

Major projects involved in the Kai Tak Developments (Part 1)

This presentation, prepared by Raymond Wong of City University, tries to briefly summarize the major projects being carries out or under active planning since the introduction of the Kai Tak Development Plan by the end of 2000s.

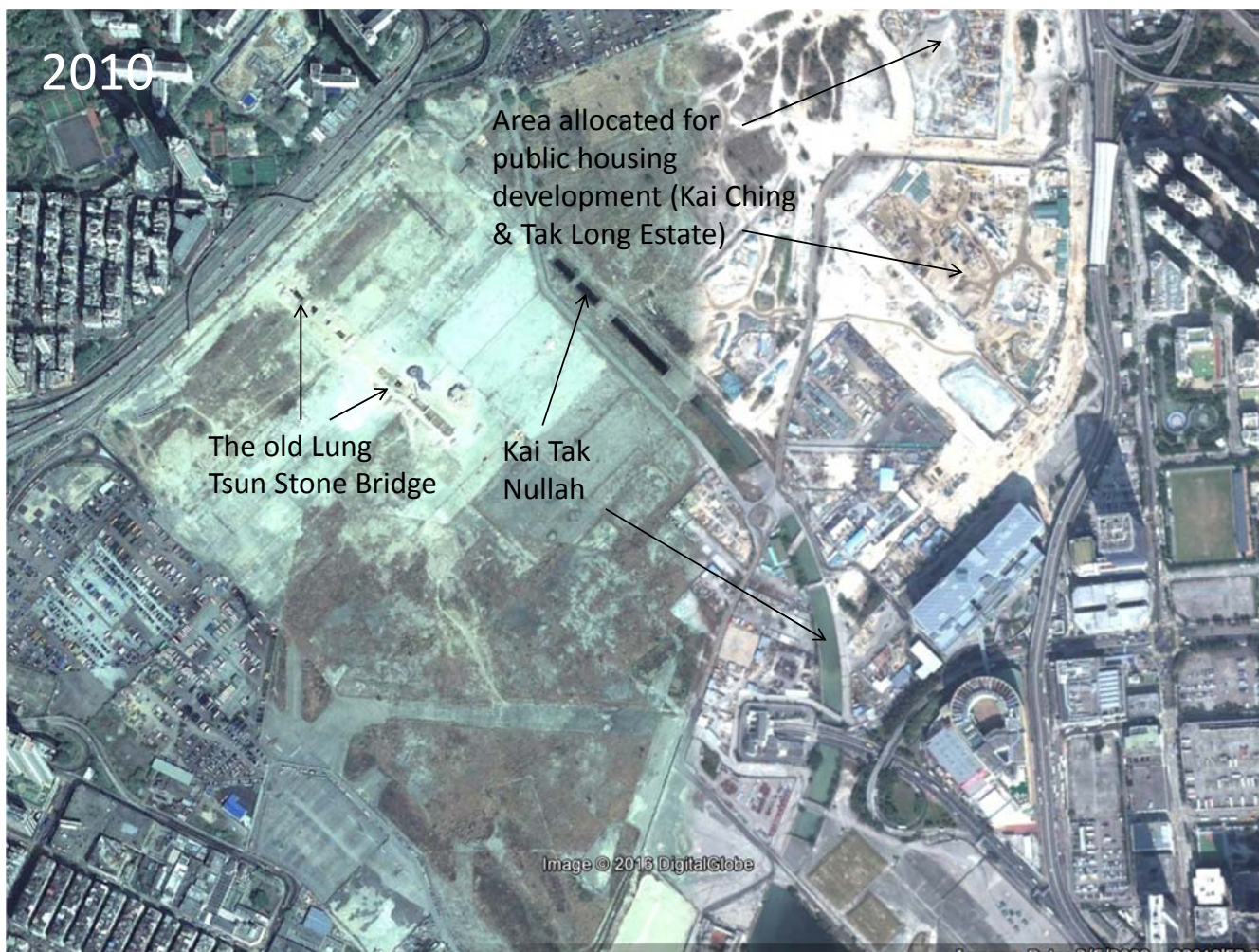
July 2017

