For discussion on 22 November 2023

# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDING Education – Others 115ET – A 12-classroom special school at Oi Kwan Road, Wan Chai

Members are invited to recommend to the Finance Committee the upgrading of **115ET** to Category A at an estimated cost of \$440.0 million in money-of-the-day prices for the construction of a 12-classroom special school for children with mild intellectual disability at 30 Oi Kwan Road, Wan Chai.

#### **PROBLEM**

We need to construct a special school at the former school site of Wanchai School at 30 Oi Kwan Road, Wan Chai, for reprovisioning Hong Chi Lions Morninghill School (HCLMS) in the same district.

#### **PROPOSAL**

2. The Director of Architectural Services, with the support of the Secretary for Education, proposes upgrading **115ET** to Category A at an estimated cost of \$440.0 million in money-of-the-day (MOD) prices for the construction of a 12-classroom school for children with mild intellectual disability (MiID) at 30 Oi Kwan Road, Wan Chai.

/PROJECT .....

#### PROJECT SCOPE AND NATURE

3. The proposed scope of works of the project includes –

- (a) demolition of the former premises of Wanchai School;
- (b) construction of a 12-classroom school for children with MiID with the following facilities
  - (i) 12 classrooms;
  - (ii) two small group teaching rooms;
  - (iii) seven special rooms including a music room, a visual arts room, a computer assisted learning room, a multi-purpose room, a home economics room, a design and technology room, and a computer room;
  - (iv) an optional subject room;
  - (v) four speech therapy rooms;
  - (vi) an occupational therapy room;
  - (vii) three social worker's rooms;
  - (viii) a library;
  - (ix) two interview rooms;
  - (x) two staff rooms;
  - (xi) a staff common room;
  - (xii) a resource room;
  - (xiii) a student activity centre;
  - (xiv) a conference room;
  - (xv) an assembly hall;
  - (xvi) multi-purpose areas;

- (xvii) a covered playground;
- (xviii) a basketball court; and
- (xix) other ancillary facilities including an accessible/fireman's lift, facilities for the disabled, a tuck shop-cum-central portioning area, store rooms and toilets, etc.; and
- (c) construction of a community room with separate access and toilets on the ground floor of the school premises.
- 4. The proposed special school, with a site area of about 2 000 square metres (m²), will meet the planning target of providing 2 m² of open space per student. In accordance with the Hong Kong Planning Standards and Guidelines, two private car parking spaces for staff and visitors (including an accessible parking space), three lay-bys for school buses and four lay-bys for taxis/private cars will also be provided within the new school premises so that roadside parking is not required. The two parking spaces mentioned above are equipped with electric vehicle charging facilities. A site and location plan, floor plans, sectional drawings, an artist's impression, and the barrier-free access plan for the 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 target completion in around four years. To meet the programme, we have invited tenders in parallel to enable early commencement of the proposed works. The returned tender prices have been reflected in the estimated cost of the proposed project. The contract will only be awarded upon obtaining FC's funding approval.

#### **JUSTIFICATION**

6. The Government endeavours to provide a better learning environment for students. In addition to the existing repair works, the Education Bureau (EDB) has put in place various measures to enhance school facilities to further improve the learning and teaching environment. Nevertheless, the facilities of some old school premises fall short of the prevailing standards and cannot be substantially improved due to area or site constraints, thereby limiting the operation of certain teaching activities. Reprovisioning of school premises is the only way to effectively improve the situation.

7. HCLMS, at 159 Blue Pool Road, Happy Valley, is the first school established by Hong Chi Association as well as the first school for children with intellectual disability (ID) in Hong Kong. The school's existing campus currently occupies a site area of about 1 200 m² only and the school building is nearly 50 years of age. EDB carried out improvement works for the school in 2000, but the scope of works was very limited due to the small size of the campus. As HCLMS is the only school¹ providing education services for children with MiID on the Hong Kong Island, the Government considers that there is an urgent need to reprovision the school to provide students with a better learning and teaching environment, thereby catering for their learning needs and promoting their whole-person development.

- 8. In general, the admission age for special schools is six. HCLMS provides education services for children with MiID from junior primary to senior secondary levels. Upon implementation of the New Academic Structure for Senior Secondary curriculum, HCLMS is required to provide 12 years' primary and secondary education to its students. As there are only nine standard classrooms at the existing school premises, students of different grades and levels have to share the classrooms and attend classes under a floating class arrangement, which is not an ideal situation for students with special educational needs (SEN). The addition of standard classrooms will allow the school to have sufficient facilities to provide more comprehensive teaching and support for students of different levels, while students will have more space to overcome their physical limitations, fully realise their potential at different stages of development, and gradually learn to be independent, which will enable them to embrace the challenges in life.
- 9. Meanwhile, the Government needs to maintain flexibility in the supply of special school places to meet the future demand<sup>2</sup>. At present, HCLMS provides 120 school places according to the approved class structure and the number can increase up to 180 on demand after reprovisioning. This will ensure that students with SEN can obtain relevant professional support.

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There are two other schools for children with mild and moderate ID on the Hong Kong Island, which are located in the Southern District and the Eastern District respectively.

According to the Government's statistics, the number of students enrolled in special schools has increased from about 7 700 in the 2014/15 school year to about 8 400 in the 2022/23 school year. Among them, the number of students with MiID has increased from about 3 000 to about 3 400.

10. On the design of school premises, the Government has been attentive to the views and needs of school sponsoring bodies and special schools. When planning for the construction of new special schools, students' perspectives are taken into account to meet their learning needs. Taking the proposed project as example, an optional subject room in the new premises will simulate a living room, a bedroom and a kitchen to cater for the curriculum design of the special school. This will help students gradually develop independence and self-care abilities, preparing them to embrace the challenges of life after graduation. Specifically, the school will cultivate students' practical skills and enable them to live independently, through adapted applied learning courses designed for senior secondary students with MiID (currently divided into three learning areas: Creative Studies, Service, Engineering and Production) as well as elective courses, such as Independent Living Skills, Health Management and Social Care and School Leavers Programme, in the optional subject room, thereby laving a solid foundation for their enrolment in vocation training programmes upon graduation.

- 11. Besides, HCLMS currently lacks basic facilities such as assembly hall, student activity centre, small group teaching room, multi-purpose room, optional subject room, occupational therapy room, computer room, resource room, central portioning area, multi-purpose areas, greenery area and accessible lift. To provide these facilities and increase the number and size of classrooms, speech therapy rooms, social worker's rooms, interview rooms and conference room, the proposed seven-storey school building will have a construction floor area (CFA) of about 6 789 m². The school can use the facilities of the proposed new school premises flexibly to provide individual or group life planning guidance services for students and parents, and invite external parties to conduct diversified vocational training activities to help students understand themselves and explore their careers.
- 12. HCLMS's existing school premises has no space for the construction of a new annex, and there is no vacant or to-be-vacant school premises in the vicinity for in-situ expansion. Reprovisioning is the only option to improve the learning and teaching environment of the school, and the former Wanchai School at Oi Kwan Road, Wan Chai is the only school site available for reprovisioning purpose in the district.

13. The premises of former Wanchai School was built over 50 years ago The building could not accommodate all basic school facilities and in 1969. demolition is the only cost-effective 3 way for redevelopment. The former Wanchai School occupies a site area of only about 2 000 m<sup>2</sup>, which is far below the prevailing school building standards and cannot be used for reprovisioning an ordinary public school<sup>4</sup>. On the other hand, as there are fewer students in a special school, the site can accommodate the facilities of a 12-classroom school for children with MiID. Although the demolition of the former school premises and the limitations of the site area will be reflected in the construction period and costs (including the need to reserve additional time to carry out demolition works in compliance with relevant statutory requirements to reduce environmental impacts, as well as site layout arrangement, transportation and storage of materials, operation of large-scale machinery and access arrangements for large construction vehicles during construction, etc.), the Government, after careful consideration, concludes that it is necessary and imminent to invest in the proposed project to create a better learning and teaching environment for the students with SEN.

