

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 - BUILDINGS

Environmental Hygiene—Burial grounds, columbaria and crematoria

**34NB—Reprovisioning of Cremators and Related Works at Kwai Chung
Crematorium**

Members are invited to recommend to the Finance Committee the upgrading of **34NB** to Category A at an estimated cost of \$500.4 million in money-of-the-day prices for the reprovisioning of cremators and the related works at Kwai Chung Crematorium.

PROBLEM

The four existing cremators at Kwai Chung Crematorium have been in use for more than 20 years and have exceeded their expected service life. To ensure the stable provision of cremation services to the public, we need to replace the four cremators and carry out other refurbishment works.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Environment and Ecology, proposes to upgrade **34NB** to Category A at an estimated cost of \$500.4 million in money-of-the-day (MOD) prices for the reprovisioning of cremators and the related works at Kwai Chung Crematorium.

/PROJECT

PROJECT SCOPE AND NATURE

3. Kwai Chung Crematorium, located at 11-13 Wing Hau Street, Kwai Chung, currently has two floors. The ground floor primarily accommodates the service halls, office area and part of the cremation services facilities, and the first floor primarily accommodates cremation services facilities. The proposed project scope comprises –

- (a) demolition of the four existing cremators and reprovisioning of four new cremators;
- (b) conversion of two service halls and their external area (including facades and the canopy);
- (c) conversion and addition of associated operation-related facilities, including addition of an annex block on the open space adjacent to the main building for accommodation of plant rooms as well as uses like maintenance, repairs and storage of equipment, so as to free up space for enlargement of the coffin holding areas;
- (d) conversion of waiting rooms, storage rooms and other ancillary facilities;
- (e) refurbishment of reception, toilets, office area and its associated facilities; and
- (f) retrofitting of building services installations, including air-conditioning, fire service and power supply systems, as well as replacement of two lifts.

4. The works site area is approximately 3 646 square metres. A site and location plan, floor plans, a sectional drawing, an artist's impression and a plan of barrier-free access of the proposed project are at **Enclosures 1 to 5** respectively.

5. We plan to commence the proposed project upon obtaining funding approval from the Finance Committee (FC) for target completion in around three and a half years. To meet the project schedule, we have invited tenders in parallel to enable early commencement of the proposed works. The returned tender prices have been reflected in the cost estimation of the proposed project. The contract will only be awarded upon obtaining FC's funding approval.

/JUSTIFICATION

JUSTIFICATION

Demand and supply of cremation services

6. With a growing and ageing population in Hong Kong, the number of deaths will be rising year by year. Cremation has been the main way chosen by the public to handle deceased bodies. The number of cremations in 2023 was 52 795, accounting for 93% of the death toll (56 776) of the year. According to the Census and Statistics Department's latest population projections, we expect the number of cremations will rise to around 60 000 in 2033, increasing by about 14% as compared with that of 2023, accounting for 95% of the death toll of 2033¹. According to the Census and Statistics Department's latest population projections until 2046, the number of deaths will continue to rise after 2033 and thus the number of cremations is also expected to keep rising.

7. The Food and Environmental Hygiene Department (FEHD) is committed to providing efficient and dignified cremation service, which is an essential public service. Members of the public who choose to handle deceased bodies by way of cremation will have to use the cremation service provided by FEHD². FEHD currently manages six crematoria³ (with a total of 34 cremators) which provide about 57 290 cremation sessions each year under regular operation, and on top of that, additional cremation sessions if necessary through manpower deployment and special operation arrangement⁴. The current charges⁵ for cremation service are \$1,220 for adult cremation and \$650 for child cremation. Since 2000, it has been FEHD's performance pledge a cremation session will be made available to the applicant within the next 15 days from the day of application.

/Specifically

¹ The death toll in 2033 was 63 500 according to the Census and Statistics Department's latest population projections.

² There are currently six temples which are approved by FEHD to carry out cremation therein according to their religious customs. They are operating at a small scale with targets of the related services which are mainly deceased monks or religious practitioners.

³ The six crematoria are Cape Collinson Crematorium, Diamond Hill Crematorium, Wo Hop Shek Crematorium, Fu Shan Crematorium, Kwai Chung Crematorium and Cheung Chau Crematorium.

⁴ The Government is also planning to construct a new crematorium at Wo Hop Shek Cemetery. The new crematorium is expected to provide more than 21 000 cremation sessions annually. The cremators at Fu Shan Crematorium and Diamond Hill Crematorium are expected to reach the end of their service life in a few years. FEHD has also been actively exploring the use of technology to improve the efficiency of cremators to further enhance cremation services.

⁵ The Public Health and Municipal Services (Fees) Regulation (Cap. 132CJ) prescribes that the current fees for cremation services at government crematoria. Any fee adjustments must be scrutinized and approved by the Legislative Council.

Specifically, it will release on each working day the cremation sessions up to the 15th day from the next day for applicants to book according to their needs. This arrangement can facilitate members of the public to choose a cremation session to suit their beliefs, customs (such as choosing an auspicious date) and the schedules of their relatives and friends, etc. Over the past years, this performance pledge has been met and the demand of the public on cremation services has been fulfilled.

