ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDING

Recreation, Culture and Amenities – Cultural facilities
75RE – Expansion of Hong Kong Science Museum and Hong Kong Museum of History

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

54QJ – New facilities building of the Hong Kong Sports Institute

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of part of **75RE** (i.e. "Preconstruction activities for expansion of Hong Kong Science Museum and Hong Kong Museum of History") and part of **54QJ** (i.e. "Pre-construction activities for new facilities building of the Hong Kong Sports Institute") to Category A at estimated costs of \$72.8 million and \$54.7 million in money-of-the-day prices respectively; and
- (b) the retention of the remainder of **75RE** and the remainder of **54QJ** in Category B.

PROBLEM

We need to carry out the pre-construction activities for the expansion of Hong Kong Science Museum (HKScM) and Hong Kong Museum of History (HKMH) as well as the new facilities building of the Hong Kong Sports Institute (HKSI).

HKScM and HKMH

- 2. Since its opening in 1991, HKScM has been featuring about 600 exhibits in 17 permanent exhibition galleries with a total exhibition space of 6 500 square metres (m²). In the past few decades, rapid advances in science and technology have been playing crucial roles in stimulating economic growth of societies worldwide. There is a strong demand from the public for HKScM to keep pace with the technological developments and showcase the latest discoveries, research findings and cutting-edge technological innovations in the exhibition galleries. In addition, there is an urgent need for HKScM to increase its size and add new facilities to enable organisation of diversified science communication activities and joint-school exhibitions in order to support the increasing demand for Science, Technology, Engineering and Mathematics (STEM)-related education programmes.
- 3. Established in 1975, HKMH has a total exhibition space of 8 000 m² with one permanent and one special exhibition galleries. The existing one-way visitor circulation design and accessibility provisions in HKMH are far from meeting the contemporary international museum standards; the size and headroom of the existing gallery does not cater for the presentation of large-scale exhibition with sizable exhibits, and restricts the museum from staging world-class exhibitions in collaboration with internationally acclaimed museums. In addition, HKMH also requires new facilities to deliver educational programmes for various target groups.
- 4. At present, the design layout of HKScM and HKHM lacks leisure space and supporting facilities, rendering the accessibility of the museums unsatisfactory and not enticing to the community. In order to invigorate the area, it is essential for the museums to enhance their accessibility, exposure and connectivity with the neighbourhood, and to provide more leisure and activity spaces for the public.

HKSI New Facilities Building

- 5. The Government fully supports elite sports development. We established the Elite Athletes Development Fund in 2011-12 to provide annual funding to the HKSI to train elite athletes in Hong Kong. With long-term and comprehensive support services, the overall performance of Hong Kong athletes has improved greatly in recent years. There have been remarkable achievements in various sports. The facilities and support provided by the HKSI to elite athletes should stay abreast of the latest developments to continuously take forward elite sports development in Hong Kong effectively.
- Over the past decade, the total number of athletes at the HKSI and the number of elite sports has greatly increased. The HKSI must add appropriate facilities to meet such needs. Besides, the outstanding achievements of Hong Kong athletes hinge on the provision of professional training and support services. As quite a number of Hong Kong athletes have successfully attained higher world rankings, the relevant sports science and sports medicine support services become more crucial. However, the structure of the existing sports complex built around 40 years ago, originally in 1982, has restricted the introduction of facilities related to sports science and sports medicine and limited the HKSI's provision of sports science and sports medicine support to athletes. The HKSI will need the construction of the new facilities building to meet the spacing and building requirements of the sports science and sports medicine facilities.

PROPOSAL

7. The Government now proposes that a reserved site of around 1 900 m² (Site 1) at the backyard of the two museums and an open space of around 7 600 m² (Site 2) should be used for the expansion of HKScM and HKMH. The project scope of the proposed expansion comprises the construction of annex buildings with new facilities for both museums and re-provisioning of the affected or out-of-date facilities. The Director of Architectural Services (DArchS), with the support of the Secretary for Home Affairs (SHA), proposes to upgrade part of 75RE to Category A at an estimated cost of \$72.8 million in money-of-the-day (MOD) prices for the preconstruction activities for the expansion of HKScM and HKMH. Subject to the funding approval by the Finance Committee (FC), we plan to commence the pre-

construction activities in the second quarter of 2020 for completion in the fourth quarter of 2022.

