

獨特水道 接連啟德毗鄰

Kai Tak Waterway Makes a Unique Connection

■啟德發展計劃是一個規模龐大且豐富多元的發展項目，除了為來自世界各地郵輪旅客提供通往香港的新通道外，亦為香港市民提供居所，以及各式各樣的體育、休憩和文化設施。然而，計劃的發展範圍，並不僅局限於啟德的規劃範圍內。與毗鄰各區融會貫通，增添地區活力新姿采是啟德發展計劃的規劃原則之一。啟德設有四通八達的行人連接網，包括行人道、行人天橋、

行人隧道、園景美化高架行人道和地下購物街等20多條行人通道，與毗鄰各區緊密連繫。

啟德河連繫毗鄰

除了完善的行人連接網外，全長2.4公里的啟德明渠，沿蒲崗村道蜿蜒而下，繞過東頭邨、新蒲崗，穿越太子道東再經啟德發展區流入維多利亞港，是連接啟德毗鄰各區與維港海濱之間的另一獨特通道。

啟德明渠作為東九龍主要的排洪渠道之一，過往曾因受到污染而產生氣味問題，一直備受關注。但隨著政府致力改善排水及排污系統，堵截污水排進雨水排放系統，並引導污水流往適當的污水處理設施，啟德明渠的水質與生態環境已大為改善。今天，不少市民已把明渠改稱為「啟德河」，更期望活化後的啟德河能塑造成一條獨特的城市景觀軸，連接啟德與鄰近地區，增強各區的融合，提供各式各樣的設施供市民享用。

公眾期望與諮詢

既然啟德河有望成為社區的休憩資源，因此，在發揮河道原有排洪功能的大前提下，我們如何把啟德河締造成一條在城市中富吸引力的綠化河道走廊，並能提供康樂活動空間，將會是一項挑戰。

為了進一步了解市民對發展啟德河的期望，土木工程拓展署聯同渠務署和規劃署舉辦了一項分兩個階段的「共建啟德河」公眾參與活動。第一階段的活動已於2010年11月舉行，包括兩場社區展望工作坊，並諮詢了有關區議會、海濱事務委員

會、城市規劃委員會，以及其他持份者的意見。

根據上述工作坊和諮詢活動收集所得的結果顯示，在保持啟德河排洪能力的首要前提下，市民一般均認同啟德河應以貫穿毗鄰各區的自然綠化河道走廊為設計原則，並提供休憩用地，供市民享用。

此外，啟德河的設計須與周邊的休憩用地融合，例如摩士公園、衙前圍村、車站廣場，以及龍津石橋遺跡保育長廊等。優化啟德河河畔的暢達性及連接方法亦同樣重要。設計還須考慮增設各式園景及康樂設施，如行人道、單車徑、緩跑徑、觀景台、水景設施，以及表演場地等。

河道發展 邁向新一步

在政府與市民攜手合作下，我們進行了「共建啟德河」第二階段的公眾參與活動，並於2011年6月25日舉行了一場建立共識工作坊，目的是要在啟德河的設計方向，尤其在「更緊密連繫」、「合適氛圍」及「河道配套設施」等方面尋求共識。

我們是在次公眾參與活動中，收集了不少寶貴意見，將為日後啟德河設計提供參考。憑着各方的努力，啟德河定能發展成為一條貫通啟德發展區和鄰近地區的綠化河道，為各區注入朝氣和活力。

啟德河上游段工程將率先由渠務署於2011年年底展開，包括防洪與活化河道工程，預計將於2017年年中完成。至於河道餘下各段的工程，將由土木工程拓展署與渠務署分階段進行。



■Kai Tak Development (KTD) is a multi-dimensional development bringing benefits to people in different ways, which will be a new gateway to Hong Kong for cruise passengers, a new home for residents, as well as a leisure resource with sports, open spaces and heritage for citizens. However, Kai Tak's developments in fact stretch way beyond its boundaries. One of its planning principles is to breathe new life into the surrounding neighbourhoods through accessible connections. Easy walking access via more than 20 external pedestrian links, ranging from pedestrian crossings, footbridges, subways, landscaped elevated walkways and underground shopping streets will be provided.