Urgency of reprovisioning of cremators at Kwai Chung Crematorium

8. Kwai Chung Crematorium was commissioned in 1979. There are four cremators, two service halls and associated operation-related facilities. The existing cremators, which came into operation in 2003 after reprovision, provide around 7 000 cremation sessions annually under regular operation; with additional cremation sessions provided when in need.

9. According to the supplier of the cremators, each cremator at Kwai Chung Crematorium is expected to provide around 40 000 cremation sessions. For the past 20 years, each cremator at Kwai Chung Crematorium has provided an average of more than 40 100 cremation sessions, which has reached the total number of cremation sessions expected to be provided. As the cremators have reached the end of their expected service life, their stability will deteriorate. In addition, these cremators are of old model. The supply of original spare parts of the core control system as well as the monitoring and data collection system are inadequate, or the production of which has even ceased. This has a major impact on the maintenance and repairs⁶ as well as the continuous operation of the cremators.

Design and operation of new cremators

10. The four new cremators will adopt a fully computerised mode of operation, using up-to-date technologies, with an advanced flue gas filtering system. Latest cremation and air pollution control technologies will be applied to process and filter out waste gases and particles generated during the combustion process, so as to ensure that waste gas emissions are in full compliance with the air quality standards. In addition, the new cremators are to be fitted with a high /temperature

⁶ As preparation work for the reprovisioning of the cremators at Kwai Chung Crematorium has begun, the Government has mainly carried out more urgent and necessary repairs in recent years. In the past five years, the annual revenue was \$9.39 million, \$7.99 million, \$8.70 million, \$10.23 million and \$9.6 million respectively; the maintenance and repair expenses were \$13.8 million, \$19.6 million, \$15.0 million, \$13.2 million and \$11.0 million respectively. Number of maintenance days of Kwai Chung Crematorium were 42, 42, 46, 68 and 46 respectively.

temperature secondary combustion chamber, facilitating more efficient and complete combustion during the cremation process. In terms of real-time monitoring of the operation and emission of the cremators, the cremation room will be equipped with a more advanced computerised monitoring system. We also take this opportunity to switch to town gas as fuel for cremators and introduce more stringent emission limits for Kwai Chung Crematorium. After reprovisioning, Kwai Chung Crematorium will maintain the current level of operation. We will explore with relevant departments separately the possibility to provide additional cremation sessions whilst meeting requirements in various aspects, including environmental requirements.

11. FEHD and other relevant departments are keeping a close eye on the development of cremation technologies in other regions, and exploring the introduction of technologies and equipment in future crematorium projects which can enhance the efficiency of cremation services on the pre-requisite that the safety and environmental requirements are met and the stability of cremation services is not affected, with a view to increasing the number of cremation sessions.

Enhancement of back-of-house cremation facilities and associated operation-related facilities

12. Currently, the space in Kwai Chung Crematorium is limited. In order to rationalise the overall operation and process of cremation services, we propose to construct an annex block on the open space adjacent to the main building to accommodate some of the plant rooms as well as facilities for maintenance, repairs and storage of equipment, freeing up spaces for enlargement of the coffin holding areas in the main building and addressing the operational needs of the crematorium.

13. In addition, the two existing service halls⁷ as well as ancillary and associated facilities like the office area, which have been in use for more than 20 years since their reprovisioning in 2003, are outdated and in need of refurbishment. The proposed project will, through conversion works, enhance the spatial configuration of the service halls, their external area and other ancillary facilities of the crematorium, further improving the routes for visitors and transit of coffins

/within

⁷ Currently, funeral ceremonies (including vigil and encoffining rituals) are mostly conducted in a funeral parlour, while some people may choose to hold a simple farewell ceremony in the farewell room of a hospital or public mortuary. The coffins to be cremated will then be transported to a crematorium, and the service halls therein are usually used for the bereaved family and friends to briefly bid the last farewell to the deceased right before cremation. As the operation hours of the service halls correspond to the cremation sessions available for reservation, the cremation sessions are sufficient for use by all the bereaved family and friends.

within the crematorium, and providing bereaved families a more dignified and solemn environment to bid farewell to the deceased. Refurbishing the office area and its associated facilities will also improve the work environment for the crematorium's staff.

14. During the proposed works period, cremation services at Kwai Chung Crematorium will be suspended. FEHD will release additional cremation sessions through manpower deployment and special operation arrangements, to increase cremation sessions primarily at Cape Collinson Crematorium, Wo Hop Shek Crematorium and Fu Shan Crematorium, to meet service demand.

15. The project should have no impact on the traffic in the vicinity. The services of the adjoining Kwai Chung Columbarium, garden of remembrance and aboriginal cremation facilities as well as other related public funeral services will remain normal.

FINANCIAL IMPLICATIONS

16. We estimate the capital cost of the proposed project to be \$500.4 million in MOD prices, broken down as follows –

	\$ million (in MOD prices)
(a) Site works	5.3
(b) Foundation works	5.3
(c) Building works ⁸	108.3
(d) Building services	66.6
(e) Drainage	7.9
(f) External works	9.3

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⁸ Building works cover the internal alteration and addition works for the associated operation-related facilities. The existing building structure of the crematorium is in good condition and will therefore be retained.

