

**For Information  
on 26 April 2021**

**Legislative Council Panel on Economic Development  
Update on the Development of the Three-Runway System  
at Hong Kong International Airport**

**Purpose**

This paper provides an update on the developments of the Three-Runway System (“3RS”) project since the last reporting to this Panel in December 2020 (LC Paper No. CB(4)333/20/21(01)).

**Background**

2. This paper presents updates on the overall progress of the 3RS project as well as its individual key aspects: (a) construction; (b) preparatory work necessary for the commissioning of the Third Runway; (c) labour supply; (d) construction safety; (e) environmental-related issues; and (f) financial arrangement.

**Progress Update on 3RS Works**

**(a) Construction**

3. The construction of the 3RS at Hong Kong International Airport (“HKIA”) comprises different components, including the formation of about 650 hectares (“ha”) of land; the construction of the Third Runway, taxiways and aprons, and the Terminal 2 Concourse (“T2C”) (formerly known as Third Runway Passenger Building); expansion of the existing Terminal 2 (“T2”); provision of a new automated people mover (“APM”) system and a high-speed baggage handling system (“BHS”); modification of the existing North Runway and the construction of airport support infrastructure, utilities and facilities (see the scope of the 3RS project on the layout plan at **Annex A**).

4. As explained in detail in the ensuing paragraphs, notwithstanding the challenges associated with the various work fronts of the 3RS project and the impact of the Coronavirus Disease (“COVID-19”), the Airport Authority Hong Kong (“AAHK”) has been maintaining the progress of the 3RS construction with a view to commissioning the Third Runway in 2022 and the 3RS in 2024.

*(i) Impact of COVID-19 on the 3RS Works*

5. In the last report in December 2020, Members were advised of the impact of the COVID-19 pandemic on the 3RS works. This has continued in Q1 2021. A total of 23 COVID-19 cases among the workers of the 3RS project were confirmed in Q1 2021, of which 14 cases were related to the programme-critical Airfield Ground Lighting works of the runway that were immediately suspended for 14 days till mid-February 2021. The Government issued a compulsory testing notice on 30 January 2021 under the Prevention and Control of Disease (Compulsory Testing for Certain Persons) Regulations (Cap. 599J) for a total of more than 3 300 staff and workers, who had worked or had been present at the affected sites of Contract 3303 (Third Runway and Associated Works) and Contract 3206 (Main Reclamation Works) for more than two hours during 17-30 January 2021, to undergo testing by 2 February 2021. Similarly, with one COVID-19 case reported under Contract 3801 (APM and BHS Tunnels on the Existing Airport Island), the relevant works was immediately suspended for 14 days and another compulsory testing notice was issued on 8 March 2021 requiring more than 360 staff and workers, who had worked or had been present at the affected sites for more than two hours from 22 February to 7 March 2021, to undergo testing by 9 March 2021. Both rounds of compulsory testing were completed by the specified deadline, with no further positive case identified.

6. To safeguard the health and safety of staff and workers at the construction sites of the 3RS project, AAHK has stepped up COVID-19 testing measures. AAHK has implemented a voluntary testing programme, under which all 3RS workers and staff members are encouraged to conduct the test on a bi-weekly basis. As at end March 2021, six rounds of testing have been conducted with the Department of Health or in collaboration with government-approved testing laboratories appointed by AAHK, with over 25 000 test specimen collected. Starting from 9 February 2021, all workers and staff entering the 3RS works sites must possess a negative COVID-19 test result within the preceding 14 days. In particular, each worker/staff member on board a ferry to the reclaimed sites of the 3RS project will be required to present an SMS showing a valid COVID-19 negative test result.

7. Apart from the requirement of negative COVID-19 test results, additional measures have been undertaken across all work sites of the 3RS project. For instance, all workers must undergo temperature check before boarding ferries to the reclaimed sites of the 3RS project. Workers are mandated to wear face masks and are not allowed to eat or drink at all times on the ferries. Both AAHK and contractors closely monitor the compliance by workers at the piers and on board the ferries by dedicated personnel. Also, contractors are required to regularly check their works areas to ensure that workers comply with the requirements of wearing masks and social distancing at work sites. Staggered lunch hours and additional well-ventilated resting areas have been arranged and workers are required to adhere to the social distancing rule during lunch on the work sites.

8. The challenges due to COVID-19 also affected the supply chains for the other work fronts in Q1 2021, particularly for the five-week period leading up to and after Chinese New Year (“CNY”) as the supply of cement and other construction materials from the Mainland was affected by the COVID-19 quarantine requirements on the marine crew; a number of Mainland workers had to leave early for CNY holidays in the Mainland during January and could only return in March 2021 after satisfying the quarantine requirements. AAHK had managed to reduce the anticipated impact on the construction progress through some control measures, such as stockpiling of aggregates on the reclaimed sites of 3RS project to maintain the runway construction as far as possible; making use of a local site for early stockpiling of other construction materials to support other work fronts, as well as deploying resources for extended working hours to catch up the productivity loss.

9. The impact of the ongoing COVID-19 situation, however, may continue to affect the progress of the works for the foreseeable future, particularly in respect of the risks of any further works disruption/suspension situations. As of March 2021, despite the continuing major impact due to COVID-19, the implementation of various alternative and contingency measures by AAHK and its contractors has helped prevent further slippage of the overall 3RS critical works, which remains at approximately eight weeks as reported to Members in December 2020. AAHK continues to implement different measures to ensure that the 3RS construction works are proceeding according to the planned schedule. These include, for example, phased handover of/early access to works areas, deployment of extra resources in extended working hours, making use of extended Notice To Airmen periods for better construction productivity, re-sequencing of works to prioritise the completion of all critical asphalt pavement works for the runway and taxiways by Q4 2021. Overall, the 3RS works are anticipated to achieve the commissioning target of the Third Runway in 2022 and the commissioning target of the 3RS in 2024 as planned.

(ii) *Land Formation*

10. To-date, substantial progress on filling operations of the reclamation works has been achieved; the marine-based Deep Cement Mixing works were completed in 2020; and the land-based ground improvement works in the “T” area<sup>1</sup> (see **Annex B**), which are necessary for the operation of the Third Runway, are substantially completed. As at March 2021, approximately 512 ha of about 650 ha of reclamation area has reached the required handover level, out of which about 460 ha has been handed over to the follow-on contractors.

11. Reclamation works is now approximately 95% complete. Of most significance is that filling operations for the “T” area were completed and the entire areas required for commissioning the Third Runway in 2022 had been handed over to the follow-on contractors. For Q1 2021, the main reclamation contractor has been using predominantly customised manufactured sand from Guangdong and public fill mostly from the sorting facility at Tuen Mun Fill Bank as the main sources of fill materials. As of March 2021, the intake of public fill from the fill banks reached approximately 21.5 million tonnes since works commencement. Public fill will continue to be utilised in the coming year. Going forward, it is expected that the subsequent fill demand will be greatly diminished. The main reclamation contractor will continue to complete the remaining ground improvement works, as well as filling operations up to final formation level by Q3 2022, excluding the wraparound areas at the western end of the existing North Runway which has to be completed after its closure in 2022.