8. The HKSI proposes to construct a new facilities building and renovate the vacated spaces of the existing HKSI sports complex within the current HKSI campus. The new facilities building is located between the rowing centre to the South and the swimming complex to the North with a site area of about 6 600 square metres (m²). It is expected to be four-storey high, which is of similar height to the swimming complex, with a net operating floor area (NOFA) of about 8 940 m². The major facilities to be provided include two multi-purpose training venues and a number of facilities related to sports science and sports medicine. The SHA, on the advice of the DArchS, proposes to upgrade part of **54QJ** to Category A at an estimated cost of \$54.70 million in MOD prices to carry out the pre-construction activities for the new facilities building in the HKSI. Subject to the funding approval by the FC, the HKSI plans to commence the pre-construction activities in the second quarter of 2020 for completion in the third quarter of 2022.

PROJECT SCOPE AND NATURE

9.	Details	of the	e two	projects	above	are	provided	at	Enclosures	1	and	2
respectively.												

Home Affairs Bureau January 2020

Expansion of Hong Kong Science Museum and Hong Kong Museum of History

PROJECT SCOPE AND NATURE

The site, in Tsim Sha Tsui East, accommodating the Hong Kong Science Museum (HKScM) and the Hong Kong Museum of History (HKMH) has been developed in planned phases for the construction of a museum complex. The development was proposed to be implemented in three phases. ¹ - HKScM, and then HKMH and the expansion of HKScM. HKScM and HKMH were completed and opened in 1991 and 1998 respectively. It is now proposed that a reserved site of around 1 900 square metres (m²) (Site 1) at the backyard of the two museums and an open space of around 7 600 m² (Site 2) should be used for the expansion of HKScM and HKMH. The proposed scope of the pre-construction activities includes —

- (a) design work for the expansion of HKScM and HKMH with facilities as set out in paragraph 2 below;
- (b) site investigation works and minor studies² to facilitate the design work mentioned in paragraph 1(a) above; and
- (c) preparation of tender documents (including tender drawings) and assessment of tenders for construction works of the expansion of HKScM and HKMH;

/2.

The existing land in Tsim Sha Tsui where HKScM and HKMH are located was demarcated for construction of a museum complex under Government Land Allocation K265. The Town Planning Board (TPB) Application No. A/K1/49 was approved on 14 August 1987 for the development of a museum complex in three phases - Phase I, the construction of the Museum of Science and Technology (former name of HKScM); Phase II, the expansion of the Museum of Science and Technology; and then the construction of HKMH in Phase III. In 1991, HKScM was constructed. According to the TPB Application A/K1/78 dated 19 May 1995, HKMH would be constructed before the possible expansion of HKScM. HKMH was constructed in 1998. Following the same TPB Application, possible expansion of HKScM would be proceeded, with the expansion of HKMH, which is under consideration of this paper.

² Site investigation works and minor studies include updated topographical and tree surveys, ground investigation, geotechnical assessment, utility mapping, air ventilation assessment and condition survey, etc.

- 2. The project scope of the proposed expansion of HKScM and HKMH comprises the construction of annex buildings with new facilities for both museums and reprovisioning of the affected or out-of-date facilities, which includes
 - (a) galleries and exhibition space for HKScM, including thematic exhibition galleries, innovative experiential centres, permanent exhibition galleries, a special exhibition gallery and outdoor interactive exhibition areas;
 - (b) education facilities for HKScM, including multipurpose hall, makerspace, science laboratories, workshops and classrooms;
 - (c) exhibition space and education facilities for HKMH, including special exhibition gallery, learning centre and activity rooms;
 - (d) reprovisioning of the affected facilities and improvements of interfacing between the existing and new facilities/exterior of HKScM and HKMH:
 - (e) improvements of HKMH's accessibility, internal circulation for people and goods, as well as venue operation, such as the addition of new escalators, provision of access points for wheelchair users, replacement of existing freight lift for transportation of artefacts, etc.;
 - (f) enhancement of the piazzas and their adjoining public spaces;
 - (g) cafe/restaurant and shop;
 - (h) office facilities for future museum staff;
 - (i) exhibits workshops and storage;

- (j) beautification of public pavement, landscaped areas and surrounding outdoor space;
- (k) realignment of pedestrian and vehicle circulation including re-provisioning of the existing ramp connecting footbridge across Granville Road, provision of ancillary parking spaces to meet the operational needs of the museums, and provision of loading/unloading facilities and lay-by spaces; and
- (l) other ancillary facilities including toilets, babycare rooms and plant rooms, etc.
- 3. The site and location plan is at Annex I to Enclosure 1.
- 4. Subject to the funding approval by the Finance Committee (FC), we plan to commence the pre-construction activities in the second quarter of 2020 for completion in the fourth quarter of 2022.
- 5. We will retain the remainder of **75RE** in Category B and will seek funding from the FC after the substantial completion of the pre-construction activities.