		\$ million (in MOD prices)
(g)	Replacement of cremators ⁹	209.0
(h)	Energy conservation and green features	4.2
(i)	Furniture and equipment (F&E) ¹⁰	0.6
(j)	Consultants' fees for	
	(i) contract administration ¹¹	14.2
	(ii) management of resident site staff (RSS)	2.0
(k)	Remuneration of RSS	22.2
(l)	Contingencies	45.5
Total		<hr/> 500.4 <hr/>

17. We propose to engage consultants to undertake contract administration and site supervision of the proposed project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Enclosure 6**.

18. We adopt the design principles of "fitness for purpose and no frills" and apply as far as possible the concepts of standardisation, simplification and single integrated element in the design and construction arrangements to formulate the design requirements that meet the operational needs. For example, the alterations to the existing structure will use simple and standardised steel structure

/systems.....

⁹ Replacement of cremators covers the demolition of existing cremators, supply and installation of new cremators and other associated installations.

¹⁰ The estimated cost is based on an indicative list of F&E required.

¹¹ Contract administration covers quantity surveying, project management, site supervision, etc.

systems. The Multi-trade integrated Mechanical, Electrical and Plumbing¹² method will also be adopted, so as to enhance the construction efficiency, quality and cost-effectiveness of the project.

19. The CFA after the completion of the proposed project is about 3 428 square metres. The estimated construction unit cost, represented by the building and building services costs, is \$43,232 per square metre of CFA in September 2023 prices¹³.

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

Year	\$ million (in MOD prices)
2024 – 25	4.2
2025 – 26	75.9
2026 – 27	102.0
2027 – 28	207.2
2028 – 29	34.6
2029 – 30	31.0
2030 – 31	27.0
2031 – 32	18.5
	<hr/> 500.4 <hr/>

/21.

¹² Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP) refers to the integration of multi-trade building services components into a single volumetric assembly of prefabricated modules, manufactured offsite, then transported to the site for connection of modules.

¹³ In reference to similar projects carried out by the Government, for example, **26NB** – Expansion of Wo Hop Shek Crematorium, for which the construction unit cost is \$40,679 per m² of CFA (in September 2023 prices) and with due consideration of the unique circumstances of the proposed project, for example, the retrofitting of existing building services installations, we consider the estimated construction unit cost of the proposed project reasonable.

21. 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 of 2024 to 2032. We will deliver the construction works under the New Engineering Contract (NEC)¹⁴ form. We will award the contract on a lump sum basis as the scope of works can be clearly defined in advance. The contract will provide for price adjustment.

22. We estimate the annual recurrent expenditure arising from the proposed works to be at about \$16.87 million.

PUBLIC CONSULTATION

23. We consulted the Community Affairs Committee under Kwai Tsing District Council about the proposed project in February 2023, and it was unanimously supported by the members present.

24. We also consulted the Legislative Council Panel on Food Safety and Environmental Hygiene (the Panel) on 14 May 2024. The Panel supported submitting the funding proposal to the Public Works Subcommittee for consideration. Panel members expressed concerns and views on the urgency of the proposed project, the design of the new cremators, future operation and charging arrangements, as well as the overall supply and demand of cremation services. We set out the situation in paragraphs 6 to 15 above and submitted the relevant information to the Panel on 13 June 2024.

ENVIRONMENTAL IMPLICATIONS

25. Kwai Chung Crematorium is a designated project under the Environmental Impact Assessment Ordinance (Cap. 499) and it was issued with an environmental permit in October 2000. The proposed project mainly involves the replacement of the four existing cremators at Kwai Chung Crematorium. After the replacement, the number of cremators and their total maximum loading meet the requirements of the environmental permit. Relevant mitigation measures will also be implemented to ensure that the project will not cause any long-term adverse impacts to the environment. Besides, we will implement appropriate mitigation

/measures

¹⁴ NEC is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises a spirit of mutual trust, cooperation and collaborative risk management between contract parties.

measures during the construction period to control the short-term environmental impacts caused by the project.

26. The new cremators will be equipped with the latest technology for flue gas filtering and emission monitoring system to meet the prevailing emission standards as set out in “A Guidance Note on the Best Practicable Means for Incinerators (Crematoria)” issued by the Environmental Protection Department.

27. To control short-term environmental impacts during construction, there will be provisions in the contract requiring the contractor to control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of appropriate mitigation measures during the construction period. These measures include the adoption of quieter construction equipment, the use of silencers, mufflers, acoustic linings or shields for noisy construction activities; frequent cleaning and watering of the site to minimise dust emission; and proper treatment of site run-off to avoid illegal effluent discharge. We have included in the project estimates the cost for implementing the above mitigation measures.

28. At the planning and design stages, we have considered taking measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards which can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling within the site) on the site or at other suitable construction sites as far as possible in order to minimise the disposal of inert construction waste at public fill reception facilities (PFRFs)¹⁵. We 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.

