

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Environmental Hygiene – Burial grounds, columbaria and crematoria 25NB – Reprovisioning of Victoria Public Mortuary

Members are invited to recommend to the Finance Committee the upgrading of **25NB** to Category A at an estimated cost of \$1,209.1 million in money-of-the-day prices for the reprovisioning of the Victoria Public Mortuary.

PROBLEM

We need to reprovision the Victoria Public Mortuary (VPM) for enhancing its body storage capacity to cope with the demand.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Health, proposes to upgrade **25NB** to Category A at an estimated cost of \$1,209.1 million in money-of-the-day (MOD) prices for the reprovisioning of the VPM (including the provision of fallback body storage spaces at an existing underground cavern).

/PROJECT

PROJECT SCOPE AND NATURE

3. The proposed project site is located at the western end of Victoria Road, covering an area of approximately 5 917 square metres (m²). The reprovisioned VPM, with body storage capacity increased from the current 76 to no less than 1 000, will cater for the projected caseload and meet the upsurge in demand amid epidemics. The proposed scope of the project comprises –

- (a) the construction of a new public mortuary to provide –
 - (i) five cold rooms and one deep freezer with a total storage capacity of 358 bodies, and Modular Refrigerated Mortuary Units (MRMUs) for the additional storage of 276 bodies when necessary;
 - (ii) four autopsy suites for routine Coroner's cases, decomposed bodies, homicidal or suspicious deaths, bodies with a high risk of infectious diseases, etc.;
 - (iii) functional facilities, including X-ray and Computed Tomography Scan rooms, laboratories, interview identification viewing rooms, interview rooms, facilities for bereavement services, autopsy viewing rooms, gowning cum de-gowning rooms and offices, etc.; and
- (b) the provision of MRMUs at the existing underground cavern for the storage of 480 bodies when necessary.

4. The reprovisioned VPM comprises five storeys, of which three storeys will be built above the level at Victoria Road. A site and location plan, floor plans, sectional drawings, an artist's impression and a barrier-free access plan — for the proposed project are at **Enclosures 1 to 5** respectively.

5. We plan to commence the proposed works upon obtaining funding approval from the Finance Committee (FC) for completion in around four and a half years. To tie in with the construction schedule, we have invited tenders in parallel for enabling early commencement of the works, and have reflected the returned tender price in the cost estimation of the proposed project. The works contracts will only be awarded after obtaining the funding approval from the FC.

/JUSTIFICATION

JUSTIFICATION

6. The VPM at Kennedy Town commenced operation in 1972. The Land Use Review on the Western Part of Kennedy Town proposes, amongst others, the relocation of incompatible uses at the waterfront (including the existing VPM located at Sai Ning Street) for the provision of a continuous waterfront promenade and open space in the western part of Kennedy Town. To this end, the subject site¹ at the western end of Victoria Road has been identified for reprovisioning the VPM. The site of the existing VPM will be used for the provision of the waterfront promenade and open space.

Enhancing the body storage capacity

7. There are four public mortuaries in Hong Kong (including the VPM, the Fu Shan Public Mortuary (FSPM) in Sha Tin, New Territories East, the Kwai Chung Public Mortuary (KCPM) in New Territories West, and the Kowloon Public Mortuary² (KPM) in Hung Hom, Kowloon). They are specialised facilities of the Forensic Pathology Service of the Department of Health for conducting medico-legal investigation of deaths that are reportable to the Coroner in accordance with the Coroners Ordinance (Cap. 504).

8. Currently, the regular body storage capacity of the VPM, the FSPM, the KCPM and the KPM is about 1 280 in total. The public mortuaries would usually reach their critical storage limits after long holidays and during winter.

9. Owing to the growing and ageing population, the number of deaths is expected to increase. Based on the Hong Kong's population growth and projection on deaths, it is estimated that a body storage capacity in public mortuaries of no less than 1 800 is required by 2046 to meet the anticipated demand. Among others, Hong Kong Island will require about 350 body storage spaces. After the reprovisioning of the VPM, its body storage capacity will increase from the current 76 to no less than 1 000, which will be sufficient to meet the projected caseload of Hong Kong Island up to 2046 under normal circumstances. It will also further enhance the overall body storage capacity of Hong Kong for enabling /flexible

¹ The relevant areas are zoned as "Other Specified Uses" annotated "Public Mortuary" ("OU(Public Mortuary)" and "Green Belt (2)" ("GB(2)") on the approved Kennedy Town and Mount Davis Outline Zoning Plan No. S/H1/22 for the reprovisioning of the VPM. "Mortuary" and "Underground Public Mortuary" uses are always permitted within "OU(Public Mortuary)" and "GB(2)" zones. For developments within the "OU(Mortuary)" zone, buildings are restricted to a maximum building height of 60 metres above Principal Datum.

² The KPM is reserved for the storage of bodies during emergency situations.

flexible coordination of body storage spaces in public mortuaries of various districts to handle the sudden upsurge in demand amid epidemics.

Utilising the existing cavern area

10. The above body storage capacity of no less than 1 000 includes MRMUs installed in the existing underground cavern for the storage of 480 bodies when required. The cavern, located at the southeast of the site for reprovisioning the VPM, was once a magazine site of the MTR Corporation Limited (MTRCL) but is now vacant. When consulting the Legislative Council (LegCo) Panel on Health Services in May 2022, we proposed setting up an emergency response supplies store and a personal protective equipment (PPE) store inside the cavern. In response to Members' discussions (on matters including the sudden surge in the number of bodies received by public mortuaries within a two-month period during the fifth wave of the COVID-19 outbreak in early 2022), we propose after deliberation that MRMUs be installed inside the cavern to further increase the overall body storage capacity of mortuaries so as to cope with the upsurge in demand for body storage spaces amid epidemics. At times when the body storage situation is normal, certain emergency response supplies and PPE may also be placed inside the cavern to fully utilise the area therein.

11. The cavern was originally a magazine site of the MTRCL designed for temporary use. The Geotechnical Engineering Office (GEO) of the Civil Engineering and Development Department will conduct cavern enhancement works to ensure that its structure is suitable for use as a fallback location for body storage. Furthermore, the GEO will carry out necessary mitigation works on the adjacent natural terrain for ensuring the safe use of the reprovisioned VPM.

Meeting public demand and expectation

12. The reprovisioning of VPM is necessary to cope with the increasing service demand, enhance the quality of service that meets the up-to-date standards and workflow, and further safeguard infection control, occupational safety and health, as well as environmental protection. This could ensure that safe and efficient mortuary service is provided to the public.

13. As compared with the existing VPM, the reprovisioned VPM will have the following enhancements –

- (a) the provision of sufficient space in the mortuary building for body loading/unloading;
- (b) the provision of a more suitable venue for bereaved families, including an indoor ceremony hall so that the bereaved families can conduct memorial ceremonies under a more private setting;
- (c) the provision of environment-friendly joss paper burning system³ for use by the bereaved families if required; and
- (d) the provision of green outdoor space at the entrance/exit.

FINANCIAL IMPLICATIONS

14. The Government estimates the capital cost of the proposed project to be \$1,209.1 million in MOD prices, broken down as follows –

	\$ million (in MOD prices)
(a) Site works	44.7
(b) Foundation	72.7
(c) Building ⁴	352.3
(d) Building services ⁵	352.4

/(e)

³ A environment-friendly joss paper burning system has built-in black smoke and fly ash treatment system to filter the black smoke and suspended particulates produced by joss paper burning so as to reduce emission of black smoke.

