Kai Tak International Regatta Contro

2006

Summary of Benefits

The Kai Tak International Regatta Centre will bring the following benefits to Hong Kong:

- ❏ International standard water sports facility at the centre of Hong Kong for daily community sport and recreational use for rowing, canoeing, dragon boating and other aquatic sports and events.

- ❏ In full compliance with the Government's stated objectives of bringing the harbour to the people and the people to the harbour.

- ❏ Health benefits through active sport opportunities for many thousands of people in East Kowloon, including children, who currently lack access to convenient recreational facilities.

- ❏ A venue to international standards for holding major international water sports events up to world championship level.

- ❏ The tidal management system will create a daily flow of 2 million cubic meters of water through the Kai Tak Approach Channel and into the To Kwa Wan Typhoon Shelter, thus cleansing these areas more effectively than the system proposed by Planning Department.

- ❏ Eliminates the need to remove 600 metres of the old airport runway, as presently proposed by Planning Department.

- ❏ As a major aquatic sports facility it complements the multi-purpose stadium and by generating substantial additional use of the area it enhances the stadium's financial viability. It provides the opportunity for an "Olympic Park" concept with the stadium and the regatta centre located together.

Hong Kong, China Rowing Association
Hong Kong Canoe Union
Hong Kong Dragon Boat Association

Proposal

Kai Tak International Regatta Centre

1. Submission

This proposal is submitted to the Hong Kong Government.

2. Proposal

It is proposed to develop the Kai Tak Approach Channel (KTAC) and part of the Kwun Tong Typhoon Shelter into an International Regatta Centre (IRC) for rowing, canoeing, dragon boating and other events and activities.

The engineering requirements will allow tidal streams to be positively controlled and directed so as to eliminate the problem of poor tidal flow within the KTAC and the To Kwa Wan Typhoon Shelter.

The IRC brings significant environmental and ecological benefits. With the surrounding areas properly landscaped, it will become an attractive water park for passive and active recreation throughout the year. It can become home to numerous species of marine and bird life, if surrounding areas are extensively planted with trees and other vegetation to provide nesting areas for egrets and other birds. Extensive tree planting will help to mitigate air pollution, provide shade and shelter, and leave a legacy for future generations to enjoy.

Development of the International Regatta Centre will demonstrate to the world that Hong Kong has the engineering capability and political will to take a polluted, former industrial area and turn it into an attractive green lung in the heart of the city.

Completely surrounded by a waterfront promenade, the IRC will provide extensive opportunities for walking, jogging and cycling and could be a safe venue for competitive events in these activities.

The International Regatta Centre will considerably enhance the Chief Executive's vision of Kai Tak becoming a Sports City with world-class facilities.

The added usage of the area will increase the overall economic viability of the Sports City.

3. The advantages of water sports for Hong Kong

Many sports are practised in Hong Kong, but there is a lack of facilities of international standard for hosting events such as Asian and world championships.

Land is in short supply and there are many competing uses for it. Allocating land for sports has a high cost, when viewed from a Government revenue point of view.

In contrast to the shortage of land, Hong Kong possesses extensive areas of water that are suitable for a wide variety of water sports.

Water sports also require land from which to operate, but for an equal number of participants, the area required is much smaller than that required by land-based sports.

Water sports are, therefore, highly suited to Hong Kong and it is logical to provide facilities to encourage participation.

4. Need for an international regatta centre

There is no venue in Hong Kong that meets the technical requirements of the international federations for rowing, canoeing and dragon boating for holding international events. A course suitable for rowing will also meet the requirements for canoeing and dragon boat competitions.

Technical requirements are for still water, a minimum depth of 3.5 metres, a width sufficient to accommodate 8 racing lanes of 13.5 metres width and a length sufficient to accommodate a racing distance of 2,000 metres, with space beyond the finish line for boats to stop. The course must be straight and conditions in each lane must, as far as possible, be equal. Space is needed alongside the course for boats to pass between the start and finish without intruding on the course.

Some land-based facilities are required, including boat park, start installations, timing facilities, finish tower, spectator facilities and rooms for meetings, doping control, first aid, athlete changing and rest areas etc.

Possession of an international standard course will allow major water sports events to be held, benefiting the development of local sport and the economy.

5. The Kai Tak Approach Channel

The KTAC and its extension into the Kwun Tong Typhoon Shelter affords the possibility of creating an international regatta centre at minimal cost. Its proximity to the proposed multi-purpose stadium and other proposed sports facilities, its access to public transport facilities and its location in the heart of the city, make the concept extremely attractive. There is the potential to create a world-class regatta centre capable of hosting a variety of water sports events and during the rest of the year being used by local clubs, schools and universities. The KTAC is 200 metres wide and could be extended to the required length.

6. Contaminated sediment

The sediment on the floor of the KTAC is contaminated, but it is understood that the sources of contamination have largely been eliminated. The situation is analogous to that of the Shing Mun River (SMR) channel, which, at 200 metres wide and 4,000 metres long, is nearly 3 times larger in area. Elimination of pollution sources and removal and treatment of contaminated sediment has successfully cleaned up the SMR channel. Nature has contributed to this process and the channel is now home to a large population of fish, crustaceans and bird life and the water is noticeably clear. The same process should be possible at the KTAC.