Satellite images show the land condition
of previous Kai Tak Airfield since 2007

2007



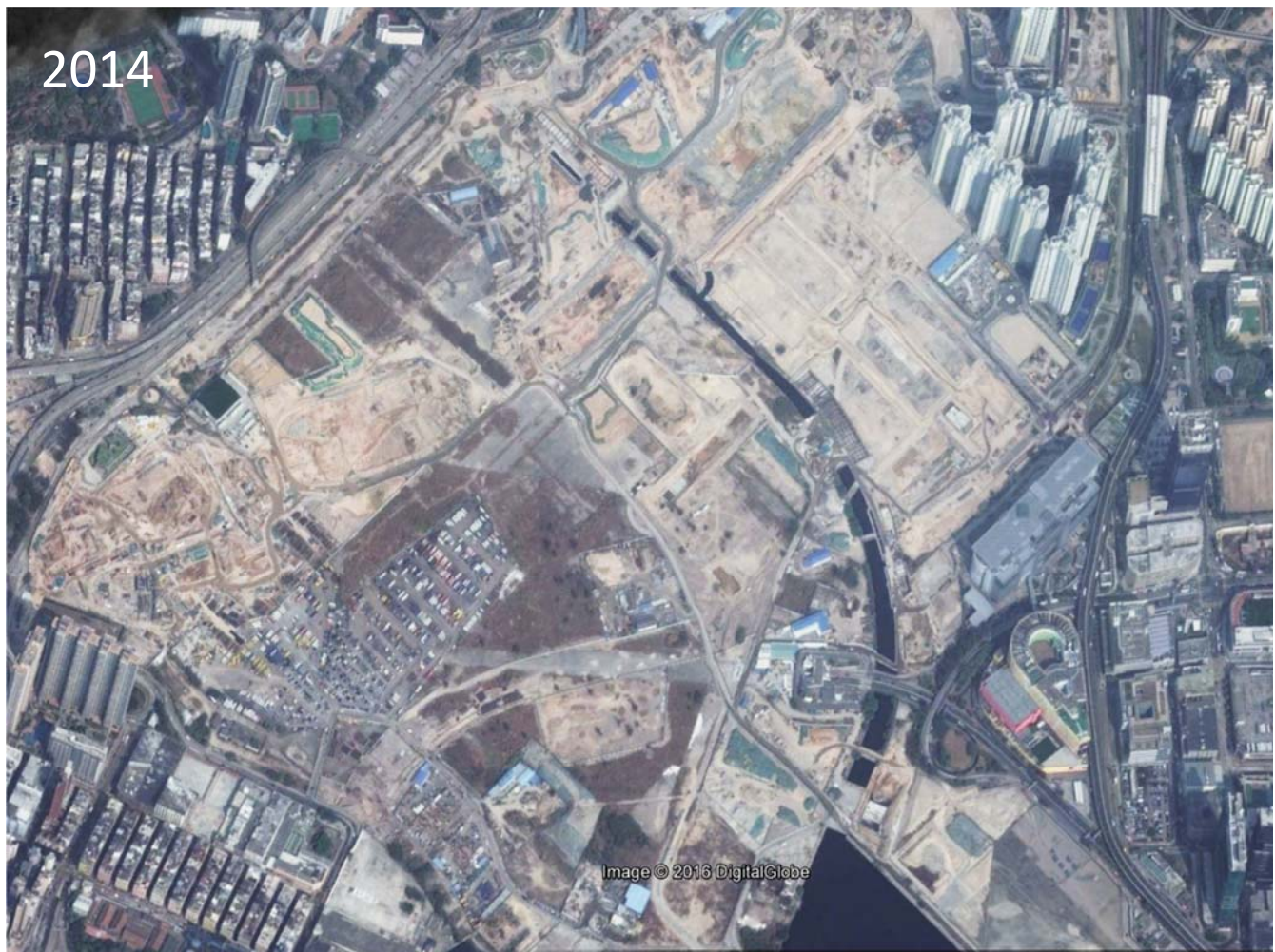
2010



2012



2014



2015

Shatin-Central Link