⁴ Building works cover the construction of substructure and superstructure of the building.

⁵ Building services works cover electrical installation, ventilation and air-conditioning installation, fire services installation, lift installation and other miscellaneous installations.

(e)	Energy conservation, green and recycled features	13.0
(f)	Drainage	17.4
(g)	External works	30.8
(h)	Slope and cavern enhancement works	55.6
(i)	Furniture and equipment (F&E) ⁶	69.7
(j)	Consultants' fees for	29.8
	(i) contract administration ⁷	19.8
	(ii) management of resident site staff (RSS)	10.0
(k)	Remuneration of RSS	60.8
(l)	Contingencies	109.9
Total		<u>1,209.1</u>

15. 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**.

16. We adopt the design principle of “fitness for purpose and no frills” for the construction of a building comprises five storeys (including three storeys above the ground level and two storeys below the level of Victoria Road). We have considered different options throughout the design process and optimised the design, including streamlining the site formation works, for better cost-effectiveness. The construction floor area (CFA) of the proposed project (including the cavern) is about 11 700 m². The estimated construction unit cost, represented by the building and building services costs, is \$48,897 per m² of CFA in September 2024 prices. Reference has been made to government projects of similar nature, for example, **20NB** – Reprovisioning of Fu Shan Public Mortuary at Sha Tin, the construction unit cost of which in September 2024 prices is about \$33,000 per m². The construction unit cost varies with the uniqueness of each project in terms of site /constraint

⁶ The estimated cost is based on an indicative list of F&E required.

⁷ The estimated cost covers quantity surveying, supervision of construction works and project management, etc.

constraint, scope and nature of the project, its scale, etc. Compared with the **20NB** project, the construction unit cost of the proposed project is higher for reasons including the need to carry out more intensive building services works to store more bodies in a relatively small floor area. In addition, there are comparatively more site constraints, such as relatively small site area, the site being located below a slope with a level difference of more than 10 metres from the level of Victoria Road, which restricts access and increases construction difficulty, as well as the provision of additional fire services installation⁸ for the part of building below the level of Victoria Road. In view of the above, we consider the construction unit cost of this project reasonable.

17. Subject to funding approval, the Government plans to phase the expenditure as follows –

Year	\$ million (in MOD prices)
2025-26	20.7
2026-27	55.1
2027-28	112.9
2028-29	212.3
2029-30	486.9
2030-31	96.6
2031-32	87.5
2032-33	77.4
2033-34	59.7
	<hr/> 1,209.1 <hr/>

/18.

⁸ Since the lowest two floors of the proposed project are below the site access level of Victoria Road, they are considered as basements and shall comply with the relevant fire safety requirements for basement.

18. 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 2034. We will deliver the construction works through a New Engineering Contract (NEC)⁹ and award the contract on a lump-sum basis as the scope of the works can be clearly defined in advance. The contract will provide for price adjustments.

19. We estimate the annual recurrent expenditure arising from the proposed project to be \$41.8 million.

PUBLIC CONSULTATION

20. We consulted the Food, Environment, Hygiene and Works Committee of the Central and Western District Council (C&WDC) on the proposed project in March 2019 and the Task Force on Harbourfront Developments on Hong Kong Island of the Harbourfront Commission by circulation of papers in November 2019. Members generally supported the proposed project.

21. We have also consulted the last-term LegCo Panel on Health Services in December 2019. Members were supportive of the proposed project and did not object to our submission of the funding proposal to the Public Works Subcommittee for consideration. However, as the site of the reprovisioned VPM involves amendments to the draft Outline Zoning Plan (OZP), and the OZP had to be amended having regard to the court's rulings on two judicial review cases, the OZP amendments were finally approved in April 2022. We consulted the LegCo Panel on Health Services again in May 2022 with regard to the development of the matter. At that time, the project proposed to increase the overall body storage capacity from 76 to 358. Members supported the funding proposal and suggested that we explore the possibility of further increasing the body storage capacity to cater for unexpected needs. In response to Members' suggestion, we immediately examined the feasibility of using the existing underground cavern area on site for the installation of MRMUs, in addition to revising and enhancing the design of the cavern. In May 2024, we briefed the C&WDC on the latest progress of the proposed project. Members expressed their general support for the proposed project.

/ENVIRONMENTAL

⁹ 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 contract parties.

ENVIRONMENTAL IMPLICATIONS

22. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have completed the Preliminary Environmental Review (PER) in July 2019, which concluded that the proposed project would not have any long-term adverse environmental impacts with the implementation of mitigation measures. The Director of Environmental Protection also agreed to the conclusion. To control the short-term environmental impacts brought by the works, we have included in the project estimate the cost for the implementation of appropriate mitigation measures.

23. We will stipulate provisions in the works contract requiring the contractor to implement appropriate mitigation measures to control the environmental impacts arising from the works to ensure compliance with established standards and guidelines. These measures include the adoption of quieter construction equipment and methods and the use of silencers or mufflers, acoustic linings or noise barriers for noisy construction works, frequent cleaning and watering of the site and the provision of wheel washing facilities to minimise dust emission, and the proper treatment of site run-off to avoid illegal discharge of waste water.

24. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste on site or in other suitable construction sites (e.g. using excavated materials for filling within the site) as far as possible in order to minimise the disposal of inert construction waste at public fill reception facilities (PFRFs)¹⁰. 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.

25. At the construction stage, we will require the contractor to submit for approval a plan setting out waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. We will ensure that day-to-day operations on site comply with the approved plan and will require the contractor to separate the inert portion from

/non-inert

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

non-inert construction waste on site for disposal at appropriate facilities. Through a trip-ticket system, we will control the disposal of inert and non-inert construction waste at PFRFs and landfills respectively.

26. We estimate that the project will generate in total about 21 713 tonnes of construction waste. Of these, about 480 tonnes (2.2%) of inert construction waste will be reused on site and 17 836 tonnes (82.1%) of inert construction waste will be delivered to PFRFs for subsequent reuse. We will dispose the remaining 3 397 tonnes (15.7%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRFs and landfill sites is estimated to be \$1.9 million for this proposed project (calculation based on a unit charge rate of \$71 per tonne for disposal at PFRFs and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

27. 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 in the new list of proposed grading items, and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

28. The proposed project only involves government land and therefore does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

29. 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 pump;
- (d) solar water heating system; and
- (e) photovoltaic system.

30. For greening features, we will provide green roof, vertical greening and landscaping at appropriate areas for environmental and amenity benefits.

31. For recycled features, we will adopt a rainwater harvesting system for landscape irrigation with a view to conserving water.

32. The total estimated cost for adoption of the above measures and features is around \$13 million (including \$5 million for energy efficient features), which has been included in the cost estimate of the proposed project. Energy efficient features will achieve 10% energy savings in the annual energy consumption with a payback period of about six years.