“Kai Tak River” connecting the neighbourhoods

In addition to the pedestrian links, the 2.4km long Kai Tak Nullah snaking down from Po Kong Village Road, passes Tung Tau Estate, San Po Kong and runs under Prince Edward Road East before traversing KTD and finally discharges into Victoria Harbour, provides a unique connection from Kai Tak's hinterland to the harbourfront.

As one of the East Kowloon's major flood relief drainage channels, the nullah had a poor reputation for pollution and odour issues. However, with continuous efforts by the Government on improving the drainage and sewerage systems to intercept waste water discharge into storm water drains and transfer polluted discharges to proper treatment facilities, an improved water quality and a favourable ecological environment have been achieved. The change has been remarkable that many people have renamed the nullah as “Kai Tak River” today, and aspired to its revitalisation and transformation into a unique urban and landscape axis linking the surrounding districts and KTD to promote their integration with a host of features for the community to enjoy.

Public aspirations and consultation

Kai Tak River has potential to serve as a leisure asset for the community. To make this a reality, turning it into an attractive green river corridor through the urban areas with space for recreational activities while fulfilling its flood protection role becomes our challenge.



To understand more about public aspirations for the river, a two-stage public engagement programme called “Building our Kai Tak River”, was jointly organised by the Civil Engineering and Development Department (CEDD), the Drainage Services Department (DSD) and the Planning Department (PlanD). The first stage of the programme was held in November 2010 with two community envisioning workshops and consultations with relevant District Councils, the Harbourfront Commission, the Town Planning Board and other stakeholders.

According to the findings of the workshops and the consultations, the community is generally in support of Kai Tak River's key design principles to

be an attractive natural green corridor through the urban areas connecting and integrating KTD with neighbouring districts and to provide open spaces for public enjoyment, with its prime objective for flood relief purpose.

The river design also needs to be in harmony with adjoining open spaces, like Morse Park, Nga Tsin Wai Village, Station Square and the preservation corridor for Lung Tsun Stone Bridge remnants. Access for the public to the riverside is important as well. In addition, the provision of landscaping and recreational facilities, including walkways, cycling and jogging trails, viewing platforms, water features and performance areas will be considered in the design.

生態環境改善措施

有關方面在完善河道排洪能力的工程時，亦希望能同時改善生態環境。一直以來，渠務署在以往各項河道改善的工程項目中，均致力保存及尋求各種優化河道自然生態的機會。雖然啟德河並非天然河道，但渠務署在是次的改善工程中，參考了過往曾得到世界自然基金會的寶貴意見，並獲獎的西貢蠔涌河改善工程項目的成功例子，藉以長遠

改善啟德河的生態環境，例如在河道壁合適的位置裝置魚洞穴，以免魚類、無脊椎動物，以及其他各種水生生物在水漲時被沖走；並於河牀放置天然大石，使水流流速有一定的變化，以便促進生物的多樣化和孕育小型生態環境。河道兩旁亦會種植各種喬木、灌木，以及蔓生植物加以美化，並配合其他美化工程，使河岸景致更秀麗宜人。

Ecological enhancements

While improving the river's drainage capacity, ecological enhancements are also being carried out to rehabilitate the waterway. DSD explores every opportunity to preserve and enhance the natural ecology in its river improvement projects. Even though Kai Tak River is a man-made channel instead of a natural waterway, experiences learnt from other river improvement projects can be employed. One of such is the awarded Ho Chung River drainage improvement project in Sai Kung carried out by DSD in consultation with World Wide Fund for

Nature (WWF). A number of similar ecological enhancement measures from Ho Chung River project have been adopted to enhance the ecological environment of Kai Tak River in the long term. These include fish shelters built into the walls of the channel providing a refuge to prevent fish, invertebrates and other aquatic organisms from being swept away during periods of high water flow; boulders on the river bed that deflect the water to make a variety of low and high-flow areas for promoting bio-diversity and micro-habitats. To make the appearance of



the river more natural, trees, shrubs and trailing plants will be planted along both sides of the river. Works to enhance the river's visual appeal will also be included.