(iii) *Airfield Works*

12. Following the handover of the “T” area in Q1 2021, pavement construction works, airfield ground lighting and utility installations continued to progress at various stages for the entire length of the Third Runway and some taxiway areas. The subgrade preparation and aggregate laying works are substantially complete at the runway. The laying of asphalt pavement, i.e. the topmost runway surface, is under trial and is targeting for completion by end June 2021. In parallel, the construction of Western Vehicular Tunnel and associated civil infrastructure works are continuing. The construction of box culverts is progressing, with the sections crossing the runway targeted for completion in April 2021. The installation of marine piles for the runway approach lights at the western end of the Third Runway has been completed. The works at the ancillary buildings as well as installation of utilities and drainage continue with the superstructure of the Observation Facility substantially

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<sup>1</sup> The “T” area refers to the area circumscribed by the red dotted line in Annex B, which is required for the operation of the Third Runway in 2022.

completed. Overall, AAHK continues to proceed with the construction for the commissioning of the Third Runway in 2022.

*(iv) Building and Infrastructure Works*

13. As regards the foundation and substructure works of T2 Expansion, basement excavation continues in tandem with the base slab construction. Demolition works of the decommissioned T2 is ongoing with the removal of the façade and roof steel trusses for completion in early April 2021. Piling works commenced within the footprint of the decommissioned T2. Piling works for the viaducts connecting T2 and the nearby road network has also commenced under the superstructure contract for the expanded T2. Phased handover of works areas to the superstructure contractor has been proceeding as scheduled with superstructure construction already started. The reconfigured T2 is targeted for re-opening as a fully-fledged terminal in 2024.

14. Works are continuing for the foundation and sub-structure contract for the T2C, the new passenger concourse to be built on reclaimed land, with bored piling works ongoing. Following the contract award for the main works of the T2C in November 2020, design submissions for excavation and lateral support works on the northern section of the Eastern Vehicular Tunnel were ongoing for statutory approvals. Preparation for erection of the steel roof is underway at the new Integrated Airport Centre. Design and material submissions of the Integrated Airport Control Systems are also ongoing, targeting for commissioning in mid-2022.

15. In addition to the above works, the design-and-build contracts for the highly specialised APM system and the high-speed BHS are in progress. Detailed design of the APM/BHS systems has been completed. Manufacture of the system components and APM cars are in progress. As regards the construction of APM and BHS tunnels on the existing airport island, excavation works continue in tandem with tunnel box construction on the Airport Island, whereas Excavation and Lateral Support as well as piling works are ongoing under the contract for the APM and BHS tunnels and related works on the reclaimed land as planned.

16. The majority of the construction support facilities and services, e.g. safety induction centre, medical centre, vehicle maintenance facility, etc., commenced operation in Q1 2021 on the newly reclaimed land, while temporary offices are in operation at the Western Support Area. Two concrete batching plants are operating on site while two asphalt plants have been set up. Overall, the building and infrastructure support works are continuing to support the commissioning target of the 3RS in 2024.

(v) *Government Facilities*

17. To ensure better coordination and management of interface issues, AAHK has undertaken the design and construction of essential government facilities<sup>2</sup> for airport operations in connection with the 3RS project. Among these, piling works for the Airside Fire Station and superstructure works for the Decontamination Facility in the Western Support Area have been completed; foundation works for some facilities for the Civil Aviation Department (“CAD”) and the Hong Kong Observatory (“HKO”) on the reclaimed land completed with the superstructure works commenced; and the piling works for the new Air Traffic Control Tower have also been completed.

(vi) *Project Cost*

18. AAHK continues to manage the project expenditure within budget. Members may wish to note that the total value of the major contracts awarded (about HKD92.3 billion), as of March 2021, is within the estimated budget. Details of the construction works contracts are at Annex C. It remains AAHK’s target to deliver the 3RS project within the budget of HKD141.5 billion.

**(b) Preparatory Work Necessary for the Commissioning of the Third Runway**

19. Apart from the construction works, AAHK is working closely with the Government and the airport stakeholders on the preparatory work for the commissioning of Third Runway in 2022, after which the existing North Runway will be closed for reconfiguration.

(i) *Land Administration Matters*

20. AAHK was granted with a Short Term Tenancy (“STT”) in June 2016 for the land formation and advanced construction works for the 3RS project. The newly reclaimed land of 3RS, to be known as Chek Lap Kok Lot No. 4 (“CLKL 4”), will be granted to AAHK through a 50-year private treaty grant. As the Third Runway will form part of the enlarged airport and be operated as a whole together with the existing Airport Island, the term of the lease of the existing Airport Island, the Remaining Portion of Chek Lap Kok Lot No. 1 and the Extension Thereto (i.e. CLKL1 RP & Ext), will also be extended to align with the lease term of CLKL 4. AAHK is working closely with the

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<sup>2</sup> For example, air traffic control facilities for the CAD; aviation weather services facilities for the HKO; rescue and firefighting facilities for the Fire Services Department, customs, immigration, quarantines, port health control and law enforcement facilities, etc.

Lands Department to finalise the terms with a view to executing the relevant land documents in 2021.

(ii) *Subsidiary Legislation Amendments*

21. To ensure the safe and effective operation of HKIA and to meet the aviation safety requirements to operate the Third Runway and the 3RS, the following restriction and areas shall be amended by way of subsidiary legislation accordingly:

- (a) the Airport Height Restrictions prescribed under Hong Kong Airport (Control of Obstructions) Ordinance (Cap. 301);
- (b) the Hong Kong International Airport Approach Area under Shipping and Port Control Regulations (Cap. 313A); and
- (c) the Maps of Airport Area and the Maps of Restricted Area under Airport Authority Ordinance (Cap. 483).

22. The above proposed amendments will be gazetted and tabled at the Legislative Council for negative vetting tentatively in Q2 2021, and shall come into force on 31 May 2022. This is to allow sufficient time for AAHK to arrange the necessary training, familiarisation and operational drills with the airport stakeholders in the vicinity of the Third Runway for simulating a real operating environment before the commissioning of the Third Runway in 2022. Details of the above amendment proposals are provided at **Annexes D to F** respectively.

(c) **Labour Supply**

23. Starting from 2021, the demand for workers is set to rise and will reach the peak level in FY2022/23, with approximately 9 000 skilled workers to be deployed in the construction of the major airfield infrastructure works, tunnels and terminal buildings. Employment opportunities generated by the 3RS project for local workers therefore have been made available and the numbers will continue to increase in the years ahead. To meet the huge manpower requirements, AAHK, in conjunction with its contractors, will keep enhancing recruitment of local labour and has taken additional steps to reach out to the job seekers in spite of the constraints posed by COVID-19. The local recruitment exercise that already commenced includes placing more job advertisements in newspapers, as well as organising job fairs at trade unions premises and local shopping malls. AAHK has encountered difficulties in arranging additional job fairs in the community due to COVID-19. Despite so, the Labour Department (“LD”) and AAHK had jointly organised the first online job fair from 12 to

13 November 2020 providing more than 500 airport jobs which included vacancies offered by 3RS construction contractors. In collaboration with the contractors, two job fairs were also held in shopping malls in Sham Shui Po and Lok Fu in July 2020 and March 2021 respectively, while another job fair in Tuen Mun will be held in the second half of 2021 to capture a greater pool of suitable job seekers. AAHK would continue to work with its contractors to recruit local workers through different means.

**(d) Construction Safety**

24. AAHK is committed to maintaining the highest standard in construction safety. As of March 2021, the 12-month rolling Accident Frequency Rate (“AFR”<sup>3</sup>) for the 3RS project was 6.8, which is the same as the figure in the last progress report and substantially lower than the accident rate per 1 000 workers of the Hong Kong construction industry of 29.0 in 2019 as released by the LD. To reinforce AAHK’s commitment to safety, AAHK continues to boost the safety culture across the 3RS project with the 12-week Safety Awareness Stimulation Programme among the staff and workers of the 3RS contractors focusing on four areas of improvement: housekeeping, lifting, working at height and people-plant interface.