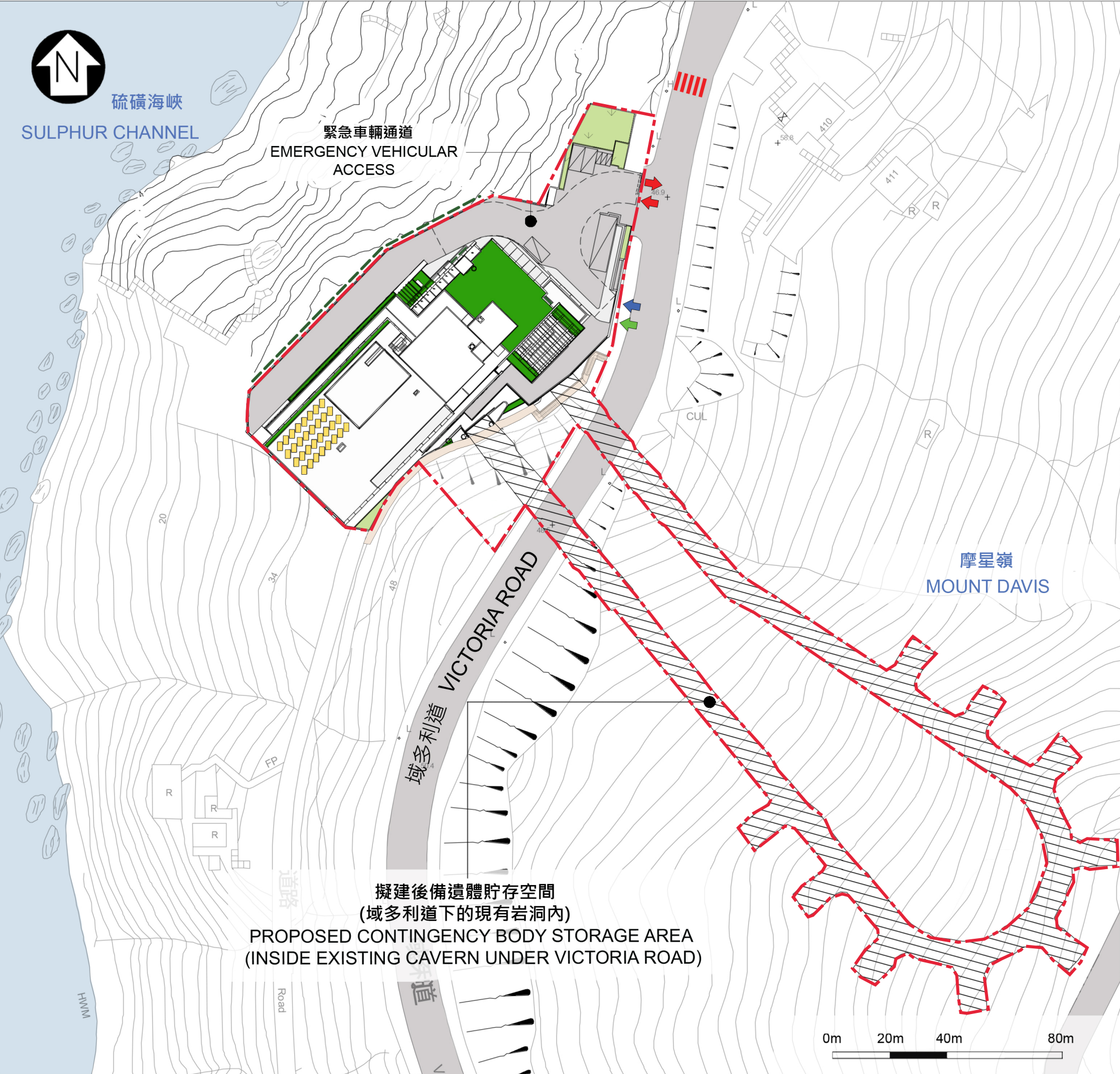
BACKGROUND INFORMATION

33. We have engaged a term contractor to carry out ground investigations and consultants to provide various services including detailed design, quantity surveying services, preliminary environmental review and planning applications at a total cost of about \$34.2 million. Investigation work carried out by the contractor and services provided by 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 investigation work and consultancy services can help finalise the project scope and estimated cost, based on which funding approval will be sought from the FC.

34. Of the 202 trees within and in close proximity to the boundary of the proposed project, 124 trees will be retained. The proposed works will involve the removal of 78 trees, all of which are not trees of particular interest¹¹. We will carry out compensatory planting of 78 trees, of which 43 trees will be planted within the site, while the remaining 35 trees will be planted in public spaces of the same district due to limited site area. In addition, we will plant other vegetation within the site, including 725 shrubs, 1 808 groundcovers and 127 climbers, as well as laying new turf of 215 m².

35. We estimate that the proposed works will create about 430 jobs (370 for labourers and 60 for professional or technical staff), providing a total employment of 6 440 man-months.

**Health Bureau
Department of Health
February 2025**



位置圖 LOCATION PLAN

圖例 LEGEND

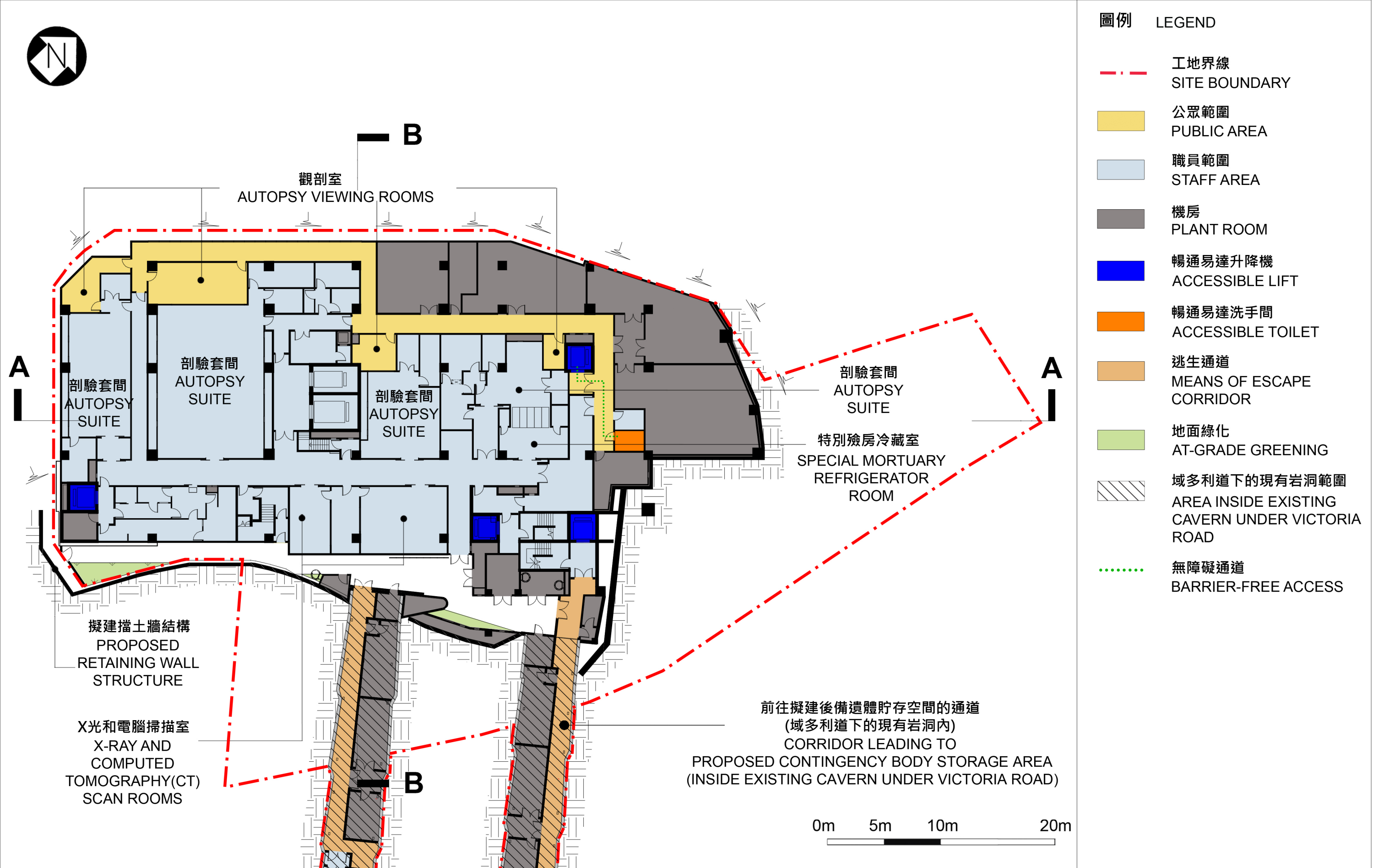
- | | |
|--|-------------------------------------|
| 工地界線
SITE BOUNDARY | 岩洞範圍
CAVERN AREA |
| 車輛出入口
VEHICULAR INGRESS/ EGRESS | 綠化範圍/ 綠化天台
LANDSCAPED AREA/ ROOF |
| 行人出入口
PEDESTRIAN ENTRANCE/ EXIT | 地面綠化
AT-GRADE GREENING |
| 無障礙出入口
BARRIER-FREE ENTRANCE/ EXIT | 行人徑
FOOTPATH |
| 擬建地面行人過路處
PROPOSED AT-GRADE PEDESTRIAN CROSSING | 垂直綠化
VERTICAL GREENING |
| | 太陽能光伏板
PHOTOVOLTAIC PANEL |