New river moves a stage closer

With the Government and community's close cooperation, the second stage public engagement programme moved forward with a consensus building workshop on 25 June, 2011 aiming at building consensus

on the landscape design approaches for the river, in particular, focusing on the areas of: “Better Connection”, “Suitable Ambience” and “Facilities Along the River”.

In this consultation, a number of constructive ideas and views were gathered,

which will be taken into account for the river's design. With all the efforts, the Kai Tak River will surely become a valuable green resource linking and bringing vibrancy to neighbourhoods along its entire route.

As the first step, DSD will commence the construction

of the upstream section of Kai Tak River with drainage enhancement cum revitalisation in late 2011 for completion in mid-2017, while remaining sections of the Kai Tak River will be implemented in phases by CEDD and DSD.

郵輪碼頭及其他項目全速展開

Full Speed Ahead for Cruise Terminal and other projects

■ 大型的發展計劃往往都需涵蓋多個工程項目，啟德發展計劃也不例外。現時，該計劃多項的相關工程已正在進行，而新項目亦會按時相繼陸續展開。雖然發展區在施工初期看來尚未見雛型，事實上，土木工程拓展署正為推動是項重大的市區發展計劃，全力展開各項基礎設施工程。

碼頭工程 按時動工

啟德郵輪碼頭土地平整工程是現時全面展開的主要工程項目之一，有關工程包括在前跑道的南端興建郵輪泊位設施。

郵輪碼頭土地平整工程龐大複雜，難度甚高，其中涉及拆卸現有海堤，並在較後位置重新建造一條約1 100米長的斜面海堤，以興建一個850米長、35米闊的碼頭前沿區連靠泊平台，並須挖掘約86公頃的海床，以容納總噸位達22萬公噸的世界最大型郵輪。

土地平整工程採用了嶄新的技術，包括運用互扣的並列鋼管樁牆，使郵輪碼頭大樓的建造工程可同期施工，達到雙管齊下的省時效益。

把原有海堤的物料循環再用於新建的斜面海堤，這不單有助減少對環境造成的影響，同時亦能降低成本。

為配合啟德發展計劃上述的前期工程，土木工程拓展署亦已全力展開相關的前期基礎設施工程，包括在前機場跑道南面建造全長1.8公里的雙線分隔車道、滅火輪碼頭、污水泵站、雨水渠、污水渠及水管等。各有關方面嚴謹監察並緊密合作，使土地平整工程和各項支援郵輪碼頭的前期基礎設施工程均如期進行。

此外，郵輪碼頭大樓的建造工程已全面展開，預計將於2013年落成啟用。

北停機坪工程 進度理想

座落於前機場北停機坪位置的公共房屋預計會在2013年竣工。至於在2009年7月開始動工的進路、排水渠，以及其他附屬工程現正順利進行。這些工程包括全長2.6公里的新建道路、兩條行人天橋、三條橫跨太子道東的行人隧道的改善工程，以及相關的排水渠、污水渠及水管系統的建造工程等。

2011年年中，位於北停機坪第二期的基礎設施工程亦已展開，包括道路、行人徑、相關公用設施、排水渠及水管的建造工程，目的是要配合區內日後的住宅發展項目和公共設施。

改善水質工程

在啟德明渠進口道及觀塘避風塘進行的原地生物除污工程同樣已於本年年中動工，以應對這兩個地點的氣味問題。□

■ There is always a lot going on in a development as large and diverse as KTD with multiple projects underway and new works starting up as the development timetable progresses. At the early construction stage, it seems that KTD is yet to be seen. However, in reality, CEDD is busy with implementing the infrastructure works for this tremendous urban development project.