JUSTIFICATION

The Hong Kong Science Museum

6. Since its opening in 1991, HKScM has been featuring about 600 exhibits in 17 permanent exhibition galleries with a total exhibition space of 6 500 m². The museum aims at promoting science popularisation in Hong Kong and arousing public's interest in the learning of science through hands-on experience. HKScM has been getting more popular and attracted more than a million visitors per year in the past five years. In view of the popularity of the museum and the high usage rate of

/various

various facilities, the existing space and facilities are insufficient. A feasibility study³ conducted earlier on has benchmarked HKScM against a number of international science museums and revealed that with a floor area of 13 500 m², HKScM was significantly smaller than its overseas counterparts. To maintain HKScM's competitiveness in the 21st century with fast-paced advances in science and technology, upgrading HKScM in both its capacity and facilities is of paramount importance.

- 7. More than 75% of HKScM's permanent galleries focus on natural sciences such as physics, biology, mathematics and earth sciences, while the rest cover topics on transportation, home technology and telecommunications. In the past few decades, rapid advances in science and technology have been playing crucial roles in stimulating economic growth of societies worldwide. There is a strong demand from the public for HKScM to keep pace with the technological developments and showcase the latest discoveries, research findings and cutting-edge technological innovations in the exhibition galleries. With the significantly increased floor area after the expansion, new exhibition space will be available for showcasing local achievements in scientific research and innovation. In addition, the new special exhibition hall could also facilitate the organisation of large-scale special exhibitions with renowned museums and institutions in the world.
- 8. Provision of informal education programmes is another core function of HKScM. At present, with the very limited venue space and supporting facilities, which include one classroom, one laboratory and one computer classroom installed with very basic and simple equipment, it is very difficult for the museum to organise diversified science communication activities and joint-school exhibitions, or to support the increasing demand for local Science, Technology, Engineering and Mathematics (STEM)-related education programmes. Therefore, there is an urgent need to increase its size and add new facilities, particularly the provision of the multipurpose hall, workshops and laboratories with advanced tools and equipment,

/discussion

Aecom conducted a feasibility study in 2015 and compared HKScM with 11 world-class science museums including California Academy of Sciences, San Francisco, California; Exploratorium, San Francisco, California; The Tech Museum of Innovation, San Jose, California; Ontario Science Centre Toronto, Canada; Science Museum, London, United Kingdom; Shanghai Science & Technology Museum, Shanghai; Shanghai Natural History Museum, Shanghai; China Science and Technology Museum, Beijing; Guangdong Science Center, Guangzhou; National Museum of Emerging Science and Innovation, Tokyo, Japan; and Science Centre Singapore.

discussion spaces and experiment rooms which are found in science museums around the world.

The Hong Kong Museum of History

- 9. Established in 1975, HKMH⁴ is dedicated to promoting local history of Hong Kong to the public, as well as fostering public awareness and understanding of the history and culture of China and overseas countries. There is a total exhibition space of 8 000 m² with one permanent and one special exhibition galleries in the current museum premises. *The Hong Kong Story* permanent exhibition, occupying an area of 7 000 m², vividly outlines the natural environment, folk culture and historical development of Hong Kong. The exhibition attracted an attendance of over one million per year during the period of 2014 to 2018 and is undergoing a full-scale renovation to sustain its appeal to the public, cultivate a wider audience base, as well as to enrich visitors' experience and attract visitation. However, the one-way visitor circulation design and accessibility provisions installed two decades ago are far from meeting the contemporary international museum standards. Improvement in this regard is therefore required before we could enhance visitors' experience and align the museum with the latest international museum standards.
- 10. Furthermore, special exhibitions on various themes of local or world history are featured regularly at the special exhibition gallery, but the existing gallery, 980 m² in size with 3.3 m headroom, does not cater for the presentation of large-scale exhibition with sizable exhibits, and restricts the museum from staging world-class exhibitions in collaboration with internationally acclaimed museums. Apart from the need of better exhibition space, HKMH also requires new facilities to deliver education programmes for various target groups, such as physical interactions with historical objects to enhance visitors' skills and knowledge in experiencing and understanding history, so as to strengthen the support to school curriculum. With the new exhibition and education facilities, HKMH would be able to present more world-class exhibitions and organise more innovative and diversified audience building and educational programmes with a view to stimulating the interest of students and

/youngsters

In 1975, HKMH was first established at Star House in Tsim Sha Tsui. It was subsequently moved to the temporary accommodation in Kowloon Park in 1983 and its present premises on Chatham Road South, Tsim Sha Tsui East in 1998.

youngsters, as well as engaging the community with new and fresh learning experience.