工地平面圖
SITE PLAN

25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY



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B

上層建築物界線
BUILDING LINE ABOVE

A

A

冷凍庫
DEEP FREEZER

B

0m 5m 10m 20m

圖例 LEGEND

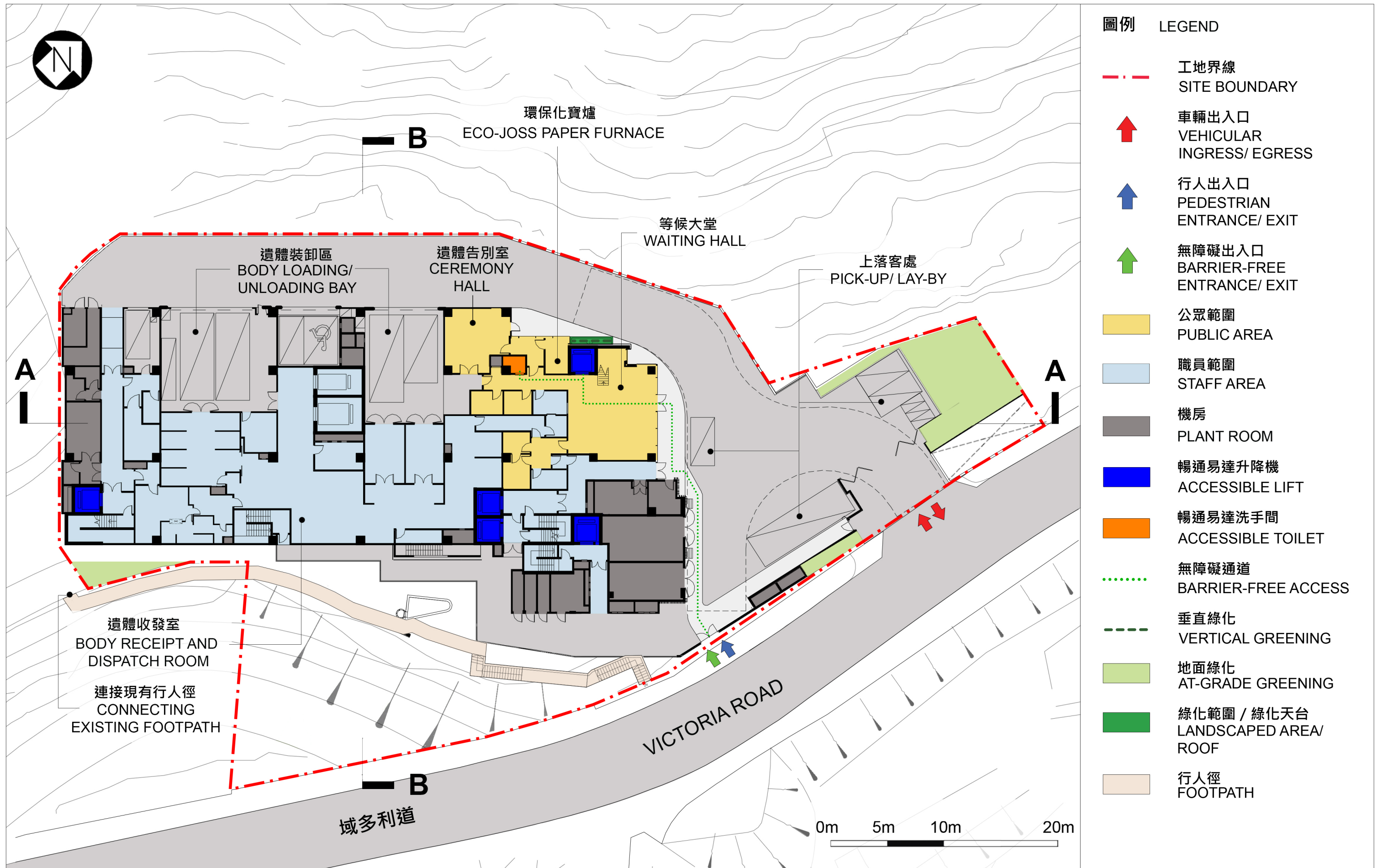
- 工地界線
SITE BOUNDARY
- 職員範圍
STAFF AREA
- 機房
PLANT ROOM
- 暢通易達升降機
ACCESSIBLE LIFT
- 綠化範圍/ 綠化天台
LANDSCAPED AREA/ ROOF
- 垂直綠化
VERTICAL GREENING