25. The safety risk profile is changing as the 3RS’s work nature is evolving from marine-based to land-based work. To cope with the increasing volume of temporary works and electricity safety works for buildings, AAHK has reinforced the safety management in “Temporary Work Control” and “Electrical Safety System of Works (“ESSW”)”. Inspection and Test Plan on Quality and Safety have been introduced to ensure key safety check and control points are included as part of the engineering control process. Internal safety workshops are conducted regularly for Temporary Work Safety Management and ESSW System.

**(e) Environmental-Related Issues**

26. The implementation of the Environmental Monitoring and Audit (“EM&A”) programme for the 3RS project is ongoing. All EM&A information, including monitoring results, implementation status of mitigation measures, events of non-compliance and the corresponding follow-up actions, etc., are reported on a monthly basis. The EM&A information together with the finalised Environmental Permit (“EP”) submissions are publicly available on a dedicated

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<sup>3</sup> AFR is the number of reportable accidents per 1 000 workers per year. This calculation is in accordance with LD and is widely used in the Hong Kong construction industry.



website<sup>4</sup>. The EM&A programme and all the required environmental mitigation measures for the 3RS project have been properly implemented since commencement of construction.

27. AAHK continues to fulfil its commitments to enhancing marine ecology and fisheries for the benefit of marine ecology (including the Chinese White Dolphins) and fisheries resources in the vicinity of the project area. Since the setting up of a Marine Ecology Enhancement Fund (“MEEF”) and a Fisheries Enhancement Fund (“FEF”) with a total budget of HKD400 million from AAHK in late 2016, over HKD44 million was granted from the MEEF and FEF to 31 projects since FY2017/18. The last round of invitations for FY2021/22 has attracted 31 MEEF and FEF applications which are currently under review. Details of the funded projects for the MEEF and FEF, including the reports of those completed projects, can be found on the dedicated websites<sup>5</sup>. These projects are managed and conducted by universities, research groups, or associations from the fisheries industry.

28. Meanwhile, other than the above two funds, AAHK continues to explore and/or implement several marine ecology and fisheries enhancement measures in Lantau waters beyond the EP requirements. These include the installation of eco-seawall blocks to facilitate and promote colonisation of epifauna and to increase microhabitat complexity. The first post-installation monitoring conducted in Q4 2020 recorded a relatively high percentage cover of sessile organisms such as barnacles and mussels on the installed eco-seawall blocks at two vertical seawall sections. The installation of the remaining eco-seawall blocks at sloping seawall is now in progress. In addition, the pilot test on artificial reef (“AR”) deployment to the west of the Airport Island will proceed to commence in the first half of 2021, intended to evaluate the effectiveness of AR within the proposed North Lantau Marine Park (formerly known as the 3RS Marine Park).

29. As recommended in the approved 3RS Environmental Impact Assessment Report, a new marine park (i.e. “the North Lantau Marine Park”) comprising an area of approximately 2 400 ha will be designated in north Lantau waters before the operation of the 3RS project in 2024. AAHK has consulted various stakeholders in the past few years and obtained the in-principle support of the Country and Marine Parks Board in October 2020 on the designation proposal. The Agriculture, Fisheries and Conservation Department is taking

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<sup>4</sup> Dedicated 3RS webpage for environmental-related issues:

<http://env.threerunwaysystem.com/en/index.html>

<sup>5</sup> Marine Ecology Enhancement Fund webpage:

<http://env.threerunwaysystem.com/en/meef/index.html>

Fisheries Enhancement Fund webpage: <http://env.threerunwaysystem.com/en/fef/index.html>

forward the statutory procedures in accordance with the Marine Parks Ordinance (Cap. 476) for the designation of the proposed North Lantau Marine Park to dovetail with the commissioning of the 3RS Project.

30. To enhance transparency and communication with the community in a proactive way, AAHK continues to engage its stakeholders through meetings with the Professional Liaison Group (“PLG”) and the Community Liaison Groups (“CLGs”), with a view to facilitating communications, enquiries and complaints handling on environmental issues related to the 3RS project. The next round of PLG and CLGs briefings is being planned for the second half of the 2021, subject to the pandemic situation.

**(f) Financial Arrangement**

31. In the last report to this Panel in December 2020, Members were updated that the drop in operating surplus and the collection of airport construction fee (“ACF”) due to traffic slump would reduce their contributions to finance the 3RS project for the next few years. As a result, AAHK has revisited and updated the 3RS financing plan (as set out at **Annex G**) with projected total incremental debt of HKD88 billion then<sup>6</sup>.

*(i) FY2020/21 Financing Progress Update*

32. Despite the COVID-19 pandemic’s unprecedented impact on HKIA business, AAHK’s credit rating remains strong and is rated “AA+” by S&P Global, Inc. Leveraging on its strong credit rating and in order to capture the liquidity in the market, AAHK successfully raised a series of financings in FY2020/21 for general corporate purposes and to fund AAHK’s capital expenditure, including the capital expenditure of the 3RS Project. These financings include:

- (a) HKD35 billion 5-year syndicated bank facilities which consists of HKD17.5 billion term loan and HKD17.5 billion revolving credit facility with 21 international and regional banks;
- (b) USD1.5 billion or HKD11.6 billion equivalent dual-tranche perpetual capital securities (which are accounted as equity);

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<sup>6</sup> In view of the prolonged impact caused by the COVID-19 pandemic on the global aviation industry, according to AAHK’s latest forecast as of March 2021, it is estimated that the total amount of funds raised by AAHK from the market will consist of HKD89 billion of debt and USD1.5 billion (or HKD11.6 billion equivalent) of perpetual capital securities (accounted as equity) issued.

- (c) USD1.5 billion or HKD11.6 billion equivalent dual tranche 10-year and 30-year institutional USD bonds; and
- (d) HKD8.2 billion Hong Kong dollar institutional bonds through private placements under AAHK's USD8 billion Medium Term Note ("MTN") programme.

The effective interest rates of these borrowings are ranged from 1.4% per annum ("p.a.") to 2.639% p.a.

33. As a result of these fundraisings, AAHK secured a total of HKD48.9 billion of capital in FY2020/21, with HKD17.5 billion committed undrawn facilities as of 31 March 2021. The receptive response for the financial community and investors is a testimony of the market's confidence in HKIA business recovery when the pandemic subsides.

*(ii) FY2021/22 Financing Plan*

34. To capture the current low-interest-rate environment, AAHK plans to use the following instruments in FY2021/22 to raise further capital:

- (a) **USD Institutional Bond:** AAHK intends to issue another USD institutional bond of USD500 million in green or sustainable format under the sustainable finance framework. This also supports the HKSAR Government's policy to develop Hong Kong as an international green and sustainable finance hub in the region;
- (b) **HKD Retail Bond:** initially planned for issuance in February 2020 but was deferred due to the COVID-19 outbreak. Subject to market sentiments, AAHK will consider an issuance of HKD5 billion fixed rate retail bond in second half of FY2021/22 which may coincide with the travel recovery. This will also allow the participation of the general public in Hong Kong; and
- (c) **HKD Institutional Bonds:** AAHK may issue up to HKD10 billion HKD bonds through the MTN programme. HKD private placement has been one of the most efficient and reliable means to raise capital. With the pandemic situation still developing, there may be a need to issue such bonds to provide additional liquidity to meet the funding requirements.