29. At the construction stage, we will require the contractor to submit for approval a proposal setting out the waste management measures, which should include appropriate mitigation measures to avoid and reduce the production of inert construction waste, and arrange for such waste to be reused and recycled. We will ensure that the day-to-day operations on site comply with the approved plan, and will also require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will monitor
/the

¹⁵ PFRFs are specified in Schedule 4 to the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at the PFRFs requires a licence issued by the Director of Civil Engineering and Development.

the disposal of inert construction waste and non-inert construction waste at the PFRFs and landfills respectively through a trip-ticket system.

30. We estimate that the proposed project will generate about 6 490 tonnes of construction waste in total. Of these, about 450 tonnes (6.9%) of inert construction waste will be reused on site and 5 140 tonnes (79.2%) will be delivered to the PFRFs for reuse in the future. We will dispose of the remaining 900 tonnes (13.9%) of non-inert construction waste at landfills. The total cost of disposal of construction waste at the PFRFs and landfill sites for the proposed project is estimated to be about \$600,000 (based on a unit charge rate of \$71 per tonne for disposal at the PFRFs 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

31. The proposed project will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures on the list of newly proposed grading items, and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

32. The proposed project does not require any land acquisition or clearance.

ENERGY CONSERVATION AND GREEN FEATURES

33. The proposed project will adopt various forms of energy efficient features and renewable energy technologies, in particular –

- (a) high efficiency chiller;
- (b) demand control of supply air;
- (c) heat recovery claim of exhaust air;
- (d) energy efficient lift system; and
- (e) photovoltaic system.

34. For greening features, we will provide landscaping and greening features on the ground level as appropriate for environmental and amenity benefits.

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35. The total estimated cost for the above features is around \$4.2 million (including \$2.3 million for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 10% energy savings in the annual energy consumption with a payback period of about 10 years.

BACKGROUND INFORMATION

36. We have engaged consultants to provide various services including topographical and tree survey, utility mapping, building services condition survey, schematic and detailed design, quantity surveying services for tender documentation, etc. at a total cost of about \$15.6 million. The services provided by the consultants were funded under block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. The above consultancy services can help finalise the project scope and estimated cost, based on which funding approval will be sought from the FC.

37. Of the existing 46 trees within and in close proximity of the project boundary, 34 trees will be retained. The proposed project will involve removal of 12 trees including seven to be felled and five to be transplanted outside the project site. All trees to be removed are common trees that are not trees of particular interest¹⁶. We will incorporate planting proposals as part of the project, including the planting of about 11 trees, 1 089 shrubs and 1 007 groundcovers.

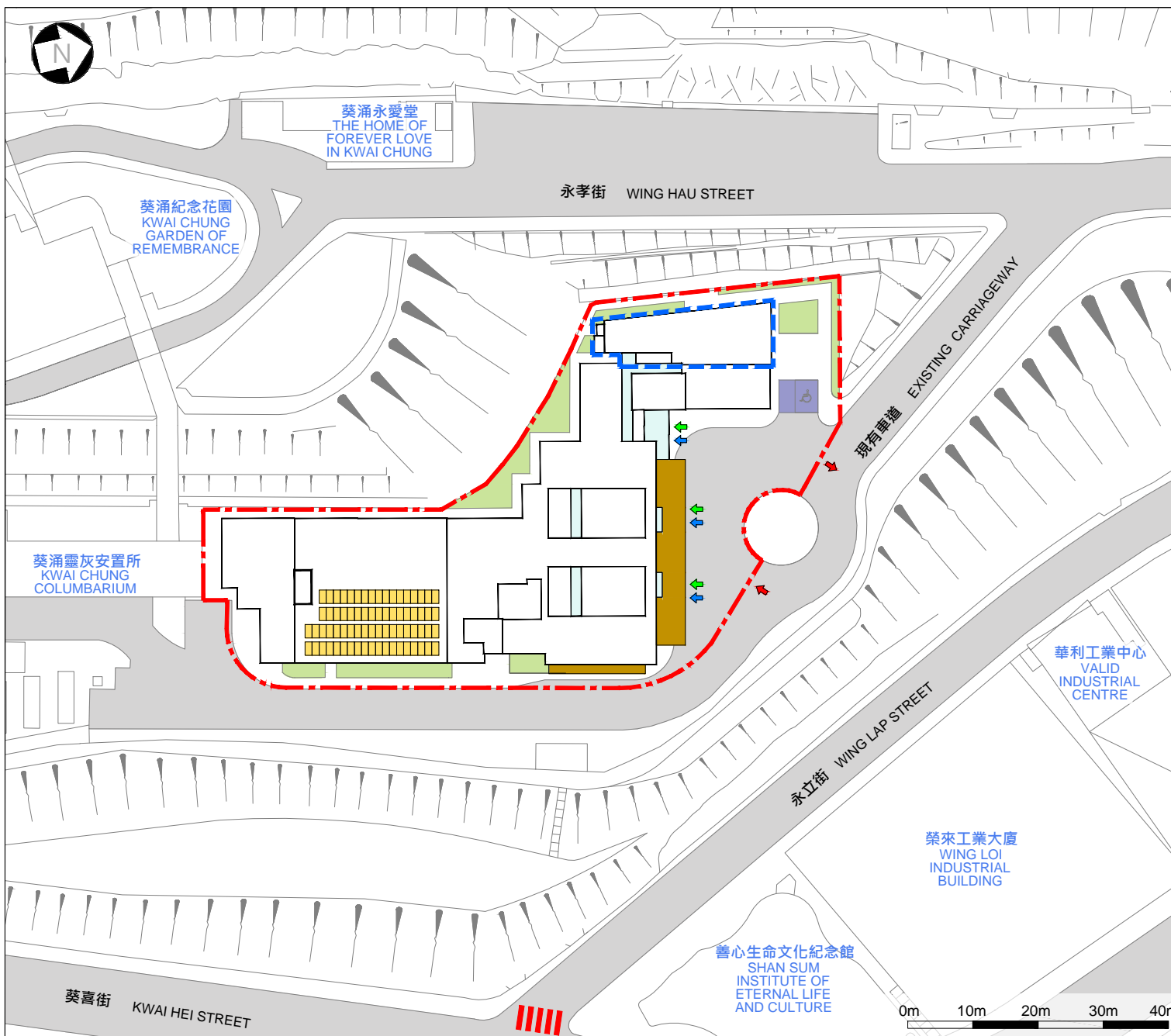
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¹⁶ “Trees of particular interest” are defined in paragraph 3.3 of the Guidelines for Tree Risk Assessment and Management Arrangement promulgated by the Development Bureau. Examples of “trees of particular interest” are listed as follows:

- (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 metre (measured at 1.3 metres above ground level), or with height/canopy spread equal to or exceeding 25 metres;
- (d) Stonewall trees or trees of outstanding form (taking account of overall tree size, shape and any special features);
- (e) Rare tree species listed in Rare and Precious Plants of Hong Kong (<https://www.herbarium.gov.hk/en/publications/books/book2/index.html>) published by the Agriculture, Fisheries and Conservation Department;
- (f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
- (g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
- (h) Well-known Fung Shui trees;
- (i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
- (j) Trees which may arouse widespread public concerns; and
- (k) Trees which may be subject to strong local objections on removal.

38. We estimate that the proposed works will create about 70 jobs (50 for labourers and 20 for professional or technical staff) providing a total employment of 2 100 man-months.

Environment and Ecology Bureau
June 2024



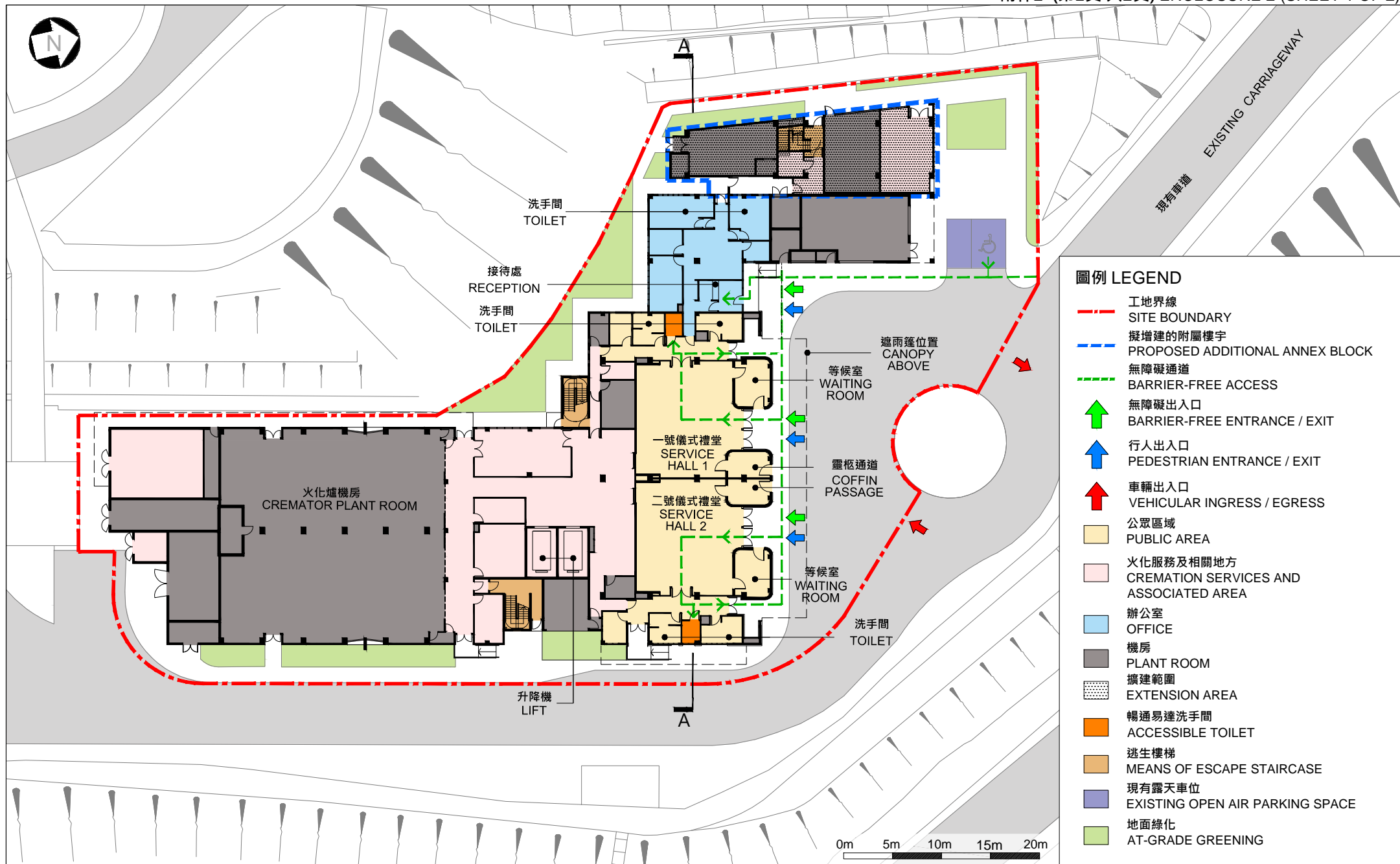
位置圖 LOCATION PLAN 0m 50m 100m 150m 200m

圖例 LEGEND

- 工地界線
SITE BOUNDARY
- 擬增建的附屬樓宇
PROPOSED ADDITIONAL ANNEX BLOCK
- |||| 行人過路處
AT-GRADE PEDESTRIAN CROSSING
- ↑ 無障礙出入口
BARRIER-FREE ENTRANCE / EXIT
- ↑ 行人出入口
PEDESTRIAN ENTRANCE / EXIT
- ↑ 車輛出入口
VEHICULAR INGRESS / EGRESS
- 太陽能光伏板
PHOTOVOLTAIC PANEL
- 簷篷
CANOPY
- 天窗 / 玻璃簷篷
SKYLIGHT / GLASS CANOPY
- 現有露天車位
EXISTING OPEN AIR PARKING SPACE
- 地面綠化
AT-GRADE GREENING