14. HCLMS has committed to opening its new school premises for education, community and other uses so long as the learning of students and school operation will not be affected. The nearby Jockey Club Hong Chi School for children with moderate ID can also use the facilities in the new school premises. In addition, the proposed project will adopt the development principle of "single site, multiple use" in constructing a community room of about 100 m<sup>2</sup> with separate access and toilets<sup>5</sup>. HCLMS will make good use of the new school premises to strengthen its connection and collaboration with the local community, with a view to encouraging its students to integrate into the community and make contribution to our society.

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The former premises of Wanchai School was built on old standards. Due to the lack of space and other physical constraints, the construction floor area is not large enough to accommodate all basic school facilities, and incapable of meeting the electrical and mechanical requirements of the new school under the current standards. Furthermore, the existing school premises has no room for adding ancillary facilities such as lay-bys for school buses and taxis/private cars as well as parking spaces for private cars as stipulated in the Hong Kong Planning Standards and Guidelines.

According to the prevailing school building standards, the site area of a 30-classroom secondary school and a 30-classroom primary school should be around 6 950 m<sup>2</sup> and 6 200 m<sup>2</sup> respectively; and the site area of a 18-classroom primary school should be at least around 3 950 m<sup>2</sup>.

The Wan Chai Kai-fong Welfare Association voluntarily surrendered the former school site of Wanchai School to the Government in 2018, thereby expediting the progress of redevelopment. Therefore, the Government plans to lend the community room to the Wan Chai Kai-fong Welfare Association for non-profit making community use.

15. Upon the completion of the new school premises, Hong Chi Association needs to surrender the current school site and premises of HCLMS to the Government. EDB all along reviews the suitability of retaining to-be-vacant school premises for school use, in line with the policy objective of optimising the use of public resources. EDB has confirmed that the said to-be-vacant premises is no longer required for reallocation for school use. Should FC approve the funding for the proposed project, EDB will release the site for Planning Department's consideration of suitable alternative long-term uses in accordance with the Central Clearing House mechanism for vacant school premises sites.

#### FINANCIAL IMPLICATIONS

16. We estimate the capital cost of the project to be \$440.0 million in MOD prices, broken down as follows –

		\$million (in MOD prices)
(a)	Site works	13.0
(b)	Demolition	12.6
(c)	Foundation	33.9
(d)	Building <sup>6</sup>	184.1
(e)	Building services	90.8
(f)	Drainage	14.3
(g)	External works	13.5
(h)	Energy conservation, green and recycled features	4.1
(i)	Furniture and equipment (F&E) <sup>7</sup>	4.9
		/(j)

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

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

\$million

		(	(in MOD prices)		
(j)	Consultants' fees for  (i) contract administration <sup>8</sup> (ii) management of resident site staff (RSS)	9.1 1.0	10.1		
(k)	Remuneration of RSS		18.8		
(1)	Contingencies		39.9		
	Total		440.0		

17. We propose engaging consultants to undertake contract administration and site supervision of the 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 principle 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 of the project. For instance, a standardised layout will be used in the highly replicable classrooms and toilets. We will also adopt the Modular Integrated Construction method, with a view to enhancing construction efficiency, quality and cost-effectiveness of the project. The design has also taken into consideration of the school operational needs in layout optimisation; as well as natural factors such as daylight, ventilation and noise, to minimise substantial mitigation measures. The CFA of the project is about 6 789 m². The estimated construction unit cost, represented by the building and building services costs, is \$40,492 per m² of CFA in MOD prices. We consider the estimated cost reasonable as compared with that of similar projects recently built by the Government.

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The estimated fee covers quantity surveying services, site supervision and project management, etc.

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

Year	\$ million (in MOD prices)
2023 – 24	7.0
2024 - 25	20.8
2025 - 26	70.5
2026 - 27	90.6
2027 - 28	153.9
2028 - 29	49.5
2029 - 30	25.9
2030 – 31	21.8
	440.0

- 20. 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 2023 to 2031. We will deliver the construction works using New Engineering Contract (NEC)<sup>9</sup>. We intend to award the contract on a lump-sum basis because we can clearly define the scope of the works in advance. The contract will provide for price adjustment.
- 21. The cost of F&E for the project, estimated to be about \$4.9 million (in MOD prices), will be borne by the Government according to the existing policy. We estimate the annual recurrent expenditure arising from this project to be \$49.83 million upon full commissioning of the new school premises.

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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 contracting parties.

#### **PUBLIC CONSULTATION**

22. We consulted the Development, Planning and Transport Committee of Wan Chai District Council on the project on 17 January 2023. Members unanimously supported the project.

23. We also consulted the Legislative Council (LegCo) Panel on Education on 5 May 2023. Members of the Panel unanimously expressed their support for the project at the meeting and the submission of the funding proposal to Public Works Subcommittee for consideration. We have submitted supplementary information to the Members of the Panel on 29 May 2023 (Legislative Council CB(4)527/2023(01)).

#### **ENVIRONMENTAL IMPLICATIONS**

- 24. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environmental Review (PER) in January 2023. The PER concluded and the Director of Environmental Protection agreed that, with the implementation of recommended noise mitigation measures, including installation of insulated windows and air-conditioning, the project would not have long-term environmental impacts. We have included in the project estimates the cost to implement these recommended mitigation measures.
- 25. We will incorporate provisions into 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 demolition and construction period. These measures include the adoption of quieter construction equipment and methods, the use of silencers, mufflers and acoustic linings or shields for noisy construction activities; frequent cleaning and watering of the site, the provision of wheel-washing facilities to minimise dust emission; and proper treatment of site run-off to avoid illegal effluent discharge.

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 generated (e.g. use of excavated materials for filling within the site) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities (PFRFs)<sup>10</sup>. 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.

- At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid and reduce the generation of inert construction waste and to reuse and recycle such waste. We will ensure that the day-to-day operations on site comply with the approved plan, and require the contractor to separate the 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 PFRFs and landfills respectively through a trip-ticket system.
- We estimate that the project will generate in total about 16 170 tonnes of construction waste. Of these, we will reuse about 1 030 tonnes (6.4%) of inert construction waste on site and deliver about 13 720 tonnes (84.8%) of inert construction waste to PFRFs for subsequent reuse. We will dispose of the remaining 1 420 tonnes (8.8%) of non-inert construction waste at landfills. The total cost of disposal of construction waste at PFRFs and landfills is estimated to be \$1.70 million for this project (based on a unit charge rate of \$87 per tonne for disposal at PFRFs and \$365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

/HERITAGE .....

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.

#### HERITAGE IMPLICATIONS

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

#### LAND ACQUISITION

30. This project will be delivered within the Government land allocated to the EDB and therefore does not require any land acquisition.

#### ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

- 31. This project will adopt various forms of energy efficient features and renewable energy technologies, in particular
  - (a) demand control of supply air;
  - (b) energy reclaim of exhaust air;
  - (c) energy efficient lift system; and
  - (d) photovoltaic system.
- 32. For greening features, there will be landscaping and green roofs at appropriate areas for environmental and amenity benefits.
- 33. For recycled features, we will adopt a rainwater harvesting system for landscape irrigation with a view to conserving water.
- 34. The total estimated cost for adoption of the above features is around \$4.10 million (including \$0.8 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 10 % energy savings in the annual energy consumption with a payback period of about 5 years.