The Disconnected Neighbourhood

11. At present, the public entrances of the two museums all lie on the southern side of the site and connect only to a fraction of the public circulation system around the area, rendering the accessibility of the museums unsatisfactory. In line with the prevalent design decades ago, HKScM and HKMH are walled up with an uninviting vibe. The museums are cut off from the surrounding streetscape and stand in striking contrast with the hustle and bustle in the vicinity. The current piazzas, especially the upper one, are very much under-utilised and have little connections with the two museums. The old framework of the museum buildings lacking leisure space and supporting facilities is not enticing to the community. In order to invigorate the area, it is essential for the museums to enhance their accessibility, exposure and connectivity with the neighbourhood, and to provide more leisure and activity spaces for the public. The current provision of open space⁵ of the museum complex would be maintained in the future design.

The Rejuvenated Museum Complex and the Invigorated Neighbourhood

- 12. Against this background, the expansion of HKScM and HKMH, forming a rejuvenated museum complex amid the invigorated neighbourhood, is envisaged to achieve the following objectives through expansion in both the scale and breath of activities:
 - (a) to expand the scope of HKScM by showcasing more cutting-edge technologies and innovations using the additional space in the new annex buildings;
 - (b) to complement the existing HKScM as a full-fledged world-class museum with state-of-the-art facilities,

/exhibits

⁵ The current provision of open space with 24-hour public access is about 40% of the site area of the whole complex (i.e. Government Land Allocation – K 265).

exhibits and programmes that can provide a pleasant learning experience to visitors, and strengthen its role as a leading science and technology education hub interconnecting the Greater Bay Area, promoting appreciation of the scientific and technological developments of China as well as the rest of the world;

- (c) to inspire and groom more talented students in support of the economic development of local scientific and technology research industries, through connecting science and the community, complementing school education by the provision of extra-curricular STEM extended-learning activities, and showcasing scientific and technological developments and achievements;
- (d) to reinforce HKMH's leading role in promoting Chinese, local and world history to the public, and to cultivate a wider audience base, by constantly striving to present high quality blockbuster exhibitions at the enhanced exhibition galleries to members of the public and visitors;
- (e) to equip HKMH with enhanced education facilities, improve accessibility and visitor circulation design, and implement series of innovative and diversified audience building and educational programmes, in support of school education and catering for the learning needs of people with disabilities as well as other underprivileged groups, so as to enhance the learning experience of visitors, school groups, families and persons with special needs; and
- (f) to invigorate the museum complex and the neighbourhood with improved visual and spatial connectivity, contemporary design and enhanced accessibility, as well as to establish a district icon to boost district character and identity.

FINANCIAL IMPLICATIONS

13. We estimate the capital cost of the project to be \$72.8 million in MOD prices, broken down as follows -

		\$million
		(in MOD prices)
(a)	Consultants' fees for design and preparation of tender documents	63.1
(b)	Site investigation works and minor studies	3.1
(c)	Contingencies	6.6
	Total	72.8

- 14. A detailed breakdown of the estimate for consultants' fees by manmonths is at Annex 2 to Enclosure 1.
- 15. Subject to funding approval, we will phase the expenditure as follows –

Year		\$ million (in MOD prices)
2020 - 2021		11.5
2021 – 2022		22.0
2022 – 2023		32.3
2023 – 2024		7.0
	Total	72.8

- 16. 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 2020 to 2024. Subject to the funding approval, we will engage consultants to undertake the proposed consultancy services through a lump-sum contract based on pre-defined scope of works with appropriate provision for price adjustments for the duration of the consultancy concerned. We will deliver the site investigation works through a re-measurement contract, with provision for price adjustments as necessary, since the quantity of works to be involved may vary depending on actual ground conditions and design development.
- 17. The proposed pre-construction activities will not incur any recurrent consequences.

PUBLIC CONSULTATION

18. We consulted Yau Tsim Mong District Council on the project scope of the proposed expansion at its meeting on 28 March 2019. Members supported the project unanimously and requested the Architectural Services Department and Leisure and Cultural Services Department (LCSD) to shorten the construction period as far as possible. The Tsim Sha Tsui East Property Developers Association⁶ was consulted on 19 February 2019. They fully supported the expansion and agreed that the project could effectively enhance the vitality of the area. We also consulted the Museum Advisory Committee ⁷ on 21 April 2017, Museum Expert Advisers ⁸ of the two museums on 27 November and 13 December 2018, and HKScM's partners on 12 July 2019 and they strongly supported the expansion to enhance museum services.