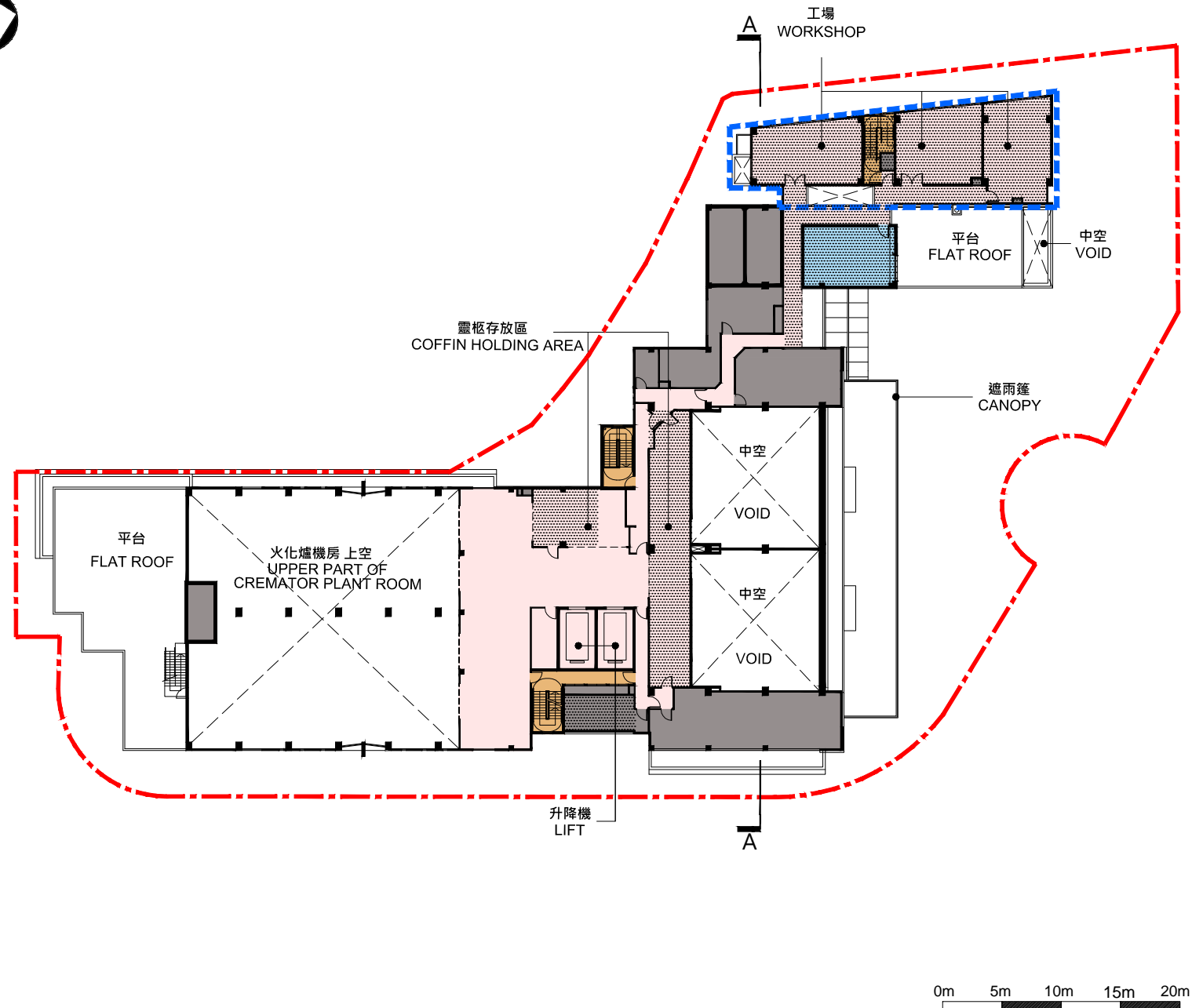
工地平面圖
SITE PLAN

34NB
葵涌火葬場重置火化爐及相關工程
REPROVISIONING OF CREMATORS AND RELATED WORKS AT KWAI CHUNG CREMATORIUM



地面層平面圖
G/F PLAN

34NB
葵涌火葬場重置火化爐及相關工程
REPROVISIONING OF CREMATORS AND RELATED WORKS AT KWAI CHUNG CREMATORIUM



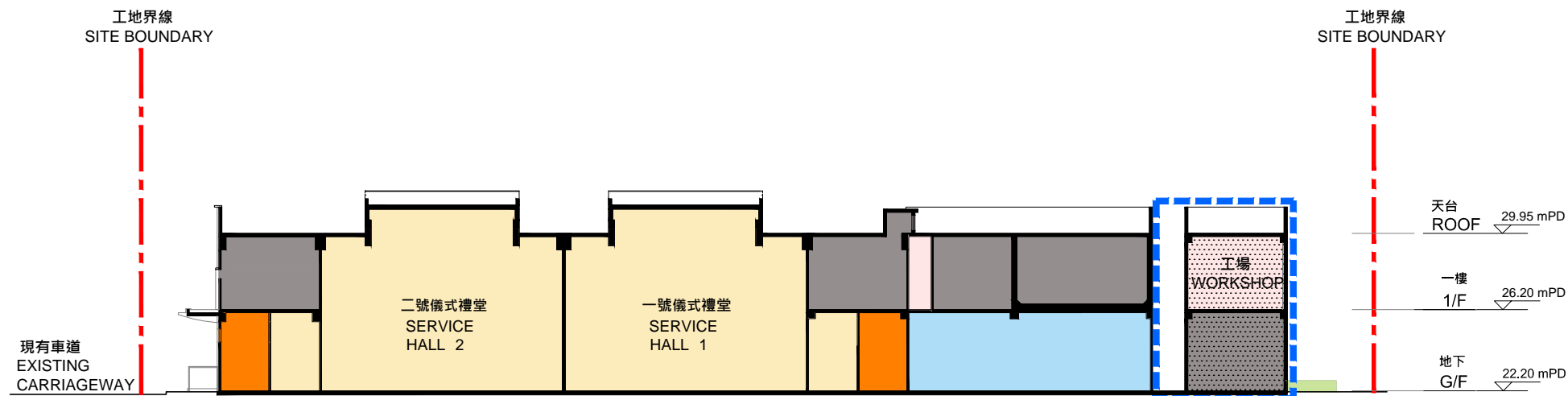
圖例 LEGEND

- 工地界線
SITE BOUNDARY
- 擬增建的附屬樓宇
PROPOSED ADDITIONAL ANNEX BLOCK
- 火化服務及相關地方
CREMATION SERVICES AND ASSOCIATED AREA
- 辦公室
OFFICE
- 機房
PLANT ROOM
- 擴建範圍
EXTENSION AREA
- 逃生樓梯
MEANS OF ESCAPE STAIRCASE

一樓平面圖
1/F PLAN

34NB
葵涌火葬場重置火化爐及相關工程
REPROVISIONING OF CREMATORS AND RELATED WORKS AT KWAI CHUNG CREMATORIUM

 ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



圖例 LEGEND

- 工地界線
SITE BOUNDARY
- 擬增建的附屬樓宇
PROPOSED ADDITIONAL ANNEX BLOCK
- 公眾區域
PUBLIC AREA
- 火化服務及相關地方
CREMATION SERVICES AND
ASSOCIATED AREA
- 辦公室
OFFICE
- 機房
PLANT ROOM
- 擴建範圍
EXTENSION AREA
- 暢通易達洗手間
ACCESSIBLE TOILET
- 地面綠化
AT-GRADE GREENING