#### **BACKGROUND INFORMATION**

We engaged a term contractor to undertake ground investigation works, and consultants to undertake various services including topographical and tree survey, underground services investigation, building information modelling, consultancy for schematic and detailed design, tender documentation and quantity surveying services at a total cost of about \$11.8 million. The works and services provided by the term contractor and consultants are 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 works and consultancy services have facilitated in finalising the scope and cost estimate of the project for seeking FC's funding approval.

- 36. Of the existing eight trees within the project boundary, five trees will be retained. The project will involve felling of three trees. All trees to be felled are common trees that are not trees of particular interest<sup>11</sup>. We will incorporate planting proposals as part of the project, including estimated quantities of around three trees, 1 173 shrubs, 122 climbers, 3 079 groundcovers and 114 m<sup>2</sup> of grassed area.
- 37. We estimate that the proposed works will create about 120 jobs (100 for labourers and 20 for professional or technical staff) providing a total employment of 2 680 man-months.

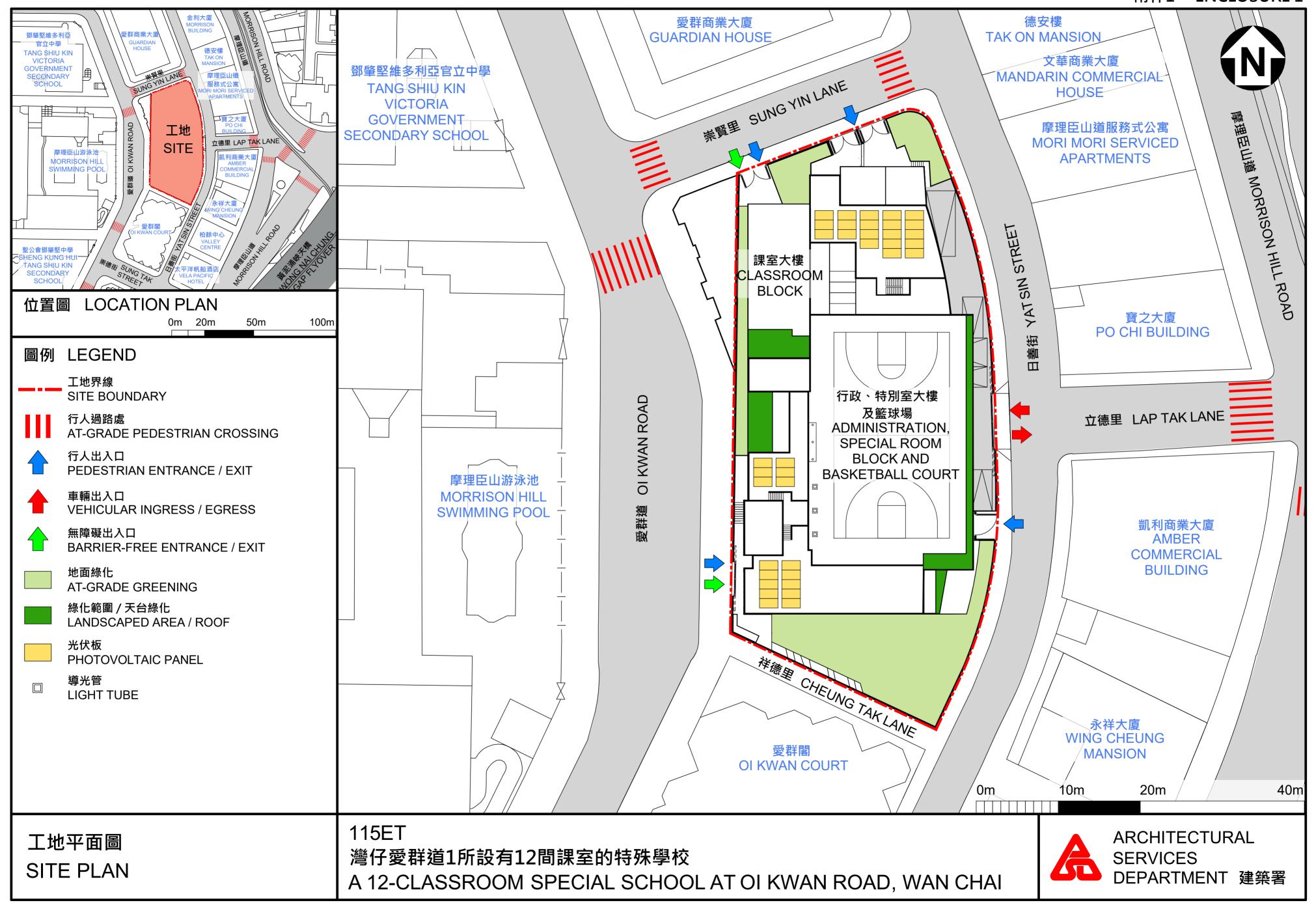
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- "Trees of particular interest" are defined in paragraph 3.3 of the Guidelines for Tree Risk Assessment and Management Arrangement promulgated by the Development Bureau. Examples of trees of particular interest are listed as follows
  - Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
  - Trees of 100 years old or above;
  - Trees with trunk diameter equal to or exceeding 1.0 metre (measured at 1.3 metres above ground level), or with height/canopy spread equal to or exceeding 25 metres;
  - Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
  - Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by Agriculture, Fisheries and Conservation Department;
  - Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
  - Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
  - Well-known Fung Shui trees;
  - Landmark trees with evidential records to support the historical or cultural significance of the trees:
  - Trees which may arouse widespread public concerns; and
  - Trees which may be subject to strong local objections on removal.

