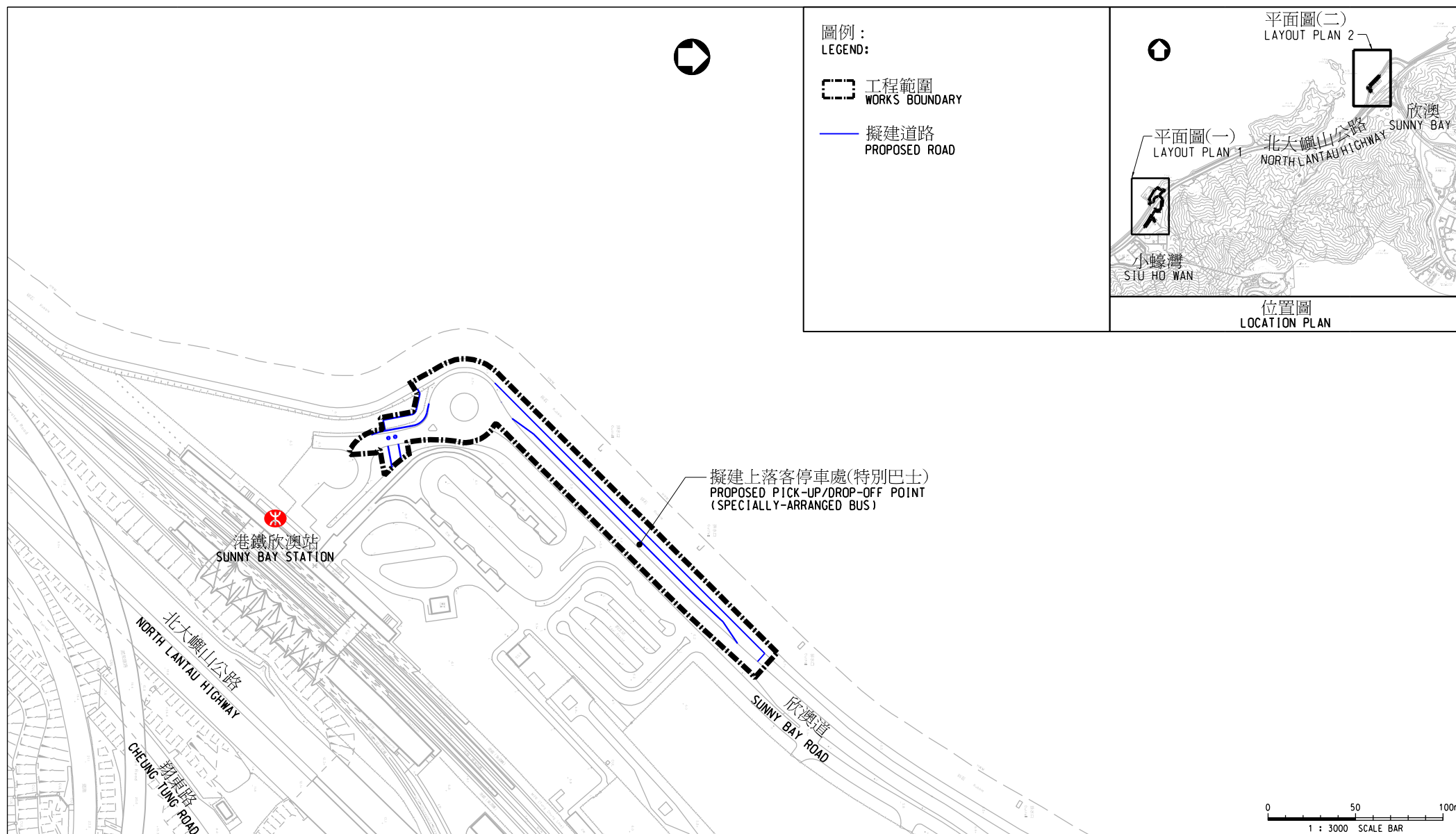
- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding forms (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 a trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with a height or canopy spread equal to or exceeding 25 m.

33. We estimate that the proposed works will create 65 jobs (55 for labourers and another 10 for professional or technical staff) providing a total employment of 2 100 man-months.

Food and Health Bureau
May 2021



工務計劃項目第841CL號
大嶼山小蠔灣興建骨灰安置所的土地平整及相關基礎設施工程 - 平面圖(一)
PWP ITEM NO. 841CL
SITE FORMATION AND ASSOCIATED INFRASTRUCTURAL WORKS FOR DEVELOPMENT
OF COLUMBARIUM AT SIU HO WAN ON LANTAU ISLAND - LAYOUT PLAN 1



工務計劃項目第841CL號
 大嶼山小蠔灣興建骨灰安置所的土地平整及相關基礎設施工程 - 平面圖(二)

PWP ITEM NO. 841CL
 SITE FORMATION AND ASSOCIATED INFRASTRUCTURAL WORKS FOR DEVELOPMENT
 OF COLUMBARIUM AT SIU HO WAN ON LANTAU ISLAND - LAYOUT PLAN 2