0m 2m 4m 6m 8m

剖面圖 A-A
SECTION A-A

34NB
葵涌火葬場重置火化爐及相關工程
REPROVISIONING OF CREMATORS AND RELATED WORKS AT KWAI CHUNG CREMATORIUM

 ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



擬翻新的外立面設計 PROPOSED NEW ELEVATION DESIGN

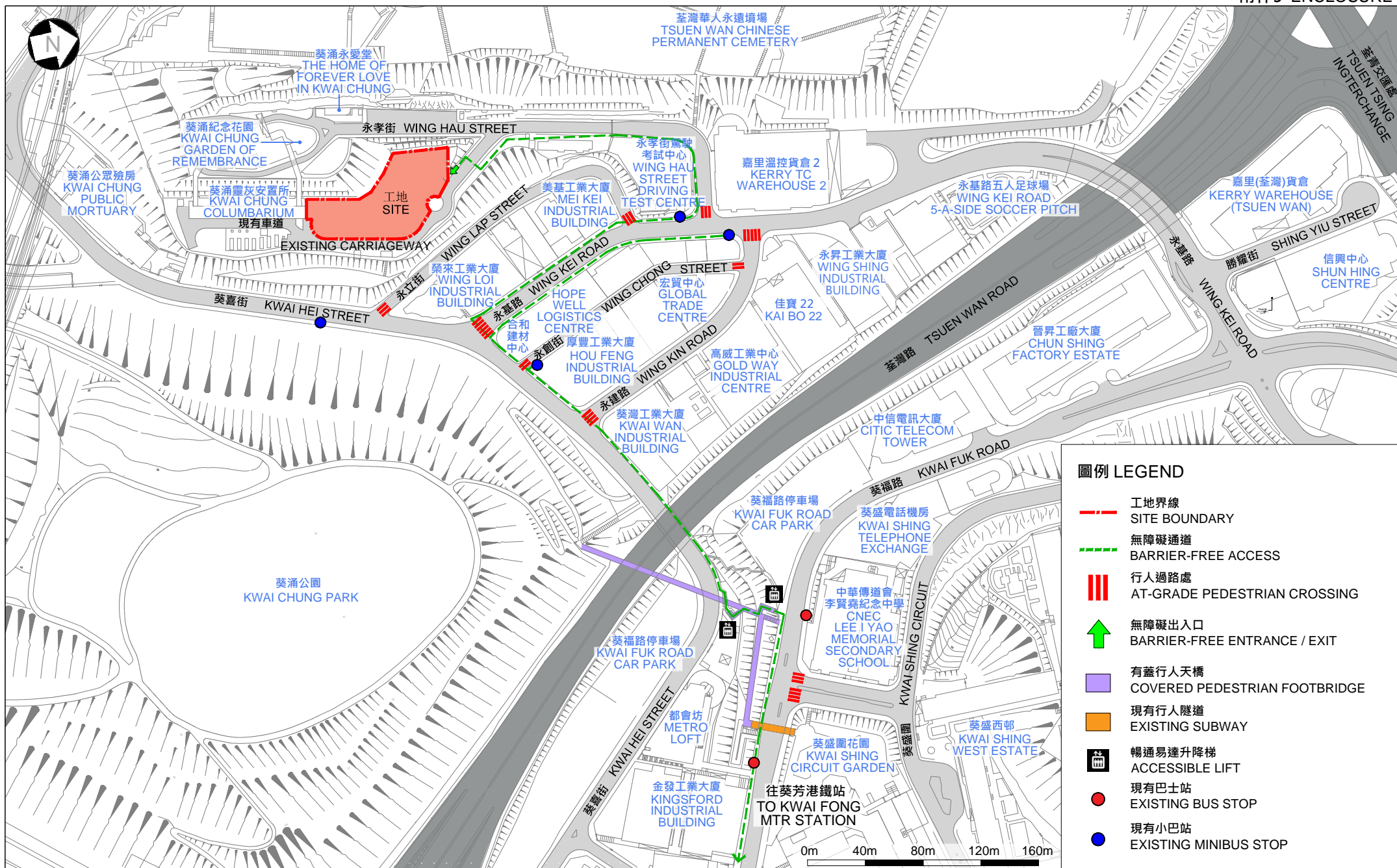
擬增建的附屬樓宇
PROPOSED ADDITIONAL
ANNEX BLOCK

從東北面望向葵涌火葬場的構思透視圖
PERSPECTIVE VIEW OF KWAI CHUNG CREMATORIUM FROM NORTHEAST DIRECTION

構思圖
ARTIST'S IMPRESSION

34NB
葵涌火葬場重置火化爐及相關工程
REPROVISIONING OF CREMATORS AND RELATED WORKS AT KWAI CHUNG CREMATORIUM

 ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



無障礙通道平面圖
BARRIER-FREE ACCESS PLAN

34NB
葵涌火葬場重置火化爐及相關工程
REPROVISIONING OF CREMATORS AND RELATED WORKS AT KWAI CHUNG CREMATORIUM

34NB—Reprovisioning of Cremators and Related Works at Kwai Chung Crematorium

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

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	-	-	-	11.1
		Technical	-	-	-	0.9
					Sub-total	12.0#
(b)	Resident site staff (RSS) (Note 3)	Technical	395	14	1.6	20.5
					Sub-total	20.5
Comprising -						
	(i) Consultants' fees for management of RSS				1.7#	
	(ii) Remuneration of RSS				18.8#	
Total						32.5

*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 14 is \$32,430 per month).
2. The consultants' fees for contract administration are calculated in accordance with the existing consultancy agreement for the provision of contract administration and site supervision of **34NB**. The assignment will only be executed subject to FC's funding approval for upgrading **34NB** to Category A.
3. The consultants' fees and staff cost for site supervision are based on the estimate prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.

Remarks

The cost figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The cost figures marked with # are shown in money-of-the-day prices in paragraph 16 of the main paper.