and Kai Tak Nullah
in full progress

Old Lung Tsun
Stone Bridge



Image © 2016 DigitalGlobe

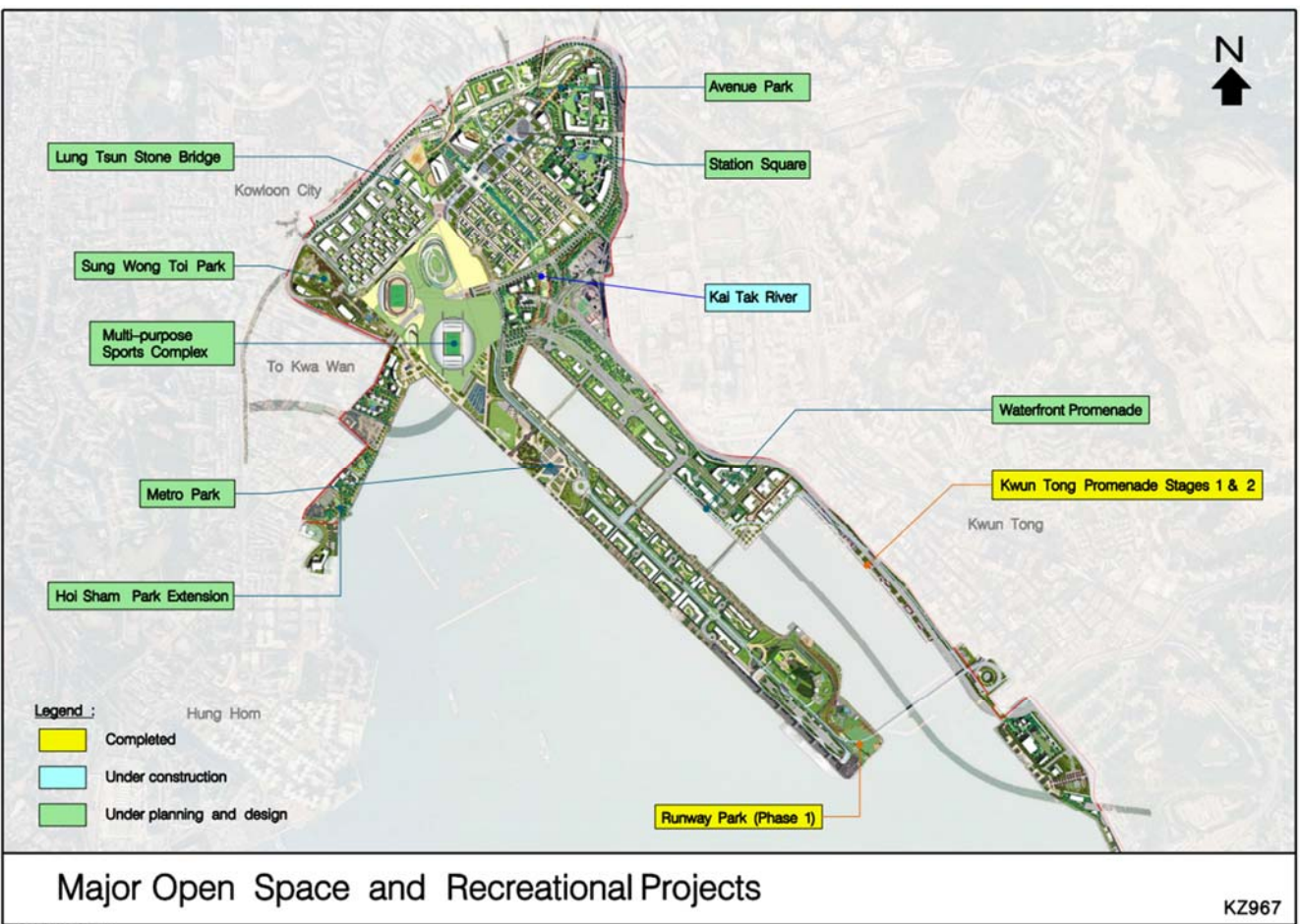
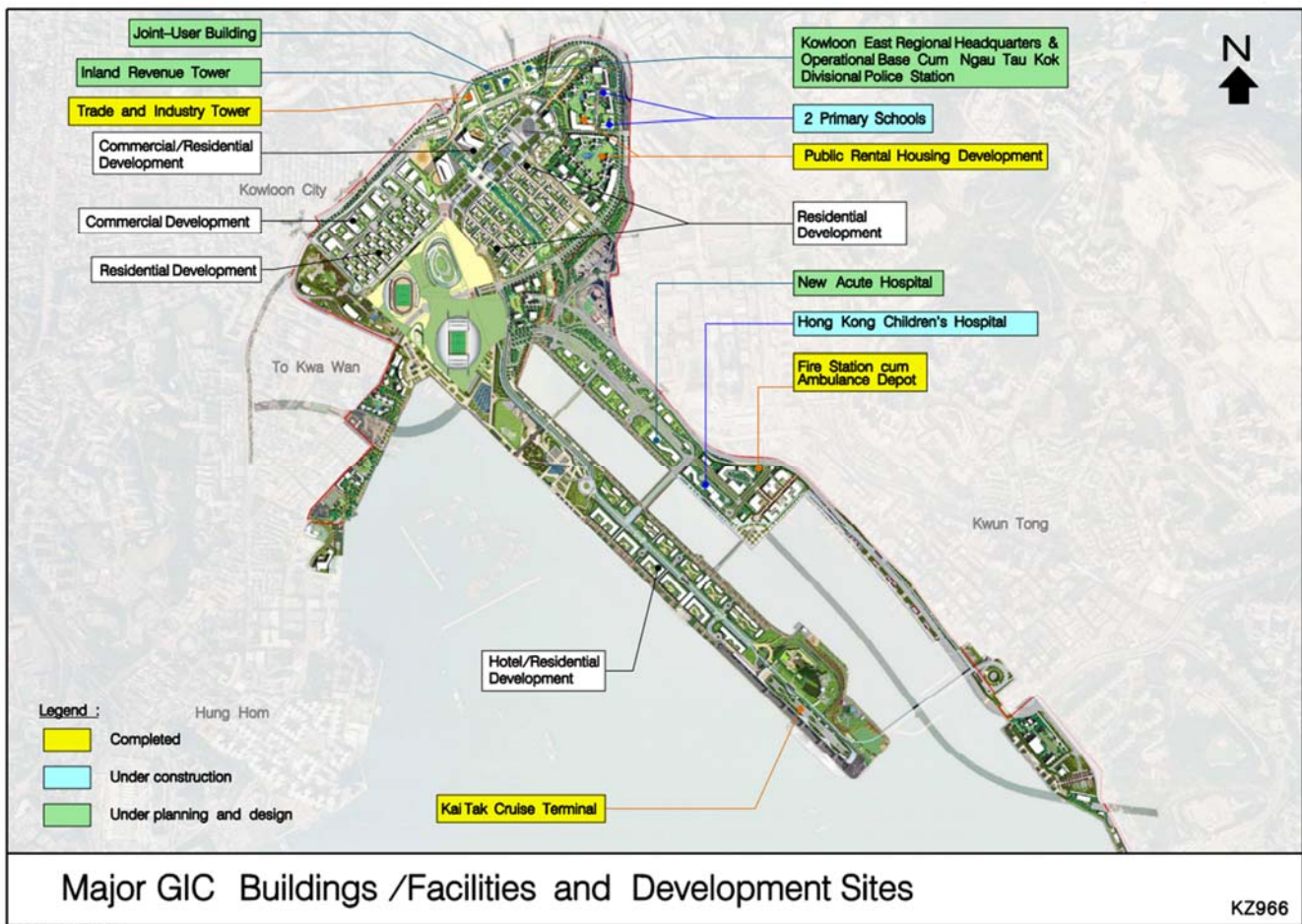
2017