The timing of these fundraisings will be subject to market condition and business sentiment towards the pace of aviation recovery.

*(iii) Update on the 3RS Medium Term Funding Plan*

35. The COVID-19 pandemic has a significant impact on the aviation industry. As of end February 2021, passenger throughput and aircraft movements at HKIA saw a year-to-date decrease of 98.7% and 67.9% respectively since April 2020, whereas total cargo throughput at HKIA remained relatively stable, declining by 2.6% year-to-date. As the pandemic continues to affect passenger traffic, the pace of the recovery for the aviation industry remains uncertain.

36. The industry in general expects passenger traffic to gradually resume to the pre-pandemic level in 3 to 4 years given the availability of vaccines and the implementation of the inoculation program. However, there remains considerable uncertainties over the pace of global traffic recovery and hence the exact financial contributions from operating surplus and ACF collection to the 3RS project, which are principally traffic driven.

37. AAHK will continue to finance the 3RS project via three sources: retaining its operating surplus, collecting ACF, and raising funds from the market. Despite the expected increase of leverage, AAHK is expected to be able to maintain its investment grade credit rating based on its discussion with its financial advisor. Given its successful track record and investors' response to the recent financings in FY2020/21, AAHK is confident that it can continue to leverage on its strong credit profile to raise funding from the market at reasonable cost. AAHK does not require any form of financial guarantees from the Government in funding the 3RS project.

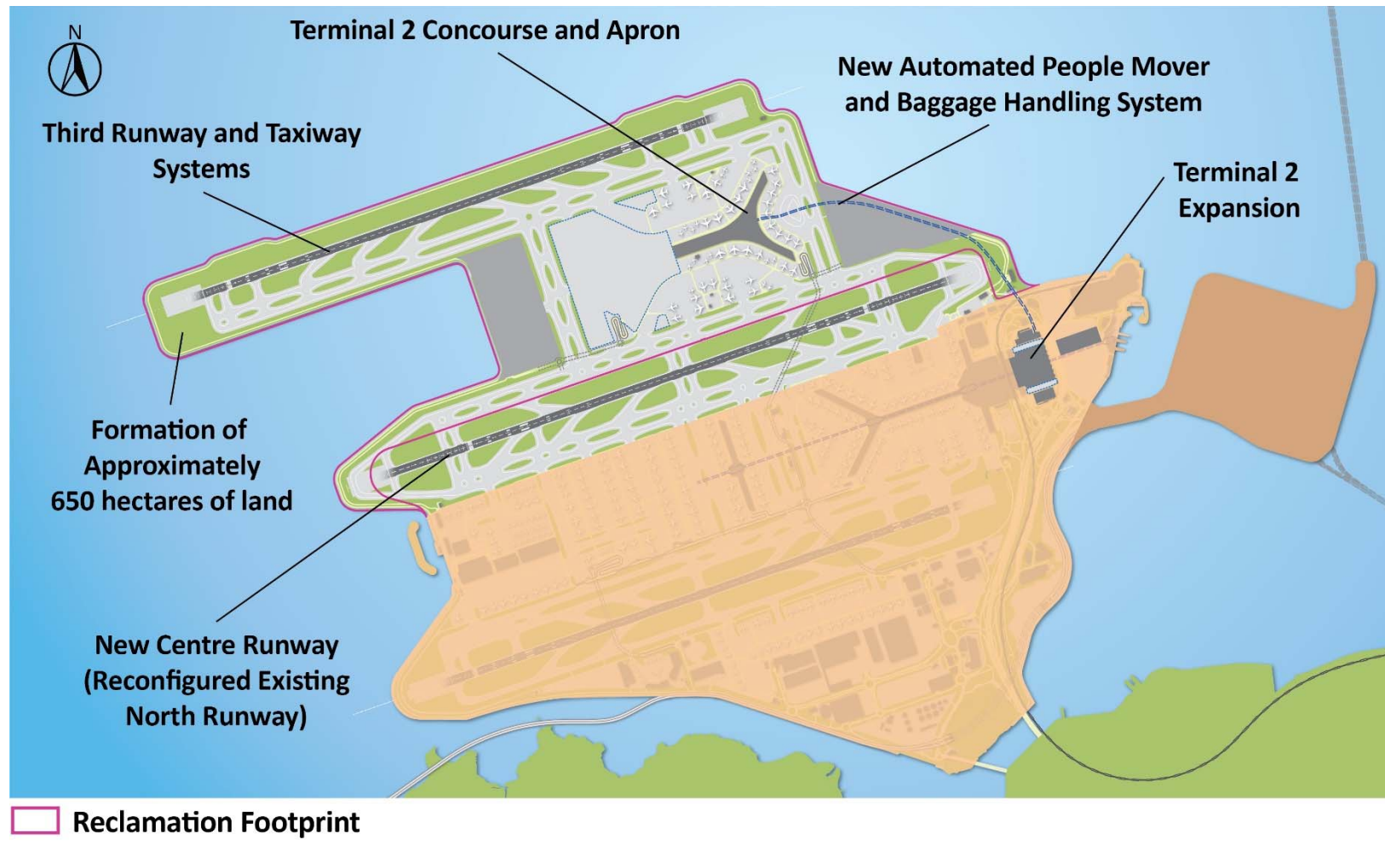
38. AAHK will review the 3RS funding plan regularly and fine-tune as and when necessary, including the total incremental debt level, in accordance with prudent financial management. Meanwhile, AAHK will execute the funding plan as the market allows. The actual timing of the financings will depend on the cash flow position after considering the operation and capital expenditure and the market condition. AAHK will stay vigilant and exercise stringent cost control in accordance with prudent commercial principles while continuing to take forward various development projects to maintain and consolidate HKIA's status as an international aviation hub.