/19.

- The Tsim Sha Tsui East Property Developers Association was founded in 1982 and committed to the development of the district into a popular commercial and shopping attraction for locals and overseas tourists.
- The Museum Advisory Committee is an advisory body that advises the Director of Leisure and Cultural Services (DLCS) on a wide range of subject matters such as strategies for development, promotion and management of the public museums and related offices under the purview of the LCSD.
- 8 Museum Expert Advisers are appointed by the DLCS to provide professional advice to the museums of the LCSD on matters pertaining to the promotion of art, history, science and film, in particular the acquisition of collection items.

19. We consulted the Legislative Council Panel on Home Affairs on the project on 9 December 2019. Members supported the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

- 20. This project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The proposed pre-construction activities will not cause long-term environmental impacts. We have included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.
- 21. The proposed pre-construction activities will only generate very little construction waste. We will require the consultant to fully consider various measures to minimise the generation of construction waste and to reuse/recycle construction waste as far as possible in the future implementation of the construction project.

HERITAGE IMPLICATIONS

22. The proposed pre-construction activities will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

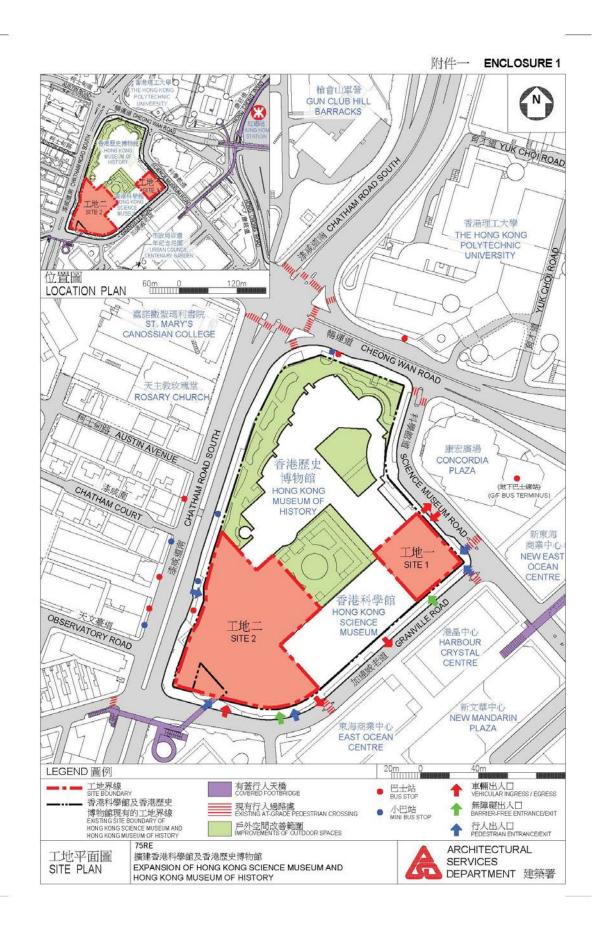
23. The proposed pre-construction activities do not require any land acquisition.

/BACKGROUND

BACKGROUND INFORMATION

- 24. We upgraded **75RE** to Category B in August 2019. We have engaged consultants to undertake traffic impact assessment, museum planning advice and tree survey in April 2018, and the total cost was about \$2.6 million. We have charged this amount to the departmental expenses of LCSD. The aforesaid works and services were completed in November 2019.
- 25. The proposed pre-construction activities will not directly involve any tree removal or planting proposals. We will require the consultants to consider the need for tree preservation during the planning and design stage of the project. We will also incorporate tree planting proposals in the construction phase in future as far as possible.
- 26. We estimate that the proposed pre-construction activities will create about ten jobs (one for labourer and nine for professional or technical staff) providing a total employment of 252 man-months.

Home Affairs Bureau January 2020



75RE (part) – Expansion of Hong Kong Science Museum and Hong Kong Museum of History

Breakdown of the estimates for consultants' fees (in September 2019 prices)

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for	Professional	218	38	2.0	37.4
	design and preparation of tender documents (Note 2)	Technical	311	14	2.0	18.8
	,				Total	56.2#

* MPS = Master Pay Scale

Notes

- 1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost including the consultants' overheads and profits as the staff will be employed in the consultants' office. (Subject to Finance Committee's approval, MPS salary point 38 = \$85,870 per month and MPS salary point 14 = \$30,235 per month).
- 2. The actual man-months and actual costs will only be known after the consultants have been selected.