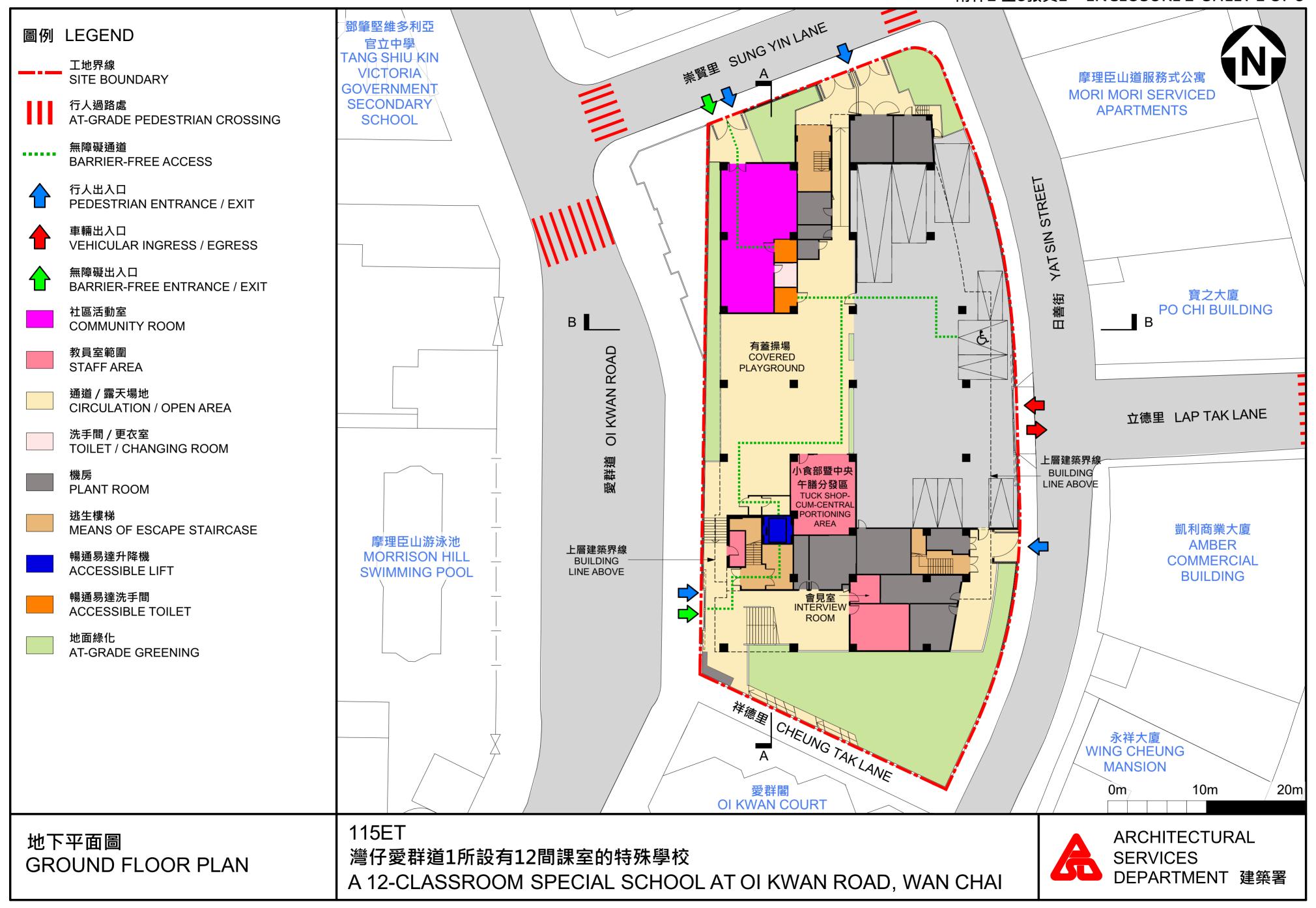
As mentioned in paragraph 5 above, we invited tenders for the proposed works in parallel. Based on the returned tender prices, we have updated the project estimate to \$440.0 million in MOD prices, which is higher than our earlier estimate of \$391.7 million in MOD prices when we consulted the LegCo Panel on Education on 5 May 2023 by 12%. We consider that the latest project estimate has reflected the prevailing market situation and should be adequate to deliver the proposed works.