7. Tidal flushing

Tidal flushing is important, to assist in cleansing the channel and to help maintain it in a healthy condition. The shortness of the channel and its location beyond the breakwaters of the Kwun Tong Typhoon Shelter mean that tidal flows into and out of the channel are slow and the exchange rate of water is limited, thus the natural cleansing process is slow.

The To Kwa Wan Typhoon Shelter also suffers from poor tidal flows.

Since both the KTAC and the To Kwa Wan Typhoon Shelter suffer from limited tidal flows, connecting them by removing 600 metres of the airport runway may not result in much increase in flow. Furthermore, removing so much material from the runway will be expensive and its disposal will present a problem. Bridging the 600 metres gap in the runway in order to reinstate the lost land area will also be expensive. We propose another solution to the problem of inadequate tidal flushing.

8. The proposed aquatic basin

Please refer to the sketch plan at page 9. It is proposed to extend the KTAC by constructing a breakwater within the Kwun Tong Typhoon Shelter. Near the end of the airport runway, the breakwater should be joined to the runway to form an enclosed basin. Within the basin, a system of sluice gates will control tidal flows and be able to maintain the water level at the high tide level when international regattas take place, thus providing the still water conditions required by the international federations.

During the approach of typhoons, passage for vessels into the basin will be provided through an openable access barrier. After construction of the KTAC extension breakwater, the width of the typhoon shelter will be in the region of 300 metres, which is sufficient for vessels to operate, pending the planned relocation of the cargo handling area.

9. Controlling tidal flows

Sluice gates near the end of the runway (the southern sluice gates) will control tidal flow into the basin. With the access barrier closed, the sluice gates will allow water to flow into the basin on the flood tide, but prevent it from flowing out on the ebb.

It is proposed that a narrow channel (spillway) be cut through the runway at the northern end of the KTAC. Sluice gates to control the flow of water will be installed at the eastern end of the spillway (the northern sluice gates). When closed, the sluice gates will retain water in the basin.

The normal daily operating protocol will allow the basin to fill on the flood tide through the southern sluice gates, while the northern sluice gates are held closed. At high tide, the southern sluice gates are closed. At this point, the water level in the basin corresponds with the high tide level. If an international regatta is to take place (requiring still water), all sluice gates will remain closed, maintaining the water in the basin at the high tide level.

If there is no requirement to maintain the water level in the basin, when the tide starts to ebb the northern sluice gates will be opened, discharging water from the basin into the To Kwa Wan Typhoon Shelter. The narrower the channel, the faster will be the rate of discharge. Holding the water back until the tide level in the harbour has dropped, then opening the sluice gates, will increase the discharge rate. The direction of the channel exit should be designed to maximise flushing of the typhoon shelter.

The proposed hydraulic management system utilises the difference in water levels between high and low tides to positively flush water through the basin and into the To Kwa Wan Typhoon Shelter. If the basin has an area of 500,000 square metres and the average tidal range is 2 metres, 2 million cubic metres of water will pass through the basin and into the

typhoon shelter each day. This quantity would be close to the total volume of water in the basin, giving a very high rate of exchange.

10. The canoe slalom course

Canoe slalom is a popular spectator and participation sport in many countries. It is also a sport for which no venue exists in Hong Kong and which the Canoe Union is keen to see provided. A canoe slalom course could be built within the airport runway. If the water in the basin is held back, as the tide drops, water could be allowed to flow from the basin through the slalom course. Adequacy of the gravity fed tidal flow would need investigation. At times when the flow is inadequate, pumps could boost the flow of water.

It is reported that revenue from the entirely electrically driven canoe slalom course that was built in conjunction with the 2000 Sydney Olympic rowing course pays for the upkeep of the entire rowing and canoeing facility.

11. Conclusion

We believe that this proposal meets the needs of Hong Kong and is a feasible and low cost solution to the problem of providing a venue for international rowing, canoeing and dragon boating events and for other aquatic events for which the facility is suitable. The facility will not only benefit Hong Kong; it will benefit the development of these sports in Asia and elsewhere.

We believe that the proposed system for controlling tidal flows through the venue will result in more effective flushing than the presently proposed 600 metres gap in the runway.

We believe that the proposal will result in Hong Kong hosting a variety of water sports events, up to world championship levels, to the benefit of the population as spectators and participants, and that the economic benefits will outweigh any costs involved.

We believe that the possibility of developing the KTAC into an International Regatta Centre presents a unique environmental and ecological opportunity that should not be missed.

In making this proposal the Hong Kong, China Rowing Association has the full support of the International Rowing Federation (FISA) and has access to all the technical resources and experience accumulated by FISA in helping to plan and develop a number of rowing courses around the world.

The World Rowing Championships

12. Further Information

Enquiries in relation to this proposal may be directed to:

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Sketch map showing location of proposed Kai Tak International Regatta Centre