地下一樓平面圖
LOWER GROUND
FIRST FLOOR PLAN

25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY

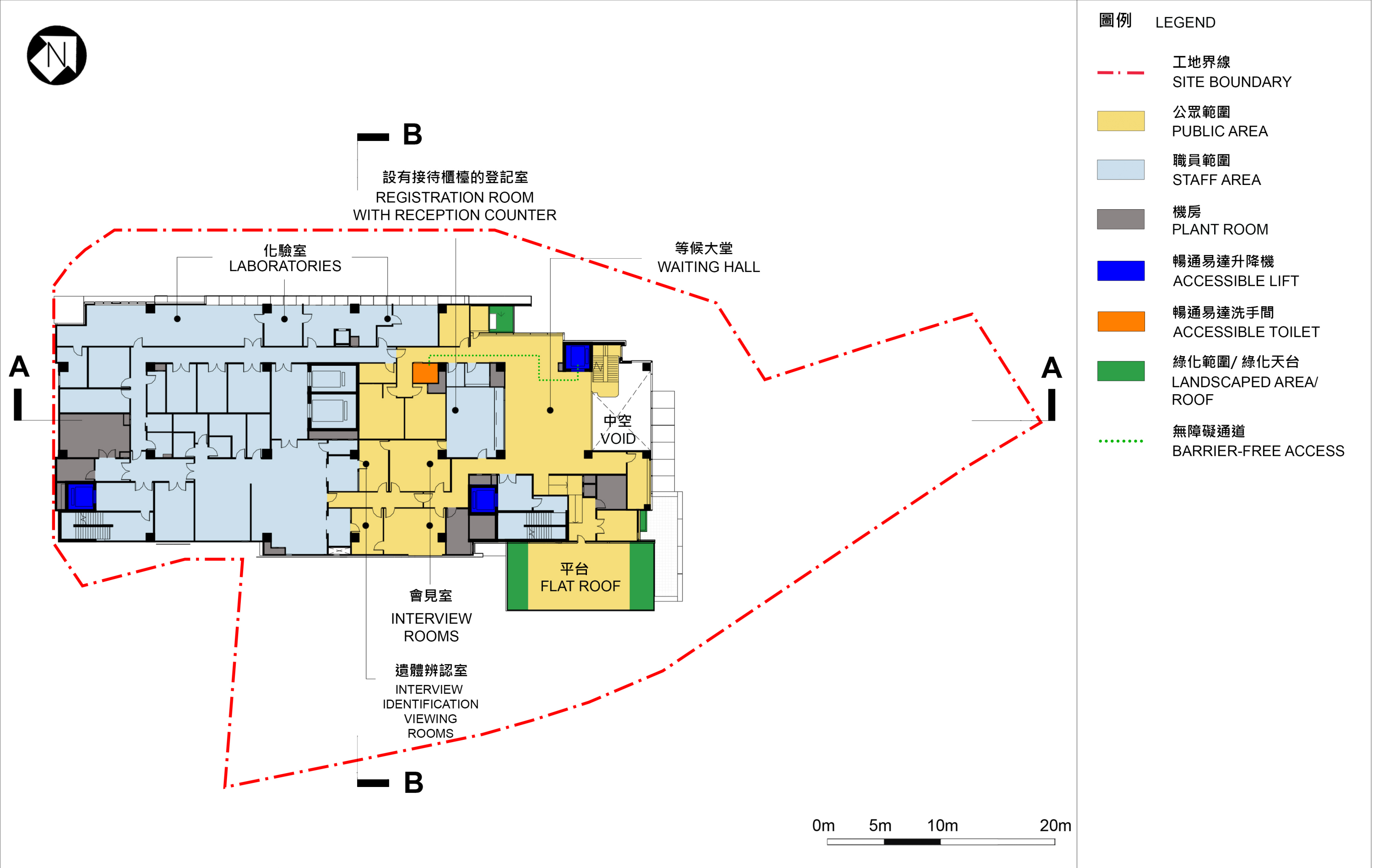


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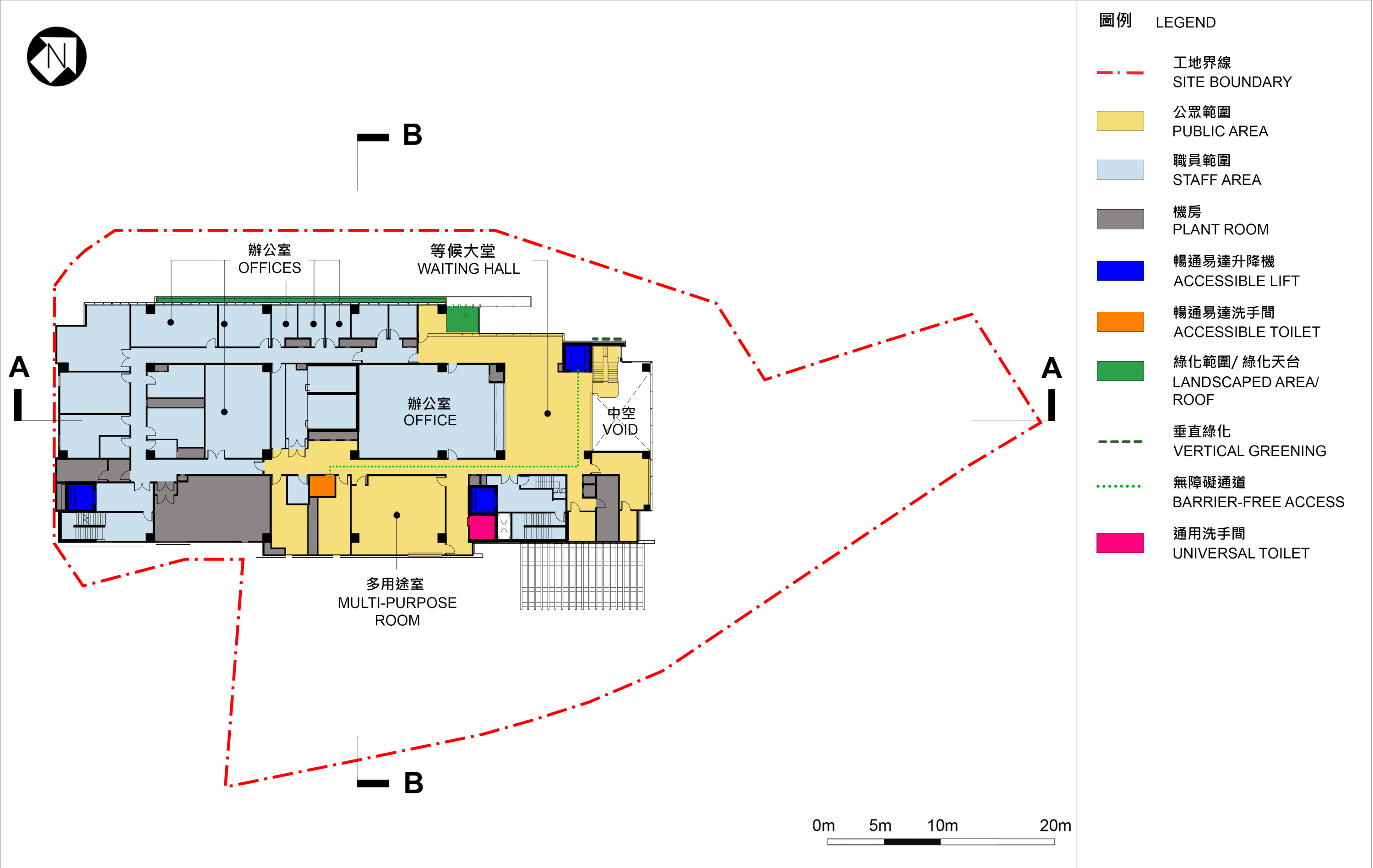
地下平面圖
GROUND FLOOR PLAN