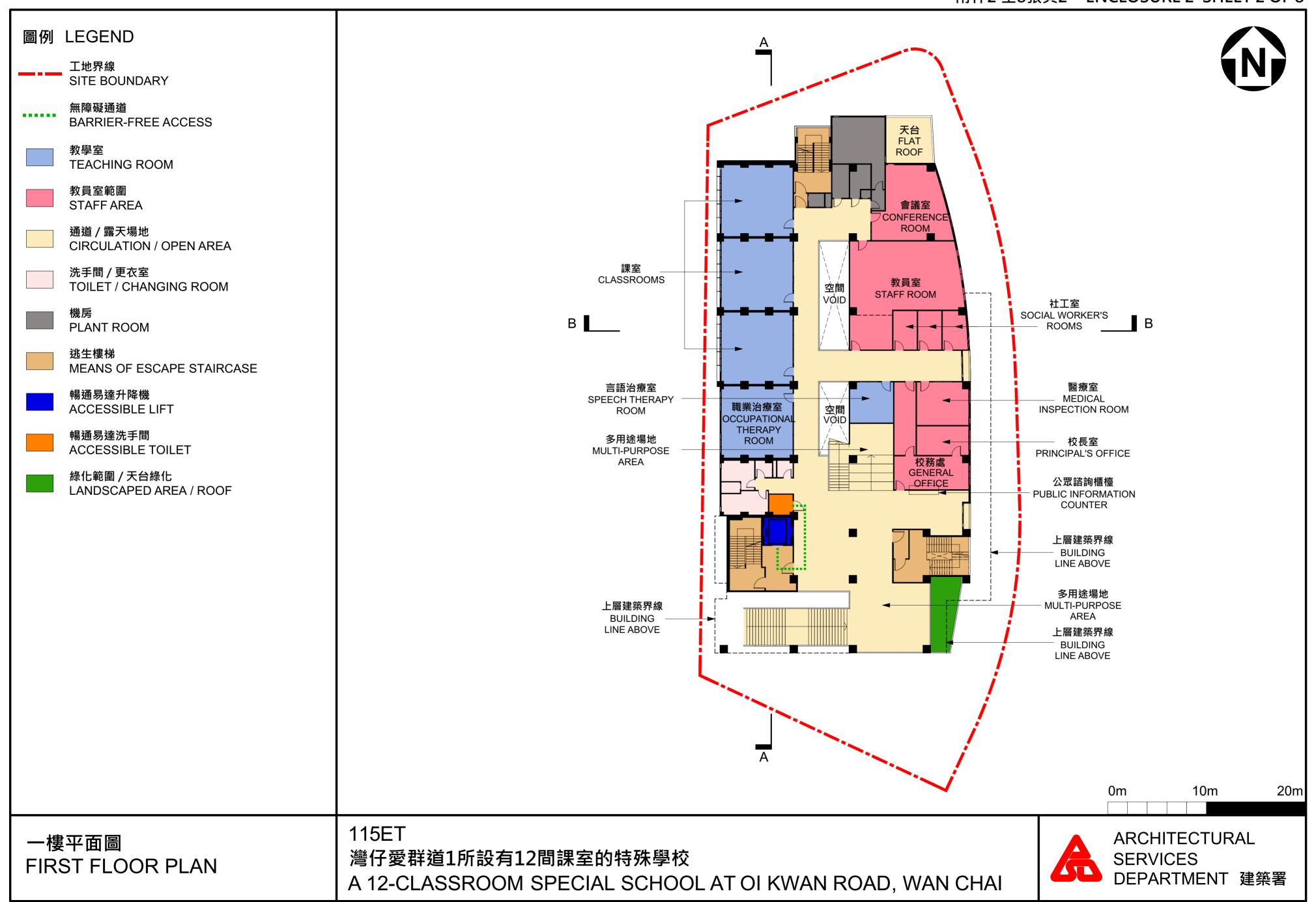
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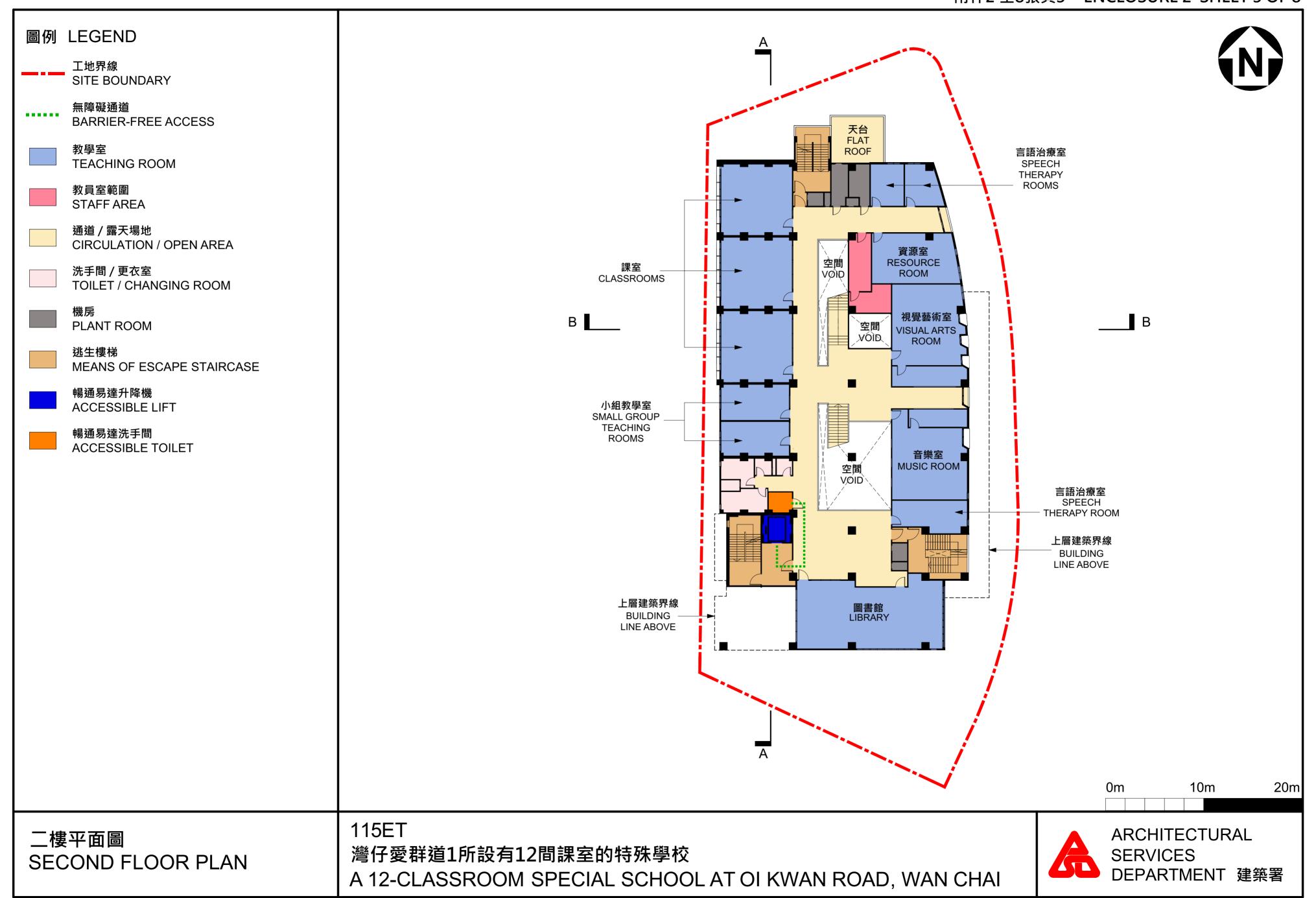
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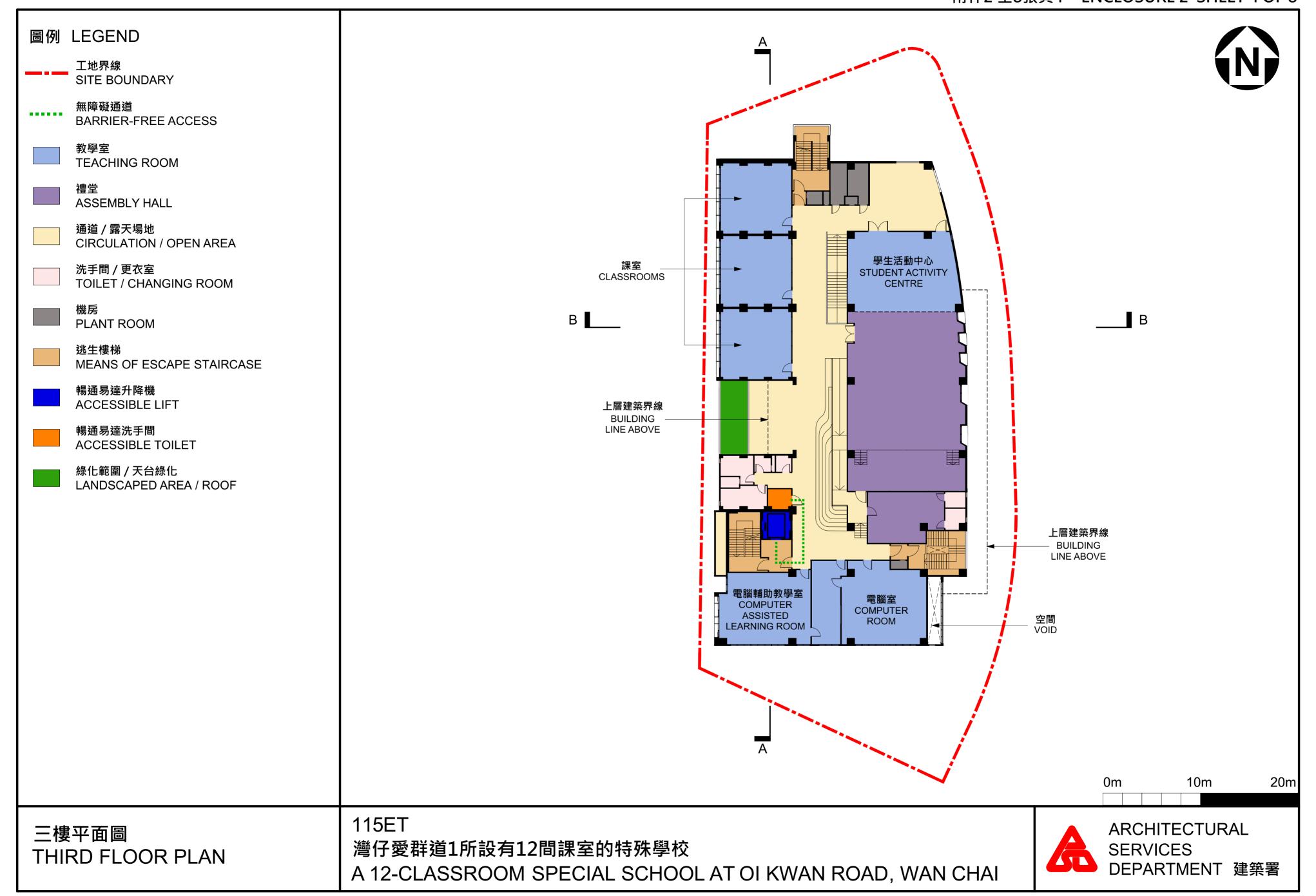