## **Advice Sought**

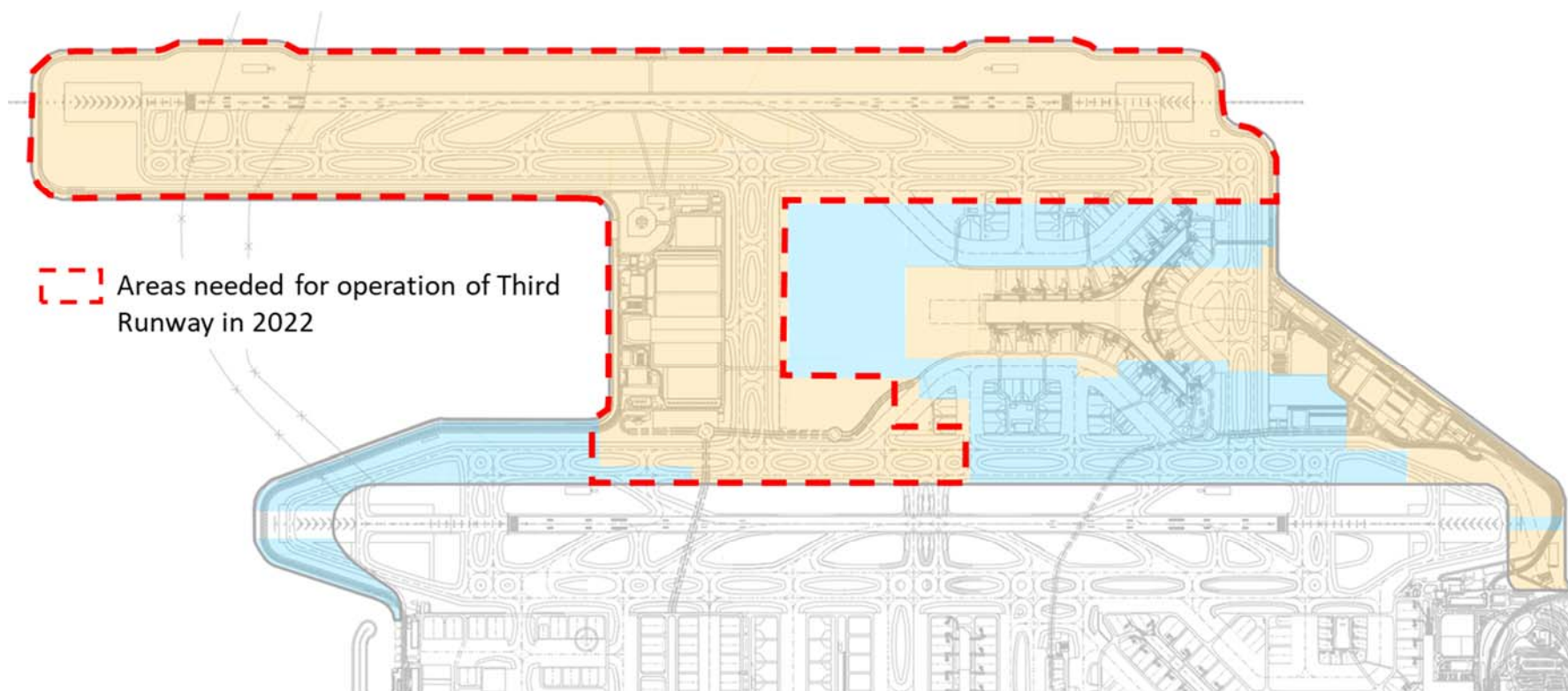
39. Members are invited to note the above.


**Airport Authority Hong Kong  
April 2021**

**Three-Runway System Layout Plan Illustrating the Project Scope**



**Updated 3RS Reclamation Phasing Plan  
(as at end March 2021)**



 Areas needed for operation of Third Runway in 2022

Target Completion Time of Reclamation



Q2 2021 to Q3 2022

Progress Status

Completed

In progress

**Three-Runway System Project  
An Overview of the Major Construction Works  
(as at March 2021)**

	<b>Construction Works Contract</b>	<b>Works Contract Award Date</b>	<b>Awarded Contract Sum (HKD)</b>
1.	Contract No.: P560(R) Aviation Fuel Pipeline Diversion Works	29 July 2015	1,289,000,000
2.	Contract No.: 3201 Deep Cement Mixing Works (Package 1)	28 July 2016	3,686,890,096
3.	Contract No.: 3202 Deep Cement Mixing Works (Package 2)	28 July 2016	2,813,918,000
4.	Contract No.: 3203 Deep Cement Mixing Works (Package 3)	28 July 2016	2,120,914,933
5.	Contract No.: 3204 Deep Cement Mixing Works (Package 4)	28 July 2016	1,800,000,000
6.	Contract No.: 3205 Deep Cement Mixing Works (Low Headroom)	27 September 2016	3,314,806,000
7.	Contract No.: 3206 Main Reclamation Works	27 September 2016	15,263,960,097
8.	Contract No.: 3602 Existing APM System Modification Works	30 March 2017	843,430,000
9.	Contract No.: 3301 North Runway Crossover Taxiway	3 April 2017	356,277,178
10.	Contract No.: 3501 Antenna Farm and Sewage Pumping Station	9 June 2017	67,628,000
11.	Contract No.: 3601 New Automated People Mover System (TRC Line)	13 June 2017	1,668,324,457
12.	Contract No.: 3801 APM and BHS Tunnels on Existing Airport Island	14 June 2017	2,370,896,942
13.	Contract No.: 3503 Terminal 2 Foundation and Substructure Works	28 November 2017	2,435,123,581
14.	Contract No.: 3603 3RS Baggage Handling System	28 November 2017	3,076,491,885
15.	Contract No. : 3402 New Integrated Airport Centres Enabling Works	30 October 2018	59,151,346
16.	Contract No.: 3302 Eastern Vehicular Tunnel Advance Works	28 November 2018	682,000,000
17.	Contract No.: 3303 Third Runway and Associated Works	8 April 2019	6,273,725,171
18.	Contract No.: 3305 Airfield Ground Lighting System	1 August 2019	835,760,167



	<b>Construction Works Contract</b>	<b>Works Contract Award Date</b>	<b>Awarded Contract Sum (HKD)</b>
19.	Contract No.: 3403 New Integrated Airport Centres - Building and Civil Works	9 August 2019	440,698,000
20.	Contract No.: 3404 Integrated Airport Control Systems	9 August 2019	172,345,000
21.	Contract No.: 3721 Construction Support Infrastructure Works	16 August 2019	488,477,541
22.	Contract No.: 3713 Third Runway Concourse and Infrastructure Site Investigation Works	25 September 2019	127,388,888
23.	Contract No.: 3306 Observation Facility Control Systems Supporting Interim 2RS and 3RS	21 October 2019	767,210,058
24.	Contract No.: 3722A Western Support Area - Site Office	13 December 2019	103,929,300
25.	Contract No.: 3722B Western Support Area - Canteen, Safety Induction Centre and Medical Centre	13 December 2019	59,988,000
26.	Contract No.: 3722C Western Support Area - Material Testing Laboratories	13 December 2019	64,064,500
27.	Contract No.: 3722D Western Support Area - Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility	30 January 2020	74,557,290
28.	Contract No.: 3405 Third Runway Concourse Foundation and Substructure Works	6 February 2020	4,639,777,000
29.	Contract No.: 3307 Fire Training Facility	23 March 2020	301,450,000
30.	Contract No.: 3802 APM and BHS Tunnels and Related Works	25 May 2020	7,202,948,752
31.	Contract No. 3508 Terminal 2 Expansion Works	5 August 2020	12,886,000,000
32.	Contract No. 3726 Construction Support Facilities Maintenance Services	4 August 2020	37,217,240
33.	Contract No. 3308 Foreign Object Debris Detection System	23 October 2020	179,055,829
34.	Contract No. 3408 Third Runway Concourse and Apron Works	3 November 2020	15,611,738,390
35.	Contract No. 3723A Eastern Support Area - Site Offices and Sewage Treatment Facility	21 January 2021	177,391,520
36.	Contract No. 3723B Eastern Support Area - Canteen and Centralised Power Supply Building	21 January 2021	57,309,030
		<b>Total :</b>	<b>92,349,844,191</b>

**Proposed Legislative Amendments for  
Updating Airport Height Restrictions under  
Hong Kong Airport (Control of Obstructions) Ordinance (Cap. 301)**

**Background**

The Hong Kong Airport (Control of Obstructions) Ordinance (Cap. 301) provides for, among others, the restriction of heights of buildings in the interest of the safety of aircraft. The existing height restrictions were prescribed under section 3(1AA) and section 3(1A) of Cap. 301 in 1997 to cater for the requirements of Hong Kong International Airport (“HKIA”) as a Two-Runway System. Such height restrictions are generally known as the Airport Height Restrictions (“AHRs”).

**Proposed Amendments**

2. With the development of HKIA into a Three-Runway System (“3RS”), the Civil Aviation Department (“CAD”) has been working closely with the Airport Authority Hong Kong (“AAHK”) to formulate new AHRs for controlling building heights to cater for the changes in airspace protection requirements necessitated by the 3RS.