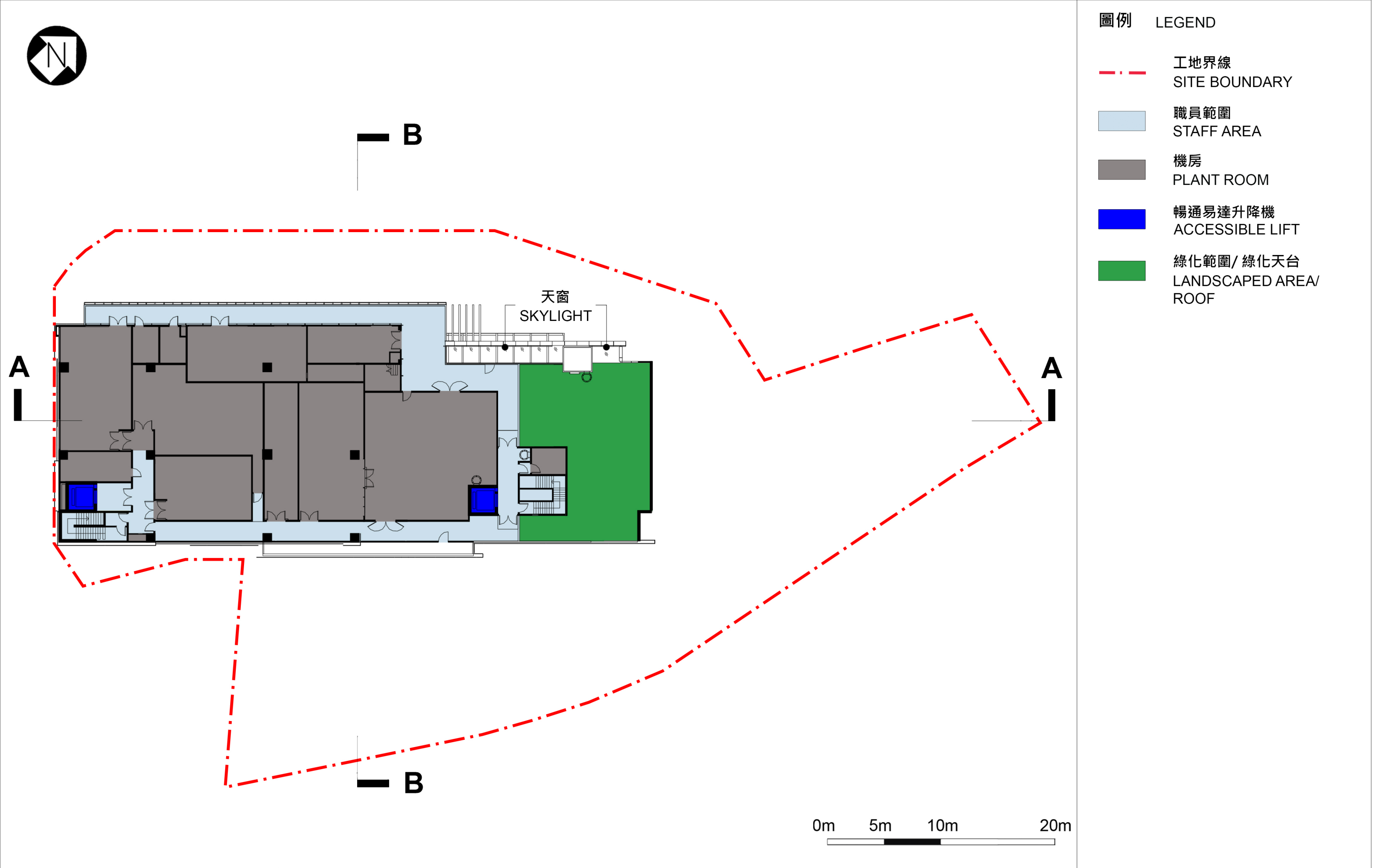
25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY



一樓平面圖
FIRST FLOOR PLAN

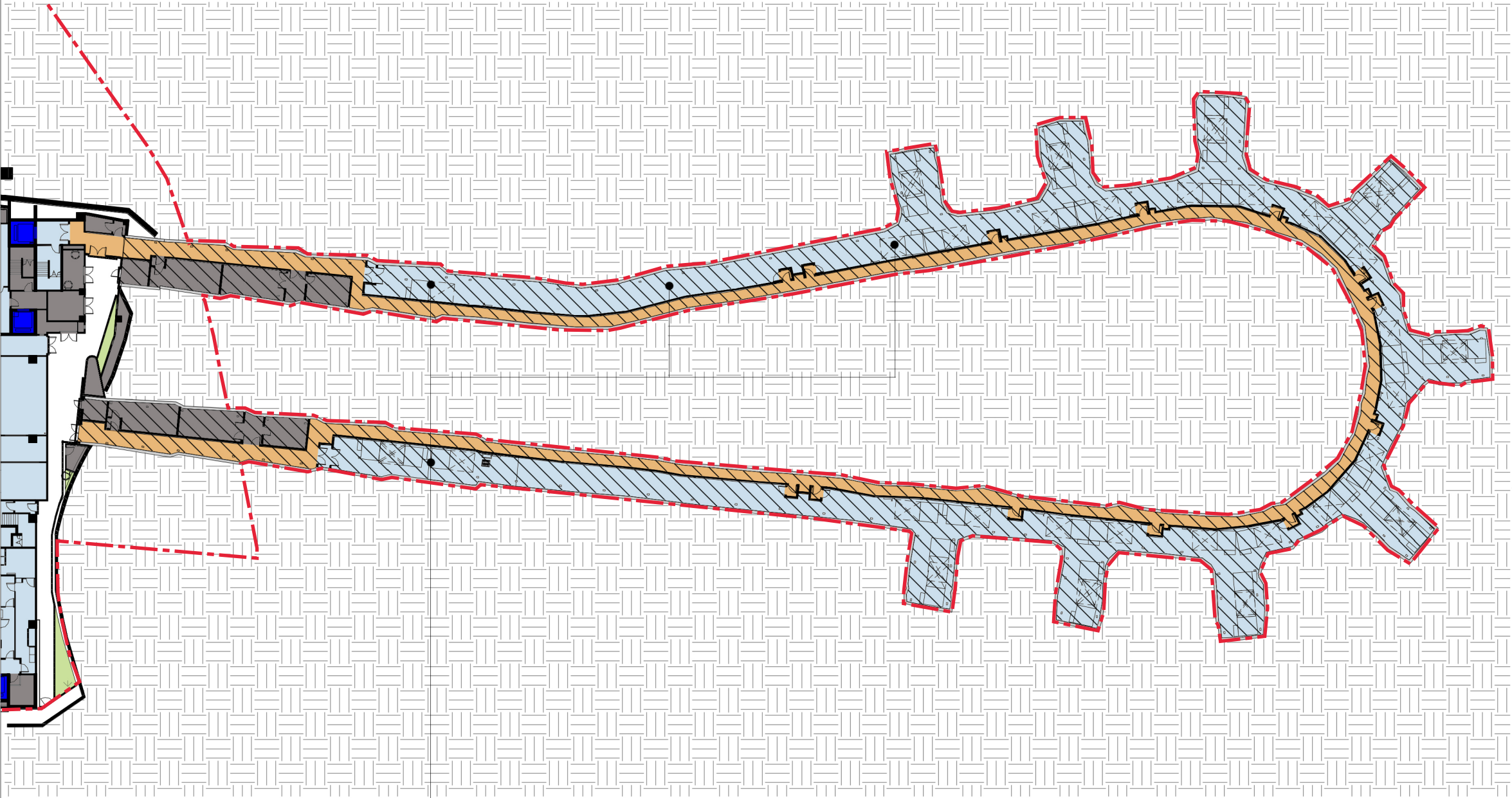
25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY