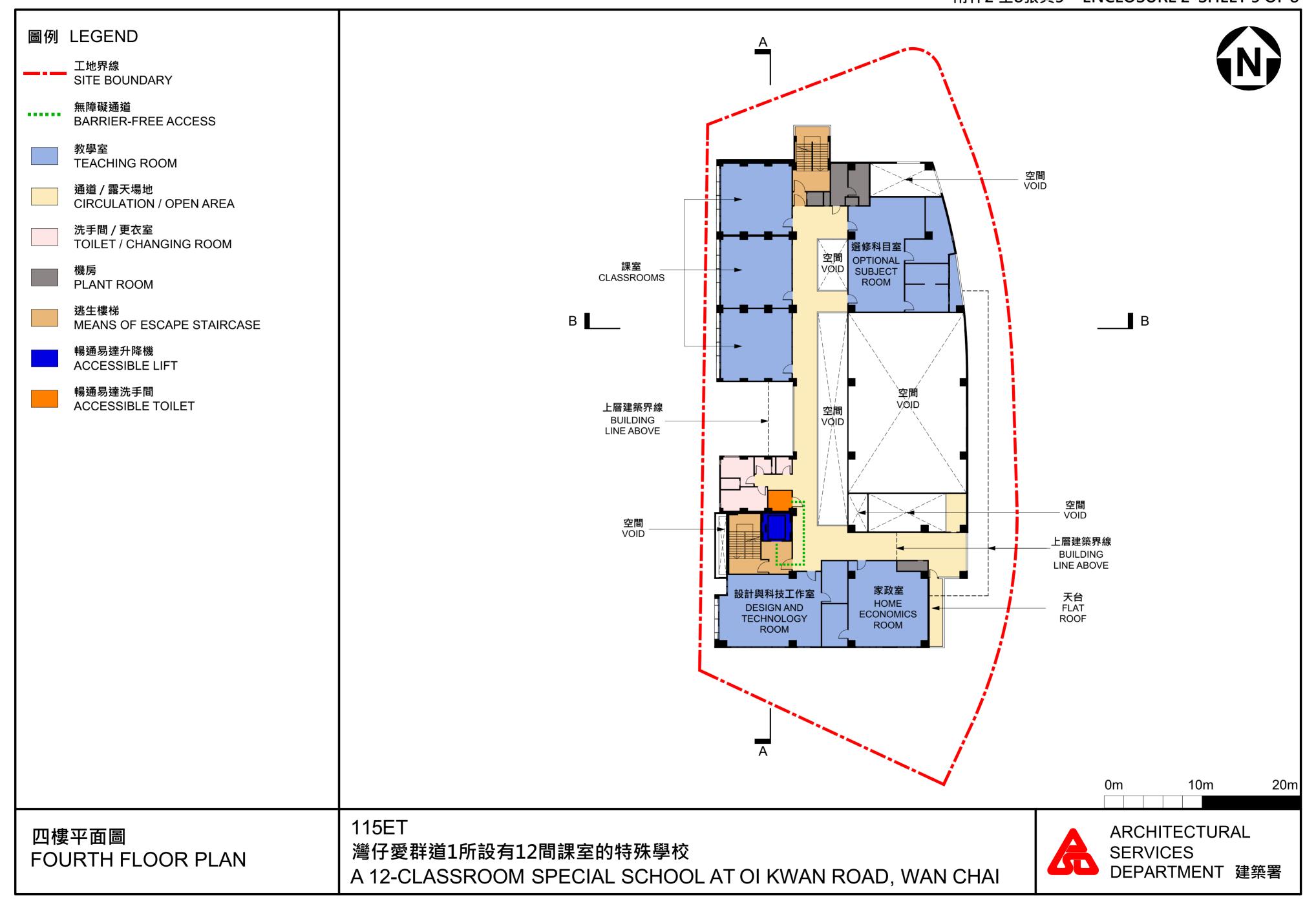
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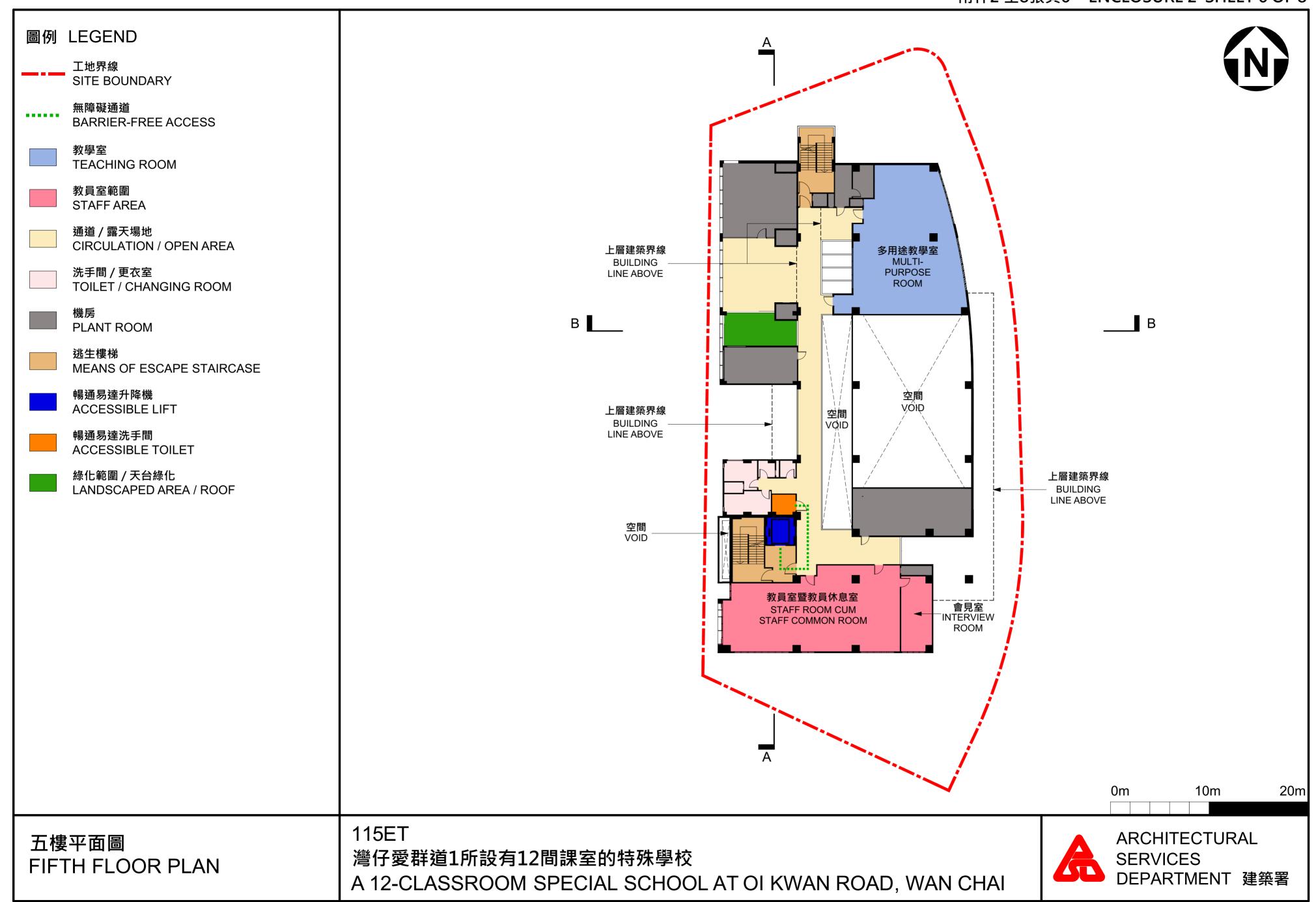


