



The Association of Consulting Engineers of Hong Kong

香港顧問工程師協會

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Clerk to Finance Committee  
Legislative Council Secretariat  
Legislative Council Complex  
1 Legislative Council Road  
Central, Hong Kong

Attn: Ms Anita SIT, Clerk to Finance Committee

Dear Ms SIT

**Views from the Association of Consulting Engineers of Hong Kong  
on “Studies Related to Artificial Islands in the Central Waters”**

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I would like to express our following supporting views on behalf of the Association.

**1 Support for the artificial islands in the Central Waters**

- 1.1 Shortage of land for further development of Hong Kong to meet the housing demand is unprecedented severe. Reclamation to create new towns supported by new infrastructure has been proven to be successful over the last half century, including Tuen Mun, Tai Po, Sha Tin, Ma On Shan, Kwun Tong, West Kowloon, Tseung Kwan O, Central and Wanchai waterfront. Reclamation has significant contributions to the development of Hong Kong to where we are.
- 1.2 Compare to other options for the creation of sizable land for future development of Hong Kong, artificial islands in the Central Waters provide a fast and straight forward solution. Also, there will be more free hand for the artificial islands on the future infrastructure and transport planning to best suit the context and enable cost effective solution, unlike other land creation options which are constrained by the existing congested environments.
- 1.3 The new reclamation allows a progressive and well-planned implementation programme in constructing new infrastructures and housing units with minimal abortive works or constraints. Without land traffic constraints, new technologies, such as modular construction (MiC) can be applied in large-scaled manner to accelerate the supply of housing units.
- 1.4 The reclamation of artificial islands at Kau Yi Chau will not only create the land for future development of Hong Kong, but also create an opportunity to connect north-west New Territories to Central via the artificial islands. Such transport links will effectively relief



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both existing highways (e.g. Lantau Link) and railways (e.g. West Rail, Tung Chung Line) capacity problems. The connectivity of the current Western District will also be significantly enhanced with the new transport link connecting to the Lantau via the future artificial islands.

- 1.5 The artificial islands also allow the infrastructures and top-side developments to adhere with the latest world standard and smart-city-ready which is too costly and technical challenging to implement in the existing urban setting.
- 1.6 Given the ageing building in the old districts over Hong Kong, this possesses a significant risk to the residents and pedestrian. The new artificial islands will provide the decanting space to speed up the urban renewal to assure sustainability of the territory.
- 1.7 The Engineering Profession has already accumulated extensive experiences with the planning and infrastructure implementation of many major reclamations, new town developments together with the existing and expansion of the Hong Kong airport, and we would be well prepared to manage the challenges ahead for the success of reclamation at the Central Waters and its infrastructure connections.
- 1.8 The Engineering Profession is also fully aware of the issues we need to face including latest aspect like environmental, climatic changes and wave protection, etc. We are confident that they could be addressed within the realms of our current skills and technology with an innovative mindset.

## 2 The "Studies Related to Artificial Islands in the Central Waters"

- 2.1 The Study should bring forth overseas experiences and newly developed technology to enhance the level and quality of the development to meet up with new planning concepts and the related demands.
- 2.2 The Study should adopt an integrated planning and engineering approach to achieve a holistic development framework engaging the most up-to-date concept and technology for its implementation and presents an insight on the long-term vision to reinforce Hong Kong's positioning in the geographic region in order to be in competition with places like Singapore, and at the same time to establish our strategic status in the Greater Bay Area.
- 2.3 As the reclamation in Central Waters is not only for resolving the imminent housing problems in HK, it is destined to be a future metropolis to enhance the Livability, Sustainability, Smart, and Resilient aspects in HK, therefore a new and innovative approach would be warranted. On this basis, we would consider new standards should be established relating to specific aspects both for planning and infrastructure developments in order to achieve these initiatives, and it is highly likely that more lands will be needed to fulfil these ends. The designated 1,000 hectares of reclamation should only serve as a starting framework but should be open subject to the findings of the Study.



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Land bank approach should be considered in order to maximize the area of land can be formed in the central waters.

- 2.4 The study should cover in-depth research of climate change impacts to future reclamation and coastal protection infrastructure, flood resilience and new town planning, and also consider the application of pioneer technology for reclamation and ground treatment methods.
- 2.5 The financial aspect of such large-scaled reclamation is one of the most debated issues. Besides the values of the land created, we believe there are many potential procurement methods, including BOT, PPP, etc, to generate financial returns to support many of the infrastructure developments. The Study should develop a strategy with innovative approach to promote their implementation with different options of the financial arrangement if there is a concern on the financial burden of Government funding.
- 2.6 Regarding the packaging, we expect the consultancy assignments will split into different packages so that more consulting engineering firms can have the chance to contribute and the outcome would be made best use of the talent from local industry. Also, the consulting engineering firm should be leading all the supporting disciplines in the studies in order to ensure the practical implementation of the project can be formulated.

With short term to long term benefits that the proposed artificial islands could bring to Hong Kong, ACEHK would support to conduct the Studies in earliest manner to explore the constraints and opportunities related to the proposed reclamation to enable a better preparation for next stage of works.

Yours sincerely

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Chairman  
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