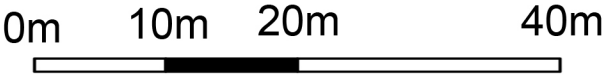


天台平面圖
ROOF FLOOR PLAN

25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY



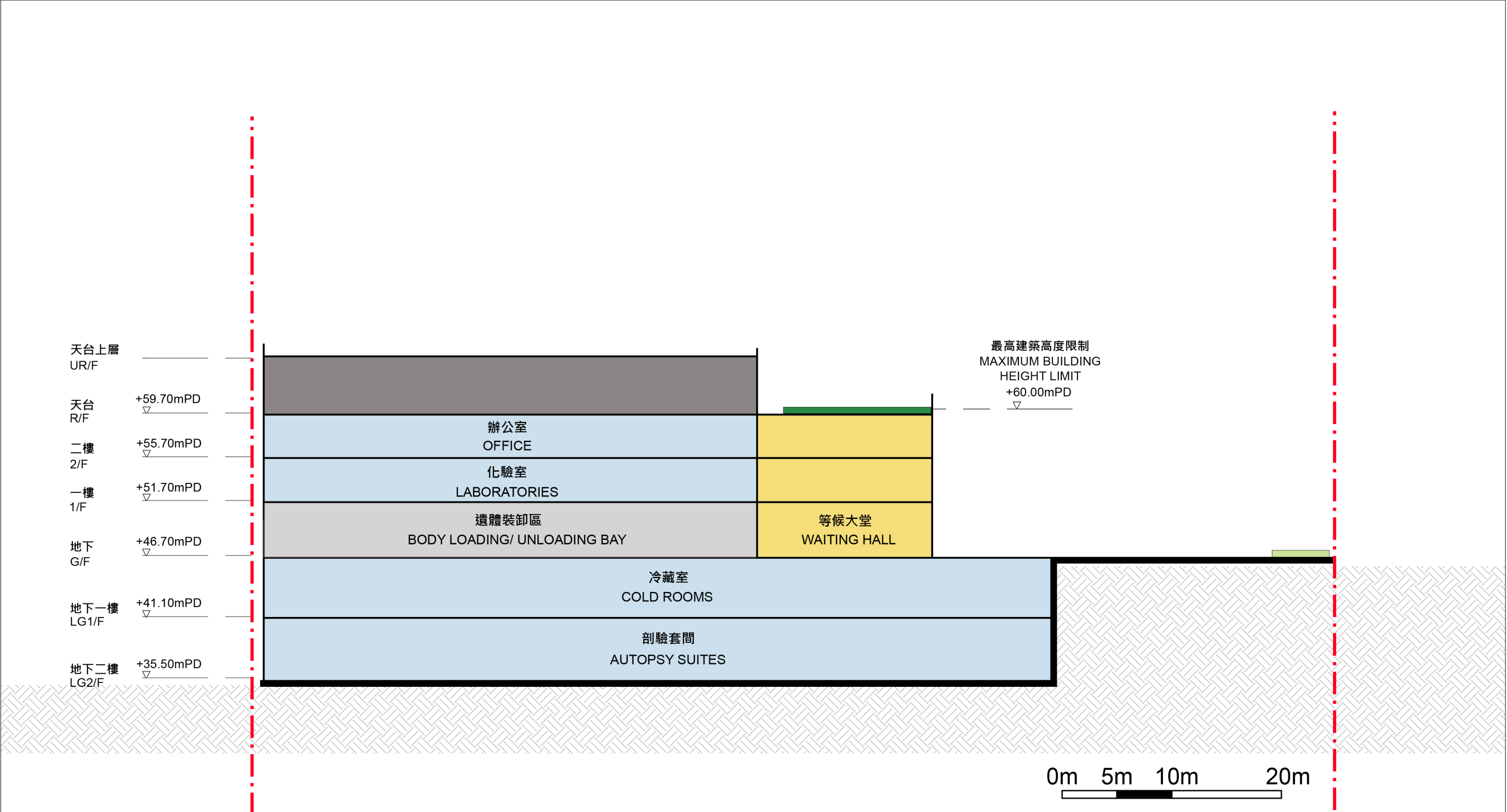
擬建後備遺體貯存空間
PROPOSED CONTINGENCY BODY STORAGE AREA



- 圖例 LEGEND
- 工地界線
SITE BOUNDARY
 - 職員範圍
STAFF AREA
 - 機房
PLANT ROOM
 - 逃生通道
MEANS OF ESCAPE CORRIDOR
 - 域多利道下的現有岩洞範圍
AREA INSIDE EXISTING CAVERN UNDER VICTORIA ROAD