Remarks

The figures in this Annex are shown in constant prices that correlate with the MPS salary point of the same year. The figures marked with # are shown in MOD prices in paragraph 13 of Enclosure 1.

New facilities building of the Hong Kong Sports Institute

PROJECT SCOPE AND NATURE

The Hong Kong Sports Institute (HKSI) is located at Yuen Wo Road, Sha Tin. The project, located within the current HKSI campus, comprises a new facilities building and the renovation of the vacated spaces of the existing HKSI sports complex. The new facilities building is located between the rowing centre to the South and the swimming complex to the North with a site area of about 6 600 square metres (m²). It is expected to be four-storey high, which is of similar height to the swimming complex, with a net operating floor area (NOFA) of about 8 940 m². The major facilities to be provided are as follows –

- (a) an around 1 400 m² multi-purpose column-free training hall suitable for a number of current and potential future sports, for example, gymnastics, volleyball (two courts), basketball (two courts), badminton (eight courts), tennis (two courts) and futsal;
- (b) an around 300 m² multi-purpose training venue suitable for a number of current and potential future sports, for example, karatedo, judo, taekwondo and boccia (three courts);
- (c) an around 3 250 m² scientific conditioning centre including a fitness training venue, environmental chamber and scientific assessment laboratory;
- (d) an around 810 m² sports medicine centre including treatment rooms, functional and mobility assessment and training areas and recovery facilities;
- (e) an around 180 m² sport psychology centre including a psychological and electroencephalogram testing laboratory as well as consultation rooms;

- (f) an around 400 m² sport biomechanics centre including both motion analysis and technology innovation laboratories;
- (g) an around 290 m² sport nutrition and monitoring centre including consultation areas, biochemistry laboratory and a DEXA (dual energy X-ray absorptiometry) body composition assessment room;
- (h) an around 40-room sports residence area for visiting teams/exchange programmes; and
- (i) covered walkway connecting the new building to existing buildings to facilitate convenient access for athletes with disability.
- 2. The renovation and repurposing of the vacated spaces of the existing sports complex will provide 2 940 m² NOFA. The major uses are as follows:
 - (a) an around 430 m² day rest room for athletes not living in the athletes' hostel, with a capacity for around 50 athletes at any one time;
 - (b) an around 1 010 m² table tennis venue;
 - (c) an around 400 m² multi-sports venue;
 - (d) an around 150 m² seminar room (partitionable to two 70m² rooms) with a full capacity of 100 people;
 - (e) an around 70 m² meeting room (partitionable into two 35 m² rooms) with a full capacity of 20 people; and
 - (f) a total of around 710 m² general offices to accommodate current staff and meet projected future needs.

- 3. A location plan of the HKSI is at Annex 1 to Enclosure 2. A site plan and artist's impressions of the new facilities building are respectively at Annexes 2 and 3 to Enclosure 2.
- 4. The part of **54QJ** that we propose to upgrade to Category A comprises pre-construction activities including
 - (a) site investigations, including site survey and ground investigations, as well as diversion of underground utilities; and
 - (b) consultancy services including outline sketch design, detailed design, contract administration, site supervision as well as tender documentation and assessment for the main works.
- 5. Subject to the funding approval by the Finance Committee (FC), the HKSI plans to commence the pre-construction activities in the second quarter of 2020 for completion in the third quarter of 2022.
- 6. We will retain the remainder of **54QJ** in Category B and will seek funding from the FC after the substantial completion of the pre-construction activities.

JUSTIFICATION

The Government fully supports elite sports development. We established the Elite Athletes Development Fund in 2011-12 to provide annual funding to the HKSI to train elite athletes in Hong Kong. With long-term and comprehensive support services, the overall performance of Hong Kong athletes has improved greatly in recent years. There have been remarkable achievements in various sports. The Hong Kong Team won a record-breaking total of 46 medals (including 8 gold, 18 silver, and 20 bronze) in the 2018 Asian Games (AG) and 48 medals (including 11 gold, 16 silver and 21 bronze) in the 2018 Asian Paralympic Games. Our athletes have attained top ten world rankings in badminton, cycling,

table tennis, windsurfing, billiard sports, fencing, karatedo, and squash. Our junior athletes also won medals at world championships in billiard sports, fencing, squash, and wushu. The facilities and support provided by the HKSI to elite athletes should stay abreast of the latest developments to continuously take forward elite sports development in Hong Kong effectively.