Cruising to schedule

One of the key projects pushing ahead quickly is the site formation works for the cruise terminal, which includes the construction of berthing facilities at the southern part of the former runway.

The site formation works for the cruise terminal and berths are multi-faceted

and challenging project, that involve demolishing and setting back the existing seawall to build a new sloping seawall over 1 100m, constructing an apron area with a quay deck 850m by 35m, and dredging 86ha of seabed to make it deep enough to accommodate the world's largest mega cruise ships with gross tonnage up to 220 000 tonnes.

Innovative approaches are being adopted for the site formation works. Using a vertical pipe pile wall has enabled the construction of cruise terminal building to go ahead in parallel with the site formation, which means the time for delivery is saved. Reusing material from the existing seawall to build the new sloping seawall will reduce the environmental impact as well as the cost.

To serve these advance works of KTD, CEDD is also moving ahead with the advance infrastructure works along

the southern part of former runway with a 1.8km two-lane carriageway, a fireboat berth, a sewage pumping station, storm drains, sewers and water mains, etc. With close monitoring and corporation, both site formation and advance infrastructure works supporting the cruise terminal are progressing satisfactorily on schedule.

Apart from these, the construction works for the cruise terminal building are in full swing. The building is expected to commence operation in 2013 as scheduled.

North apron arriving on time

Another project targeted for completion in 2013 is the public housing at the former north apron. Roads, drainage and other ancillary works started in July 2009 are well underway. These include forming 2.6km of new roads, building two new footbridges, improving three existing subways under Prince Edward Road East, and constructing the associated drainage, sewerage and water main systems.

In mid-2011, the second stage of infrastructure works for roads, footpaths, related utilities, drainage and water mains was launched at the north apron to serve future residential developments and public facilities in this area.

Improving the water quality

Another project starting in the middle of this year is the in-situ bioremediation work to address odour issues at Kai Tak Approach Channel (KTAC) and Kwun Tong Typhoon Shelter (KTTS). □

時刻監察環境

Keeping an eye on the environment

■ 啟德發展計劃工程浩大且複雜，在工程過程中難免對周圍環境構成一些影響。因此在工程展開期間，土木工程拓展署已按照環境影響評估報告的要求，委託獨立專家，就啟德發展計劃建造工程對環境的影響進行環境監察和審核。

這些工作包括監察啟德發展區附近的水質，就各物理、化學和微生物參數（包括溶解氧和大腸桿菌含量）進行分析。至目前為止，水質監察結果顯示，土瓜灣避風塘的水質大致符合維多利亞港水質管制區的水質標準；至於啟德明渠進口道和觀塘避風塘部分區域的水質，則尚未達標準。另外，根據氣味監測結果顯示，啟德明渠進口道和觀塘避風塘間歐錄得輕微至中等程度的異味。預計在2011年下半年起，開始進行生物除污後，上述兩處地點的水質和氣味均有所改善。

自2010年9月開始，土木工程拓展署亦於啟德發展區附近不同位置設立監察站，以監察建造工程對空氣質素（塵埃）和噪音水平所造成的影響。監察結果顯示，兩方面

均低於環境保護署的限制規定。此外，鑑於市民對啟德發展區內現有沙倉所產生的塵埃排放表示關注，我們一直密切留意有關情況，在各方努力合作下，沙倉亦快將遷移。

土木工程拓展署將繼續密切留意各項環境監察結果，並採取足夠的環境保護措施，致力盡量減少啟德發展區對附近環境產生的影響。□

■ In terms of size, complexity and time-scale, the construction of KTD is bound to have some effects on the environment of the surrounding areas. To monitor and quantify the impact, CEDD has appointed independent specialists to carry out environmental monitoring and audit works as required in the Environmental Impact Assessment Report during the construction stage of KTD.