現有岩洞平面圖
EXISTING CAVERN
FLOOR PLAN

25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY



圖例

LEGEND

工地界線
SITE BOUNDARY

公眾範圍
PUBLIC AREA

職員範圍
STAFF AREA

機房
PLANT ROOM

綠化範圍 / 綠化天台
LANDSCAPED AREA/ ROOF

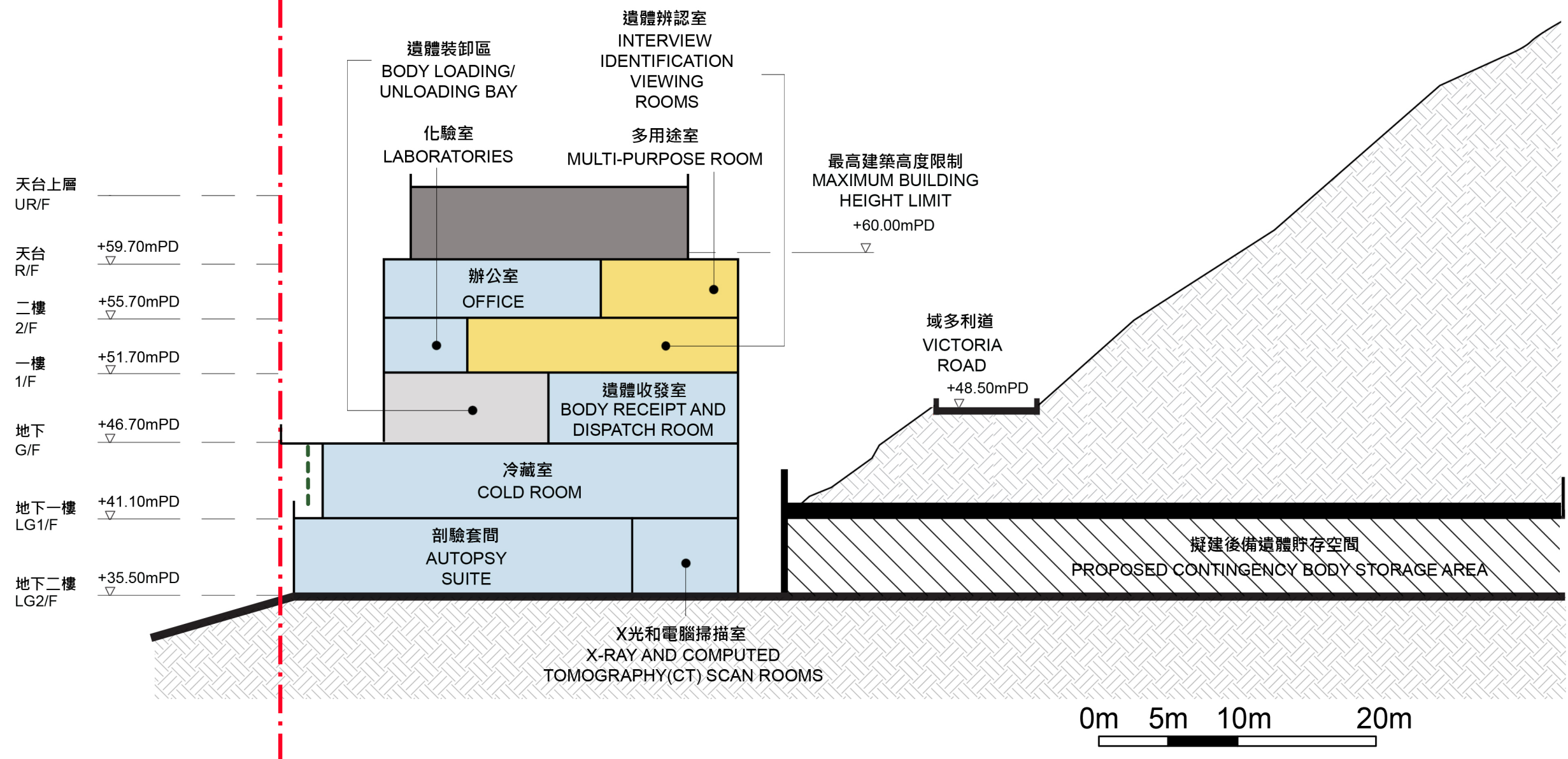
地面綠化
AT-GRADE GREENING

剖面圖 A-A
SECTION A-A

25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY



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圖例	LEGEND		
---	工地界線 SITE BOUNDARY		域多利道下的現有岩洞範圍 AREA INSIDE EXISTING CAVERN UNDER VICTORIA ROAD
	公眾範圍 PUBLIC AREA		
	職員範圍 STAFF AREA		
	機房 PLANT ROOM		
	垂直綠化 VERTICAL GREENING		



從北面望向域多利亞公眾殮房的構思透視圖

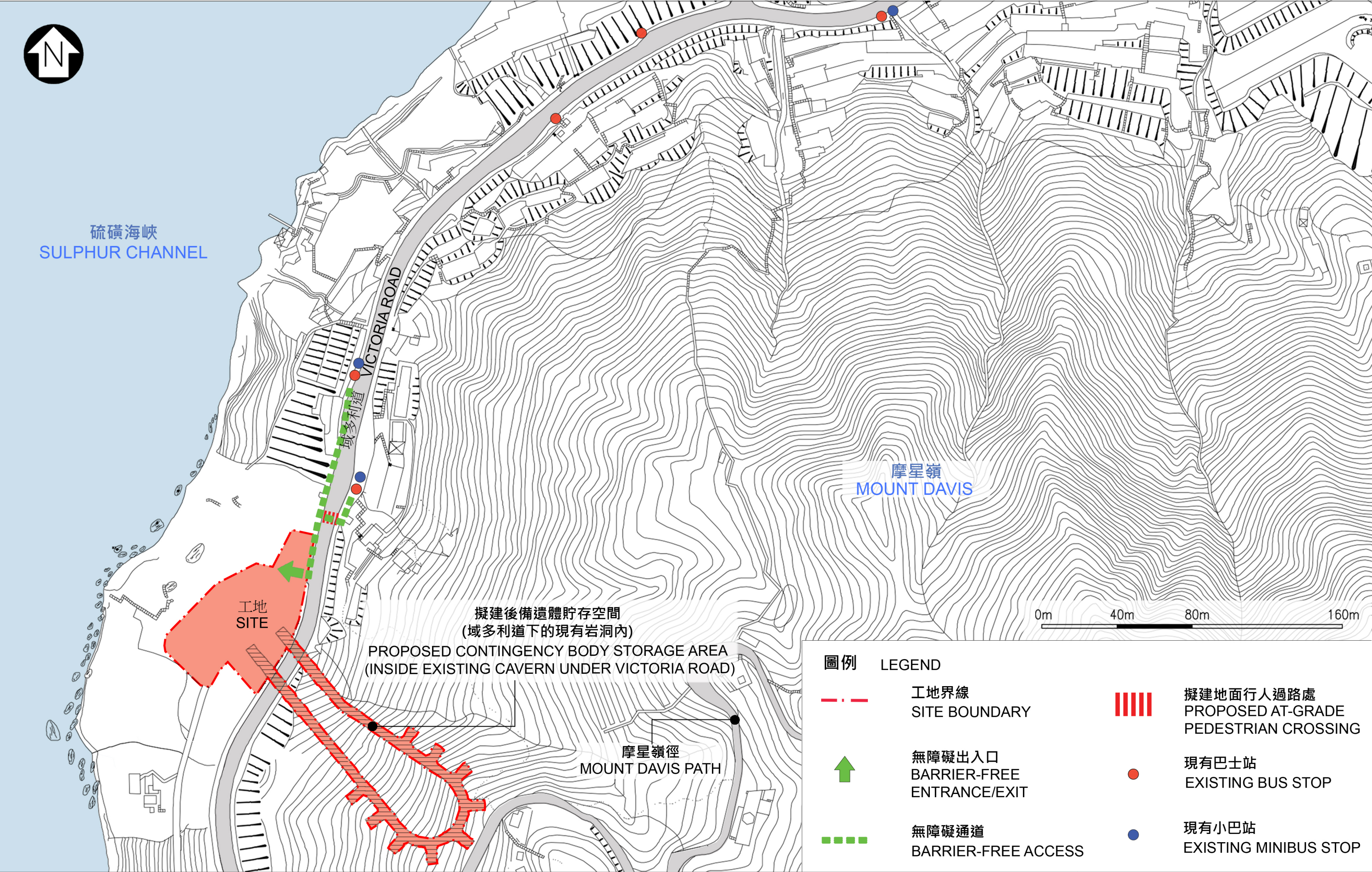
PERSPECTIVE VIEW OF VICTORIA PUBLIC MORTUARY FROM NORTH DIRECTION

構思圖
ARTIST'S IMPRESSION

25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY



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無障礙通道平面圖
BARRIER-FREE
ACCESS PLAN

25NB
重置域多利亞公眾殮房
REPROVISIONING OF VICTORIA PUBLIC MORTUARY

圖例	LEGEND		
	工地界線 SITE BOUNDARY		擬建地面行人過路處 PROPOSED AT-GRADE PEDESTRIAN CROSSING
	無障礙出入口 BARRIER-FREE ENTRANCE/EXIT		現有巴士站 EXISTING BUS STOP
	無障礙通道 BARRIER-FREE ACCESS		現有小巴士站 EXISTING MINIBUS STOP



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25NB – Reprovisioning of Victoria Public Mortuary**Breakdown of estimates for consultants' fees and resident site staff costs
(in September 2024 prices)**

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	12.0
		Technical	–	–	–	4.1
					Sub-total	16.1 #
(b)	Resident site staff (RSS) costs (Note 3)	Professional	108	38	1.6	16.1
		Technical	775	14	1.6	41.4
					Sub-total	57.5 #
Comprising –						
(i)	Consultants' fees for management of RSS					8.1#
(ii)	Remuneration of RSS					49.4#
					Total	73.6

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 applied to the average MPS salary point to estimate the 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' fees for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **25NB**. The assignment will only be executed subject to the Finance Committee's approval to upgrade **25NB** to Category A.

3. The consultants' fee and staff costs for site supervision are based on the estimates 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. Figures marked with # are shown in money-of-the-day prices in paragraph 14 of the main paper.