(a) Significant increase in number of athletes

- 8. The total number of athletes at the HKSI has almost doubled from 651 in 2007-08 to around 1 300¹ in 2019-20. In particular, the number of full-time athletes has increased from 153 in 2007-08 to 529 in 2019-20, representing an increase of about 245%. This is significant to the development of elite sports in Hong Kong because full-time athletes² have a higher chance in winning medals in major events.
- 9. In recent years, secondary schools and tertiary institutions have been providing more flexible education support to study athletes while "national sports associations" (NSAs) have been training young athletes in a more in-depth and comprehensive manner. These have helped us identify more junior athletes with potential and build a stronger feeder system to provide sufficient new forces to elite sports in Hong Kong. Over the past decade, there has been a significant upward trend in the number of junior elite athletes joining the feeder system as it has almost doubled from 206 in 2007-08 to 396 in 2019-20. Meanwhile, the number of full-time junior athletes has increased by 404% from 23 in 2007-08 to 116 in 2019-20.
- 10. In addition, the HKSI provides accommodation to elite athletes to ensure that they have full access to an elite sport lifestyle including speedy recovery after regular training and competitions. The 185-room athletes' hostel reached its capacity in 2018-19. The HKSI is currently converting 26 rooms from the 74 room guest accommodation at the sports residence for athletes' use. Since it is necessary

/for

Athletes receiving training in the HKSI include 413 full-time senior athletes, 118 part-time senior athletes, 116 full-time junior athletes, 280 part-time junior athletes and 350 potential athletes.

² For example, 80% of our 107 medallists in the 2018 AG are full-time athletes.

for the HKSI to accommodate training partners and international teams during their training and exchange with elite athletes in Hong Kong, further conversion of guest accommodation for athletes' use will not be feasible. The HKSI will need the construction of the new facilities building to provide guest accommodation so that it could convert the remaining rooms at the existing guest accommodation for use as athletes' hostel when required after the completion of the new facilities building.

(b) Increase in number of elite sports

- 11. The number of elite sports has increased from 11 in 2007-08 to the current 20 Tier A elite sports and 13 Tier B elite sports. To meet the needs arisen from the new elite sports, it is necessary for the HKSI to develop new training facilities. As sports will continue to enter and leave the elite system due to their performance in the international arena, any development of new training facilities must include multi-functionality.
- 12. The Government has implemented the long-term support system for elite disability sports in 2019-20. With the increased requirements for disability sports and the continuing increase in full-time able-bodied and disabled athletes, the HKSI must add appropriate facilities to meet such needs.

(c) Support on Sports Science and Sports Medicine

13. The outstanding achievements of Hong Kong athletes hinge on the provision of professional training and support services. As quite a number of Hong Kong athletes have successfully attained higher world rankings, the relevant sports science and sports medicine support services become more crucial in enhancing the effectiveness of training, avoiding injuries and enabling speedy recovery after competitions for athletes. Support on sports science and sports medicine is very critical to helping our top athletes boost their performance to increase their chances to attain medals in major international games such as the Olympic Games and the AG. The HKSI has also rolled out dedicated medical support for elite sports.

14. The existing sports complex originally built in 1982 was refurbished in 2009 using the existing structural framework. However, the structure built around 40 years ago has restricted the introduction of facilities related to sports science and sports medicine and limited the HKSI's provision of sports science and sports medicine support to athletes. Meanwhile, the significant increase in the number of elite athletes and elite sports has increased the demand for sports science and sports medicine, which has resulted in a 222% increase in the number of sports science and medicine servicing sessions provided to athletes from 23 660 in 2007 to 76 160 in 2018. The HKSI will need the construction of the new facilities building to meet the spacing and building requirements of the sports science and sports medicine facilities.

FINANCIAL IMPLICATIONS

15. The HKSI estimates the capital cost of the project to be \$54.7 million in money-of-the-day (MOD) prices, broken down as follows –

		\$ million (in MOD prices)
(a)	Site investigations and underground utilities diversion;	23.0
(b)	Consultancy services	26.8
(c)	Contingencies	4.9
	Total	54.7

- 16. A detailed breakdown of the estimate for consultants' fees by manmonths is at Annex 4 to Enclosure 2.
- 17. Subject to funding approval, the HKSI will phase the expenditure as follows –

Year		\$ million (in MOD prices)
2020 - 2021		9.3
2021 - 2022		26.9
2022 - 2023		18.5
	Total	54.7

- 18. The HKSI has 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 2020 to 2023. As the HKSI can clearly define the scope of the works in advance, it will deliver the construction works through a lump-sum contract. The contract will provide terms for price adjustment.
- 19. The proposed pre-construction activities will not give rise to any recurrent consequences.