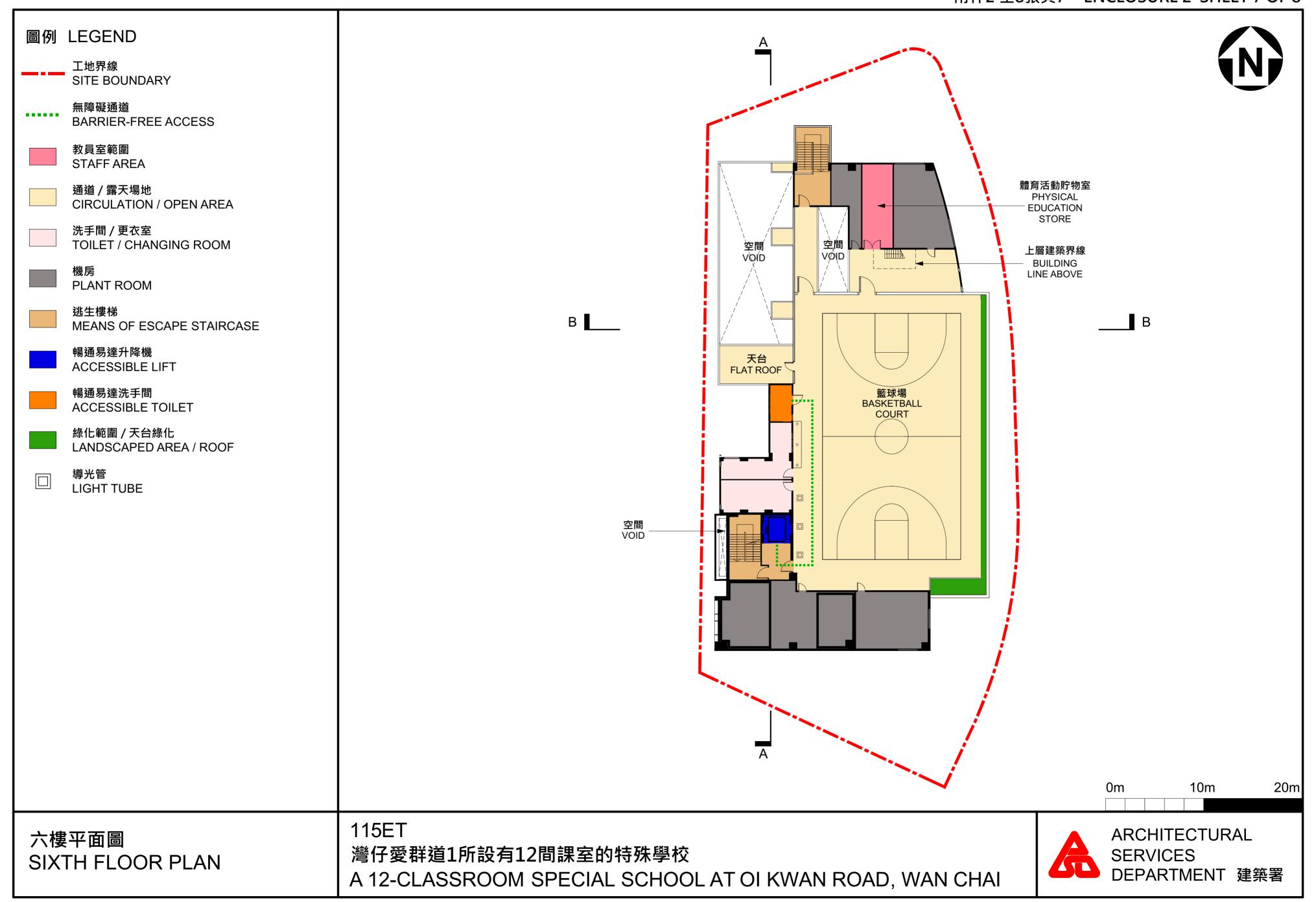


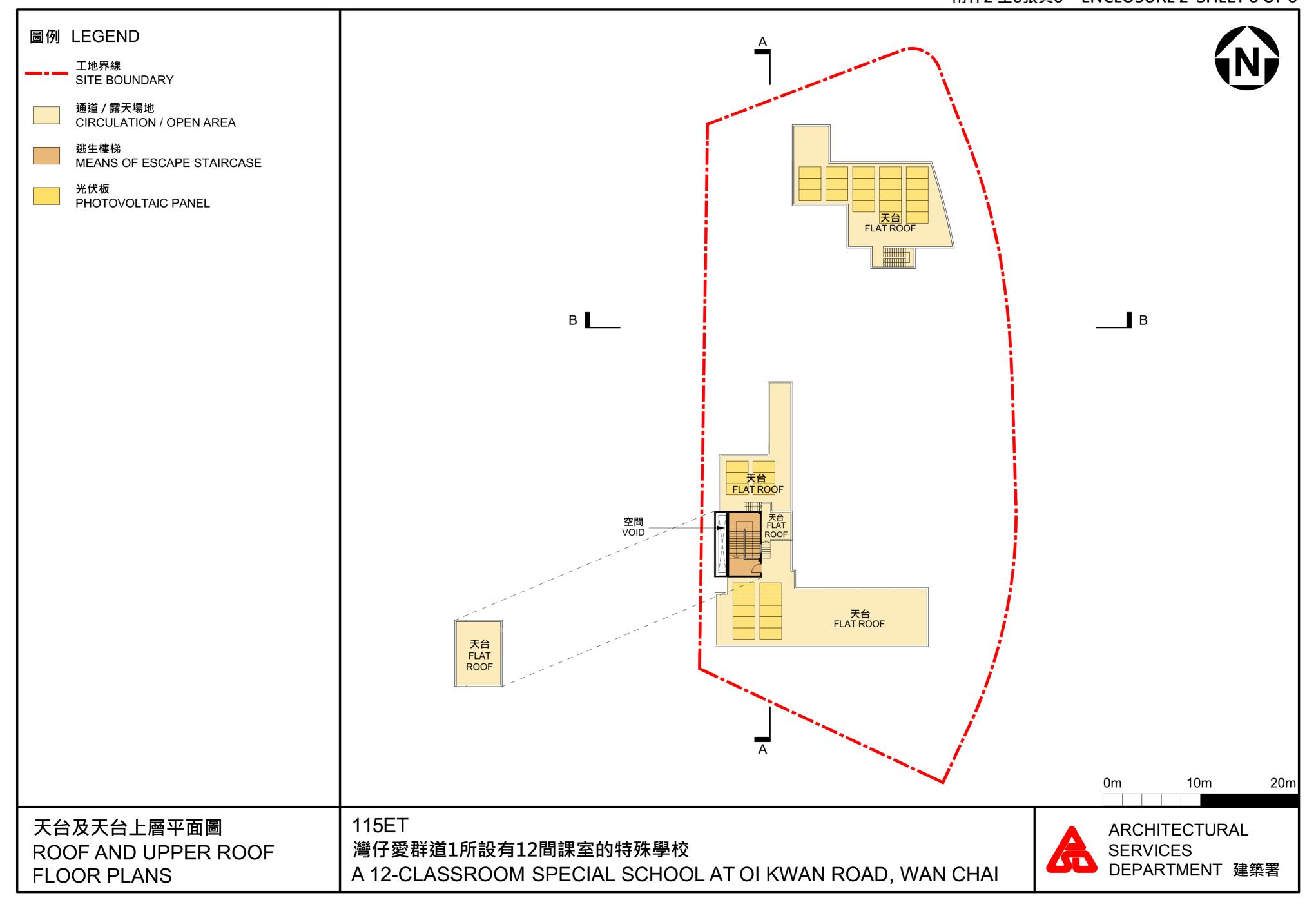


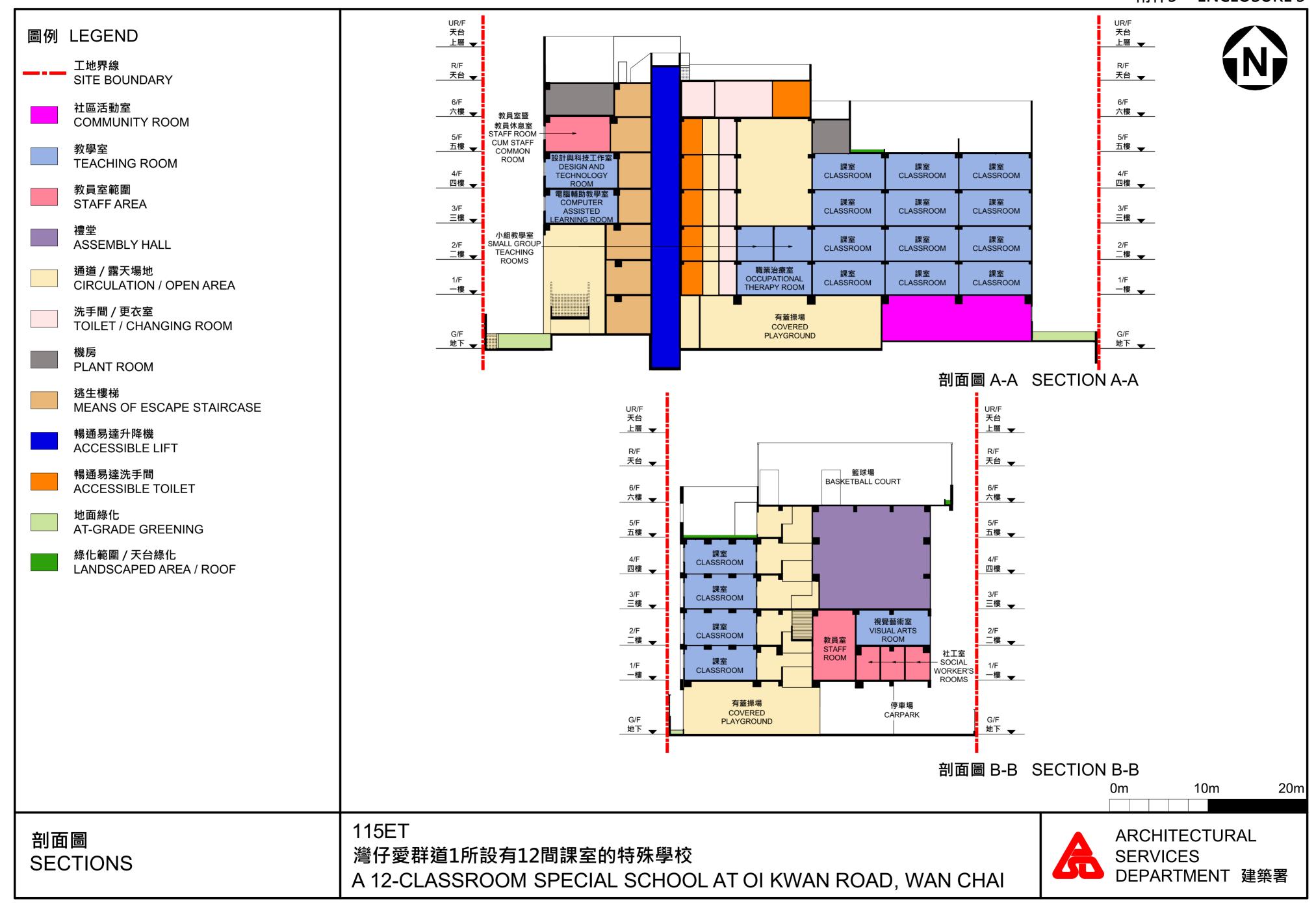










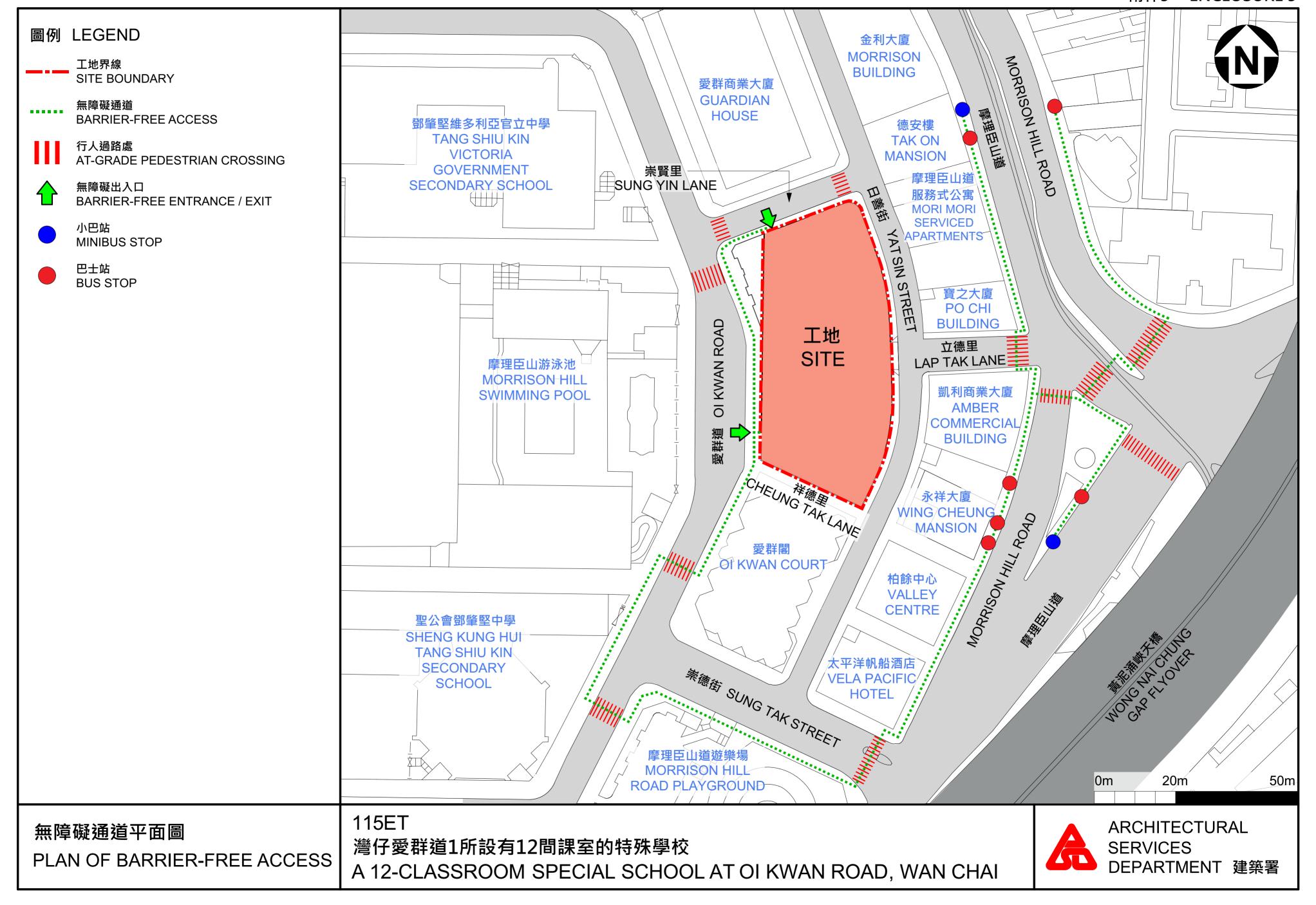




從西南面望向學校的構思透視圖 PERSPECTIVE VIEW FROM SOUTHWEST DIRECTION

構思圖 ARTIST'S IMPRESSION 115ET 灣仔愛群道1所設有12間課室的特殊學校 A 12-CLASSROOM SPECIAL SCHOOL AT OI KWAN ROAD, WAN CHAI





#### 115ET – A 12-classroom special school at Oi Kwan Road, Wan Chai

## 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	Professional	_	_	_	6.7
	for contract administration (Note 2)	Technical	_	_	_	1.1
	udiffinistration				Sub-total	7.8#
(b)	Resident site staff	Professional	27	38	1.6	3.9
	(RSS) costs (Note 3)	Technical	254	14	1.6	13.2
					Sub-total	17.1
	Comprising –					
	(i) Consultants' fees for management of RSS					0.9#
	(ii)Remuneration of RSS					16.2#
					Total	24.9

<sup>\*</sup> 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 = \$90,540 per month and MPS salary point 14 = \$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 **115ET**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade the **115ET** to Category A.
- 3. The consultants' fee 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.