Part of these works involves monitoring the water quality around KTD for analysing various physical, chemical and microbiological



水質監察
Water quality monitoring



空氣質素監察
Air quality monitoring

parameters, including dissolved oxygen and E. coli levels. So far these tests have shown that the water quality in To Kwa Wan Typhoon Shelter is generally in line with the standard of water in the Victoria Harbour Water Control Zone, whereas the water quality in some areas of KTAC and KTTS falls below the required standards. Odour nuisance in KTAC and KTTS is occasionally slight to moderate according to the monitoring results. Both of the water quality and odour issues at KTAC and KTTS are expected to improve when bioremediation is started in the latter half of 2011.

Since September 2010, CEDD has also set up monitoring stations around KTD to monitor air quality (dust) and noise

levels arising from the construction activities. The monitoring results indicated no exceedance of the respective limits stipulated by the Environmental Protection Department. Understanding public's concern about dust emission from the operation of the existing sand depot situated inside KTD, we have been closely following up the case, and with all the efforts, it will be moved very soon.

CEDD is committed to minimising the impact of KTD on the environment of its adjacent communities and will continue to closely oversee the environmental monitoring results to ensure adequate measures are being adopted. □

下一步...

為設置保育長廊用以原址保存龍津石橋遺跡，並優化啟德海濱的暢達度，我們已提出有關《啟德分區計劃大綱圖》的修訂建議，並於2011年8月刊憲。在工程全面展開的同時，我們將會繼續致力優化啟德的城市設計，務求實現建設一個「富有特色、朝氣蓬勃、優美動人及與民共享的啟德」的目標。

What's next...

To accommodate the preservation corridor for in-situ preservation of Lung Tsun Stone Bridge remnants, and to enhance accessibility to the waterfront, amendments to the "Kai Tak Outline Zoning Plan" were proposed and gazetted in August 2011. As the project proceeds, we will continue to work on the urban design refinements to realize the planning intention of developing a "Distinguished, Vibrant, Attractive and People-oriented Kai Tak".

「啟德之友」

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ktd@cedd.gov.hk，登記成為「啟德之友」。我們亦將舉行「啟德之友」成立一周年活動，各位會員萬勿錯過。

“Friends of Kai Tak”

To receive e-copy of this newsletter or other information about KTD, simply enroll as "Friends of Kai Tak" by sending us your email address to friends.

ktd@cedd.gov.hk Watch out also for the upcoming anniversary activity for members of "Friends of Kai Tak".

下期精彩內容

我們將於下期重點介紹各項行人連接設施，以及啟德發展區如何與鄰近地區的連接。

Look out for the next issue

In the next issue, we will focus on pedestrian connectivity and how KTD is linked with its surrounding neighbourhoods.

我們歡迎您提供寶貴的意見，令《啟德新里程》的內容更豐富、更吸引。請將意見電郵至 ktd@cedd.gov.hk。

We appreciate hearing your valuable comments to enhance the contents of this publication. Please email them to ktd@cedd.gov.hk.

進行各種環境監察時，可量度甚麼參數？

溶解氧是監察水質的一種參數。水中的氧氣含量足以影響水生動植物在水中存活的可能性。一般情況下，溶解氧含量愈高表示水質愈佳。

至於總懸浮粒子則可作為衡量空氣質素的準則之一。總懸浮粒子是一些直徑少於100微米，比人類頭髮直徑還要細小的空氣漂浮物，這些粒子可來自大自然，例如由風吹送的海鹽、土壤，或人為的活動，例如建築活動、工廠及車輛。

What parameters are measured for various environmental monitoring purposes?

The amount of Dissolved Oxygen (DO) in water is a parameter to indicate how well the water can support aquatic plant and animal life. Generally, water with higher DO level indicates a better water quality.

In addition, Total Suspended Particulates (TSP) can be used as one of the criteria to measure air quality. TSP is tiny airborne particles with diameters less than 100 micrometres, thinner than the diameter of a human hair, from natural sources including wind-blown sea salt, soil or from man-made sources, like construction activities, factories and vehicles.

有問必答

Frequently Asked Questions