PUBLIC CONSULTATION

- 20. The project will be conducted within the HKSI campus. There are no residential developments in the immediate vicinity of the project. The project will not affect residents nearby. In April to June 2017, the HKSI held numerous meetings to listen to the views of stakeholders in the sports sector, including the Sports Federation and Olympic Committee of Hong Kong, China, NSAs, coaches and athletes. These views have been given full consideration by the HKSI in preparing for the new facilities building.
- 21. We consulted the Legislative Council Panel on Home Affairs on 9 December 2019. Members supported the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

- 22. The proposed pre-construction activities will not cause long-term environmental impacts. The HKSI has included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.
- 23. The proposed pre-construction activities will only generate very little construction waste. The HKSI will require the consultants to fully consider appropriate measures to minimise the generation of construction waste and to reuse or recycle construction waste as much as possible in future implementation of the construction project.

HERITAGE IMPLICATIONS

24. This proposed pre-construction activities will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

25. This proposed pre-construction activities do not require any land acquisition.

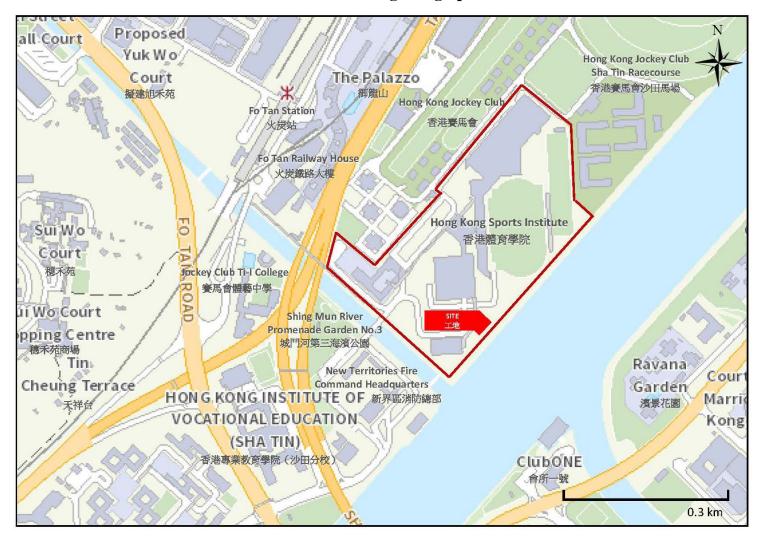
BACKGROUND INFORMATION

- 26. We upgraded **54QJ** to Category B in October 2019.
- 27. The proposed pre-construction activities will not directly involve any tree felling, but 20 trees within the project boundary (subject to the finalisation of the design) will need to be transplanted to other areas within the HKSI campus. None of these trees to be transplanted are important trees. The HKSI will require the consultants to take into consideration the need for tree preservation during the planning and design stage of the project. The HKSI will also incorporate tree planting proposals, where possible, in the construction phase in the future.

28. We estimate that the proposed pre-construction activities will create about 24 jobs (six for labourers and 18 for professional or technical staff) providing a total employment of 490 man-months.

Home Affairs Bureau January 2020

Location Plan of the Hong Kong Sports Institute



Annex 2 to Enclosure 2

Site Plan of the New Facilities Building of the Hong Kong Sports Institute



Artist's Impressions of the New Facilities Building of the Hong Kong Sports Institute

(Facing Shing Mun River)



(Facing the swimming complex)



54QJ (part) - New facilities building of the Hong Kong Sports Institute

Breakdown of estimates for consultants' fees (in September 2019 prices)

Consultants' staff costs	1	timated man- nonths	Average MPS* salary point	Multiplier ^(Note 1)	Estimated fees (\$ million)
Consultants' fees for contract	Professional	91	38	2	15.6
administration (Note 2)	Technical	137	14	2	8.3
			Total (in S	eptember prices)	23.9#

* MPS = Master Pay Scale

Notes

- 1. A multiplier of 2.0 is applied to the average MPS point to estimate the full staff cost including the consultant's overheads and profit as the staff will be employed in the consultants' office. (Subject to Finance Committee's approval, MPS point 38 = \$85,870 per month and MPS point 14 = \$30,235 per month.)
- 2. The actual man-months and fees will only be known after consultants have been selected.

Remarks

The figures in this Annex are shown in constant prices to correlate with the MPS Salary Point of the same year. The Figures marked with # are shown in money-of-the-day prices in paragraph 15 of the Enclosure 2.