3. CAD and AAHK have also reviewed the entire airspace protection requirements taking into account the latest international aviation standards, including the latest standards set by the International Civil Aviation Organization to safeguard the operation of aircraft and air navigation service equipment.

4. AHRs are prescribed in the form of specific limits (expressed in terms of metres above Hong Kong Principal Datum, or mPD) for different areas across the territory, and are set out in a series of plans published and deposited in the Land Registry in accordance with the requirements under Cap.301. To give a simple illustration for the purpose of this paper, an indicative plan showing the proposed new AHRs grouped by range is set out at **Appendix to Annex D**. As compared with the existing AHRs, certain areas in the vicinity of HKIA (mainly areas covered by sea or mountainous areas) will be subject to more stringent restrictions for safeguarding the operations of HKIA under the 3RS, while the rest of the

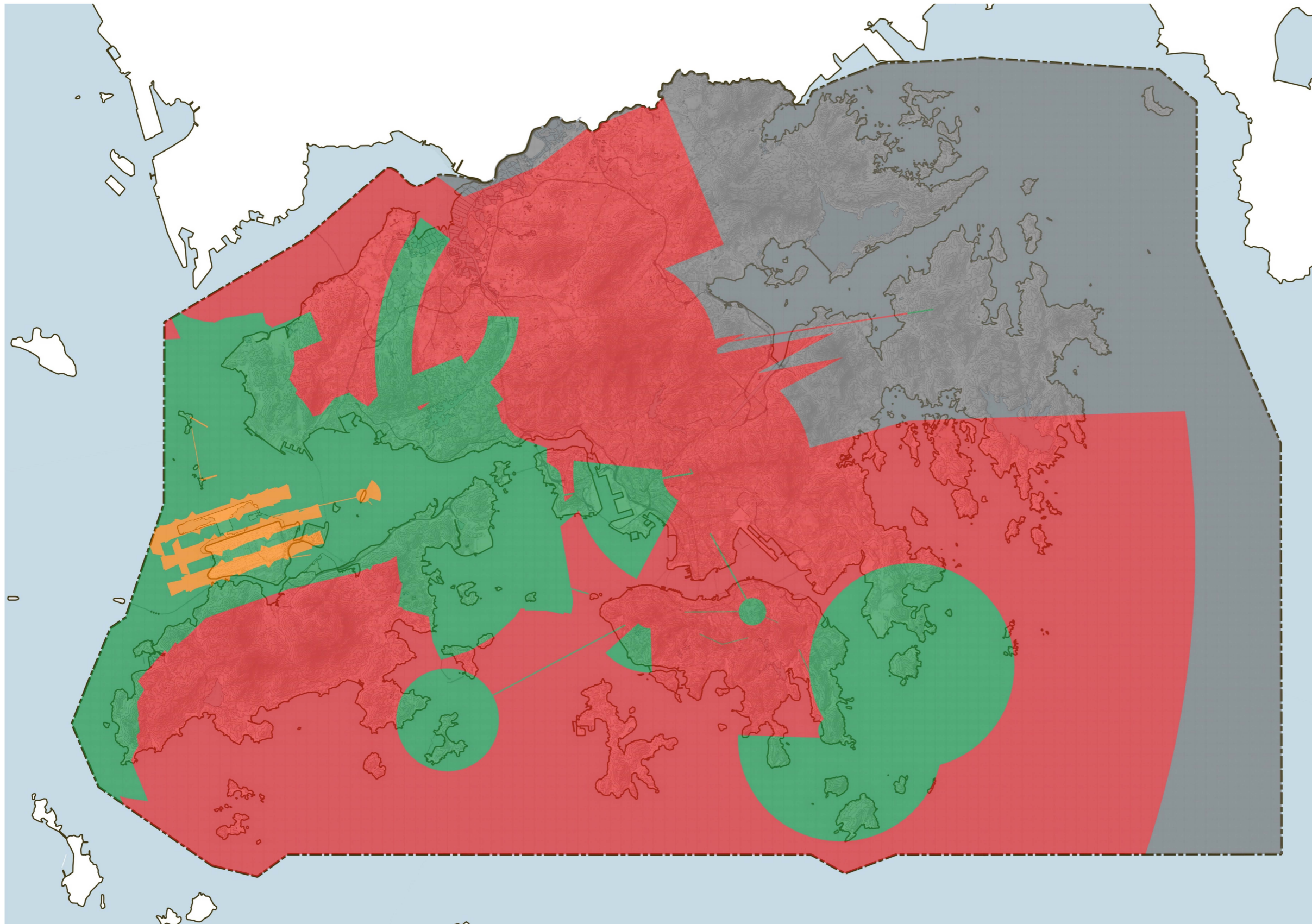
territory will be subject to less stringent AHRs. Some areas, mostly covered by sea or country parks in the eastern part of Hong Kong, are not covered by the existing AHRs but will come under the scope of the proposed new AHRs taking into account the latest requirements.

5. As in the past, the proposed new AHRs will not apply to buildings erected or to be erected according to building plans approved before the proposed new AHRs come into effect. In any event, in the interest of the safety of aircraft, CAD has since 2014 commented on building plan submissions of private development applications and those from government departments, based on the latest available new AHRs at the time, as and when required.

**Development Bureau  
Civil Aviation Department  
April 2021**

Indicative Plan (參考圖)  
New Airport Height Restrictions  
新機場高度限制

Appendix to Annex D  
(附件四 附錄)



New AHR (metres above Hong Kong  
Principal Datum, mPD)

新機場高度限制  
(香港主水平基準,米)

- $\geq 1000$
- 450 to (至)  $< 1000$
- 50 to (至)  $< 450$
- $< 50$

This draft may be  
subject to refinement

此擬本可能再作修訂

**Proposed Legislative Amendments to the Fifth Schedule  
to the Shipping and Port Control Regulations (Cap. 313 sub. leg. A)**

**Hong Kong International Airport Approach Area No. 3 and No. 7**

**Background**

The movement of vessels in the vicinity of Hong Kong International Airport (“HKIA”) is regulated to safeguard the operation of aircraft and air navigation service equipment. On this, some waters in the vicinity of HKIA have been designated as Hong Kong International Airport Approach Area (“HKIAAA”) to prohibit vessels to enter or pass through or to prohibit vessels exceeding specified heights to enter or pass through except with the permission of the Director of Marine. Currently, eight HKIAAA have been designated under the Fifth Schedule to the Shipping and Port Control Regulations (Cap. 313A), each with different restrictions<sup>1</sup>. The Director of Marine is empowered under regulation 72(1) of Cap. 313A to amend the Fifth Schedule.

**Proposed Amendments**

2. Upon the expansion of HKIA into a Three-Runway System, part of the waters within the existing HKIAAA No. 3 and No. 7 at the northern part of HKIA would no longer exist. Moreover, the boundaries of HKIAAA No. 3 and No. 7 in the Fifth Schedule to Cap. 313A are required to be expanded accordingly to upkeep the aforesaid safety requirements for the commissioning of the Third Runway. A plan showing the indicative boundaries<sup>2</sup> of the expanded HKIAAA is at **Appendix to Annex E**.

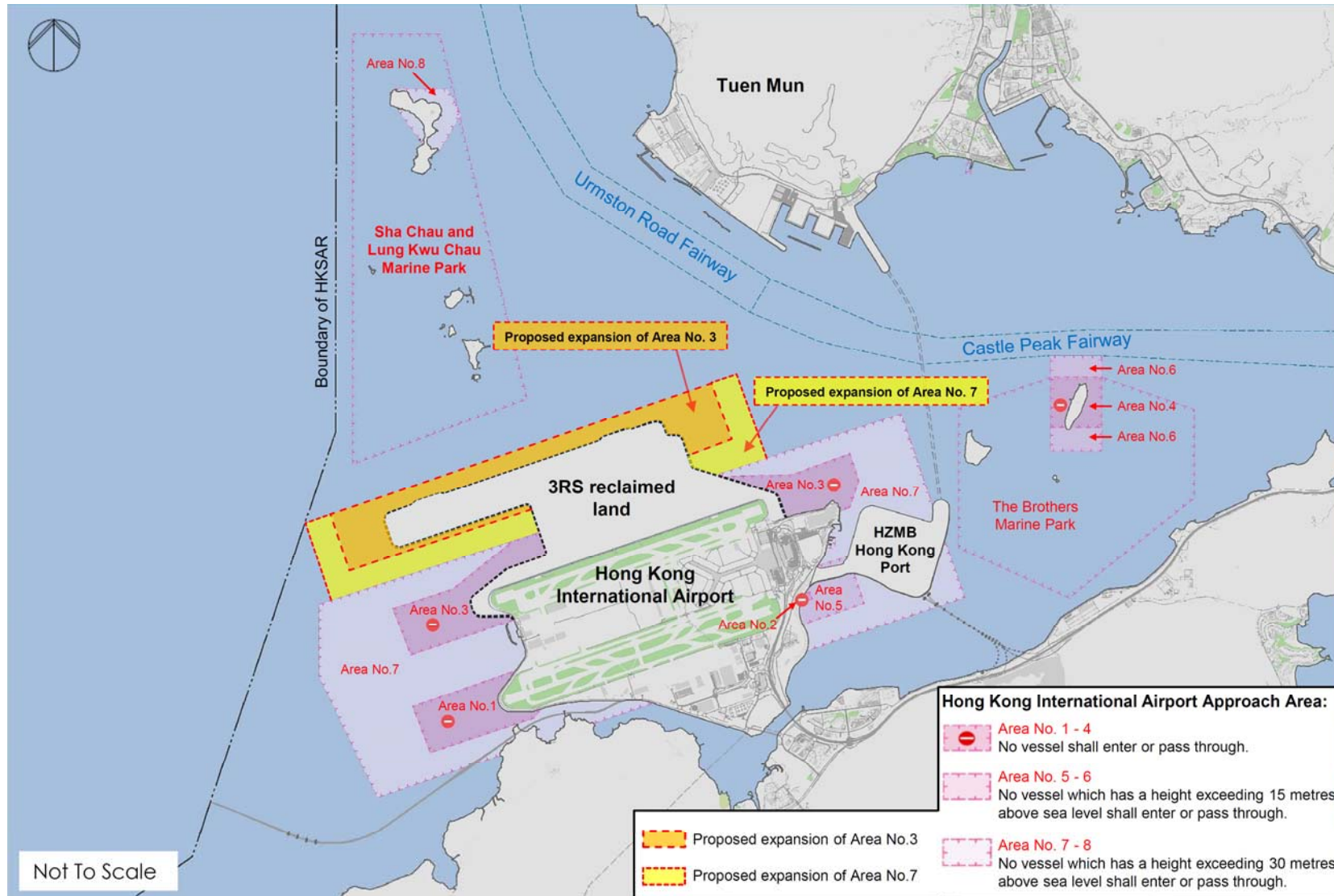
**Transport and Housing Bureau  
Marine Department  
April 2021**

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<sup>1</sup> Except with the permission of the Director of Marine, no vessel shall enter or pass through HKIAAA No. 1, 2, 3 or 4; no vessel which has a height exceeding 15 metres above sea level shall enter or pass through HKIAAA No. 5 or 6; and no vessel which has a height exceeding 30 metres above sea level shall enter or pass through HKIAAA No. 7 or 8.

<sup>2</sup> The movement and navigation of local vessels will also be governed by the amended boundaries of the HKIAAA concerned by virtue of Section 12 of the Merchant Shipping (Local Vessels) (General) Regulation (Cap. 548F).

# Appendix to Annex E



**Proposed Legislative Amendments to  
Airport Authority Ordinance (Map of Airport Area) Order  
(Cap. 483 sub. leg. F) and  
Airport Authority Ordinance (Map of Restricted Area) Order  
(Cap. 483 sub. leg. L)**

**Background**

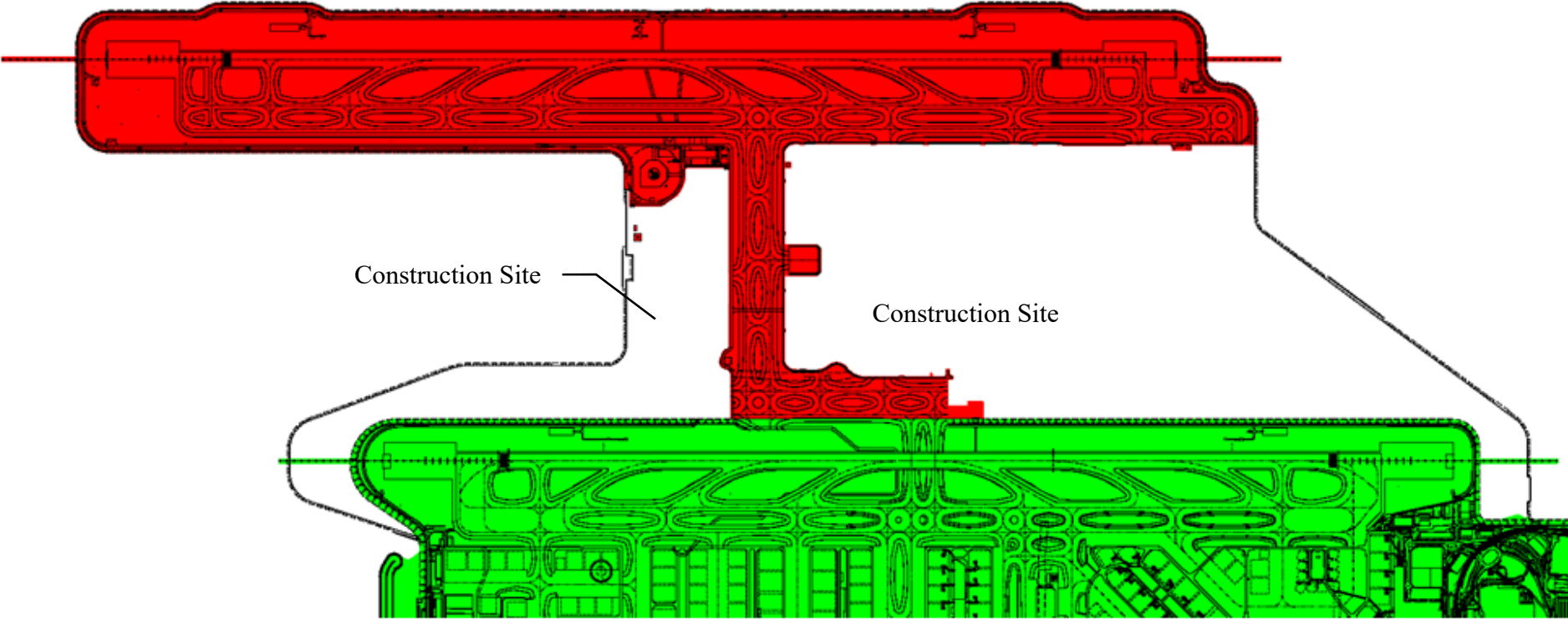
Section 37 of the Airport Authority Ordinance (Cap. 483) provides that the Director-General of Civil Aviation, after consultation with the Airport Authority Hong Kong (“AAHK”), may by orders published in the Gazette describe and delineate by reference to a map the Airport Area (“AA”) and Restricted Area (“RA”).



2. The purpose of delineating the AA and RA is to facilitate AAHK in exercising the Airport Authority Bylaw (Cap. 483A) for regulating the use and operation of Hong Kong International Airport (“HKIA”) and conduct of persons with an aim to ensuring the safe and effective operation of HKIA. The Maps are made available by AAHK for public inspection.

**Proposed Amendments**

3. Upon the commissioning of the Third Runway in 2022, the Third Runway and associated infrastructure on the reclaimed land to the north of the existing Airport Island have to be integrated with that on the existing Airport Island to ensure the safe and effective operation of HKIA as a whole. In this connection, it is proposed to expand the AA and RA to cover the Third Runway and associated infrastructure by amendment Orders to reflect the corresponding changes in the maps of AA and RA. Indicative plans showing the proposed AA and RA to be expanded are at **Appendices 1 and 2 to Annex F**.

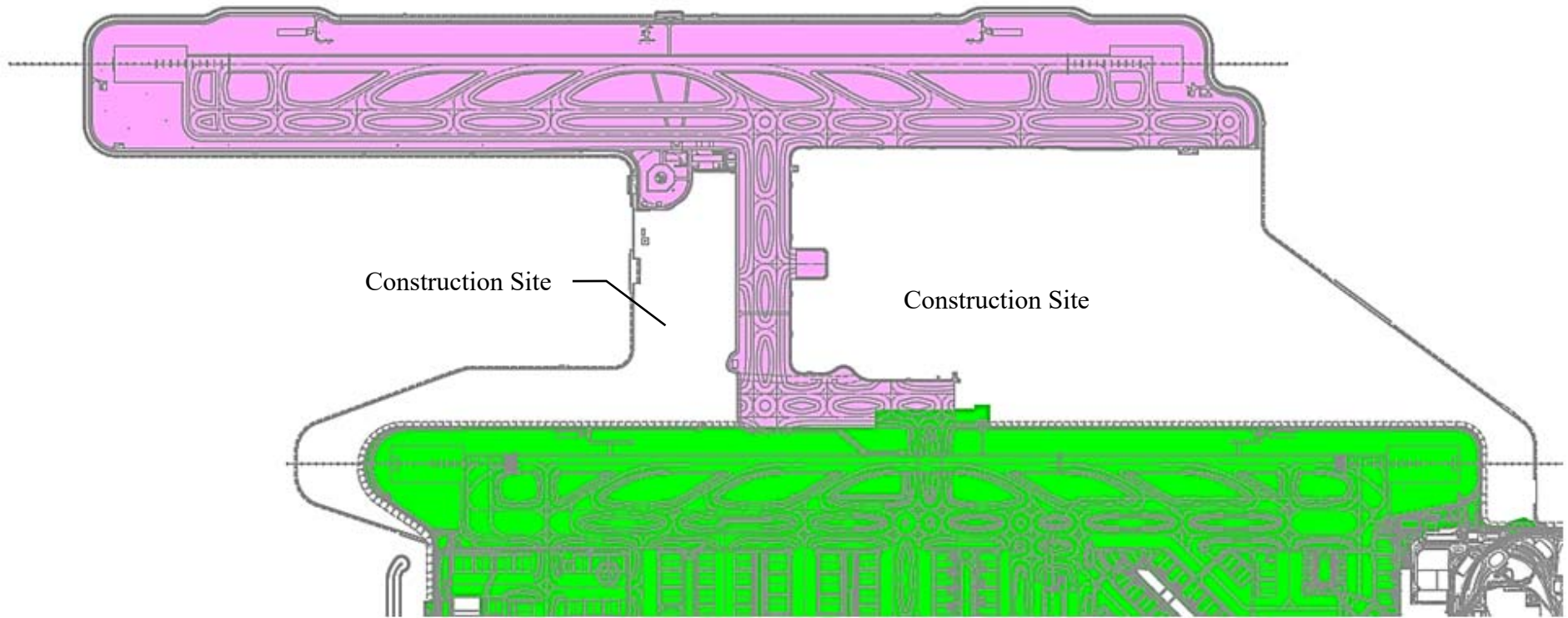
Proposed Amendment to the Map of Airport Area





-  Proposed Airport Area to be expanded
-  Existing Airport Area

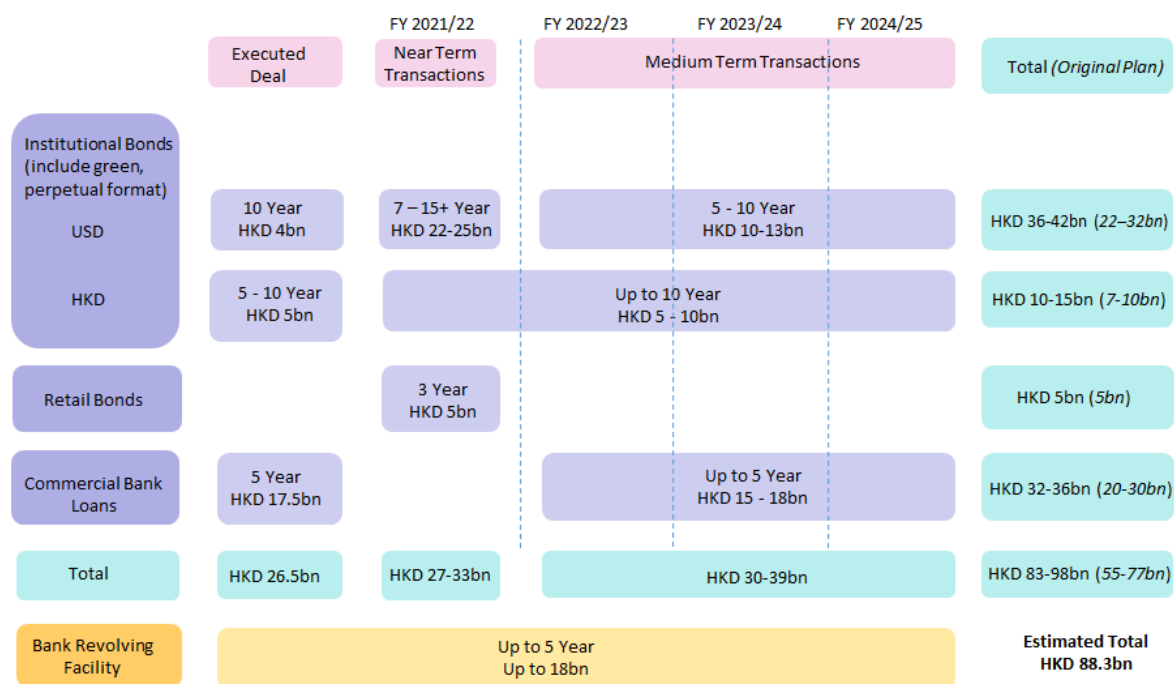


**Proposed Amendment to the Map of Restricted Area**



-  Proposed Restricted Area to be expanded
-  Existing Restricted Area

**Indicative Implementation Timeline of Updated 3RS Financing Plan**



Note: update as of November 2020