Progress of private residential
developments in full scale

Image © 2017 DigitalGlobe

Major development projects submitted to Legco for approval in 2010





Kai Tak Development Master Programme of Major Items (as of July 2015)

Item No	Major Items	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Supporting Infrastructure Works																
1	Advance infrastructure works at former south apron and runway area															
2	Stage 2 Infrastructure Works at the southern part of former runway area															
3	Stage 3 infrastructure works at the southern part of the former runway area															
4	Stage 1 infrastructure works at former north apron area															
5	Stage 2 infrastructure works at former north apron area															
6	Stage 3A infrastructure at former north apron area															
7	Stage 4 infrastructure at former north apron area															
8	Reconstruction and Upgrading of Kai Tak Nullah															
9	Stage 5A infrastructure at former north apron area															
10	Stage 5B infrastructure at former north apron area															
Major Transport Infrastructures																
11	Shatin-to-Central Link (parts within Kai Tak development)															
12	Central Kowloon Route															
13	Trunk Road T2															
District Cooling System (DCS)																
14	District Cooling System Phase I															
15	District Cooling System Phase II															
16	District Cooling System Phase III (Package A)															
17	District Cooling System Phase III (Package B)															
Kai Tak Cruise Terminal (KTCT)																
18	Site Formation for Cruise Terminal - First Berth															
19	Kai Tak Cruise Terminal Building															
20	Site Formation for Cruise Terminal - Second Berth & Remaining Works															
Kai Tak Approach Channel and Kwun Tong Typhoon Shelter																
21	Phase 1 improvement works to address odour issue at Kai Tak Approach Channel and Kwun Tong Typhoon Shelter															
22	Phase 2 improvement works															
Major Government, Institution and Community (GIC) Projects																
23	Kai Tak Fire Station cum ambulance depot															
24	Trade and Industry (TI) Tower															
25	2 primary schools in Sites 1A3 and 1A4															
26	Hong Kong Children's Hospital															
27	Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station															
Multi-purpose Sports Complex (MPSC)																
28	Multi-purpose Sports Complex															
Major Open Space Projects																
29	Runway Park Phase 1															
30	Kwun Tong Promenade Stage 2															



Proposed Land Uses 建議土地用途	Area (in ha) 面積 (公頃)		
	Concept 1 概念一	Concept 2 概念二	Concept 3 概念三
Office辦公大樓	-	3	-
Mixed Use (Office, Hotel & Retail)混合用途(辦公大樓、酒店及零售)	10	20	19
Mixed Use (Housing & Commercial)混合用途(住宅及商業)	9	5	-
High Density Housing高密度住宅	41	33	14
Medium Density Housing中密度住宅	17	10	18
Low Density Housing低密度住宅	-	-	13
G/IC Other Specified Use政府/機構及社區，其他指定用途	45	42	43
Metro Park, Runway Park & Waterfront Promenade都會公園、跑道公園及海濱長廊	42	48	50
District & Local Open Space地區及鄰舍休憩用地	56	64	54
Multi-purpose Stadium (including open space)多用途體育館(附休憩用地)	24	24	24
Sports / Recreation體育/康樂	-	-	16
Cruise Terminal 郵輪碼頭	5	5	5
Road Network, Amenity Area & Green Belt道路網絡、美化市容地帶及綠化地帶	79	74	72
Total合共:	328	328	328

Visions, Planning Principles and Design Considerations for Kai Tak 對啓德發展的理想，規劃原則及城市設計的考慮

1. A vibrant working and living environment should be an important design consideration for Kai Tak.
以建設一個充滿朝氣的工作和生活環境為主要設計考慮。
2. Better social, physical and transport integration of Kai Tak with its neighbouring districts.
與鄰近地區在社會，地形結構和運輸上有更好的融合。
3. Development of Kai Tak should help regenerate its neighboring areas.
啓德發展應帶動周邊地區進行重建。
4. To enhance the water quality of the Kai Tak Approach Channel.
提高啓德明渠進口道的水質。
5. No reclamation as the major planning principle, so as to preserve the coastline.
應以不填海為主要規劃原則，以保護海岸線。
6. Reclamation to solve the water pollution problem of the Kai Tak Approach Channel should be considered.
可考慮以填海解決啓德明渠進口道的水質問題。

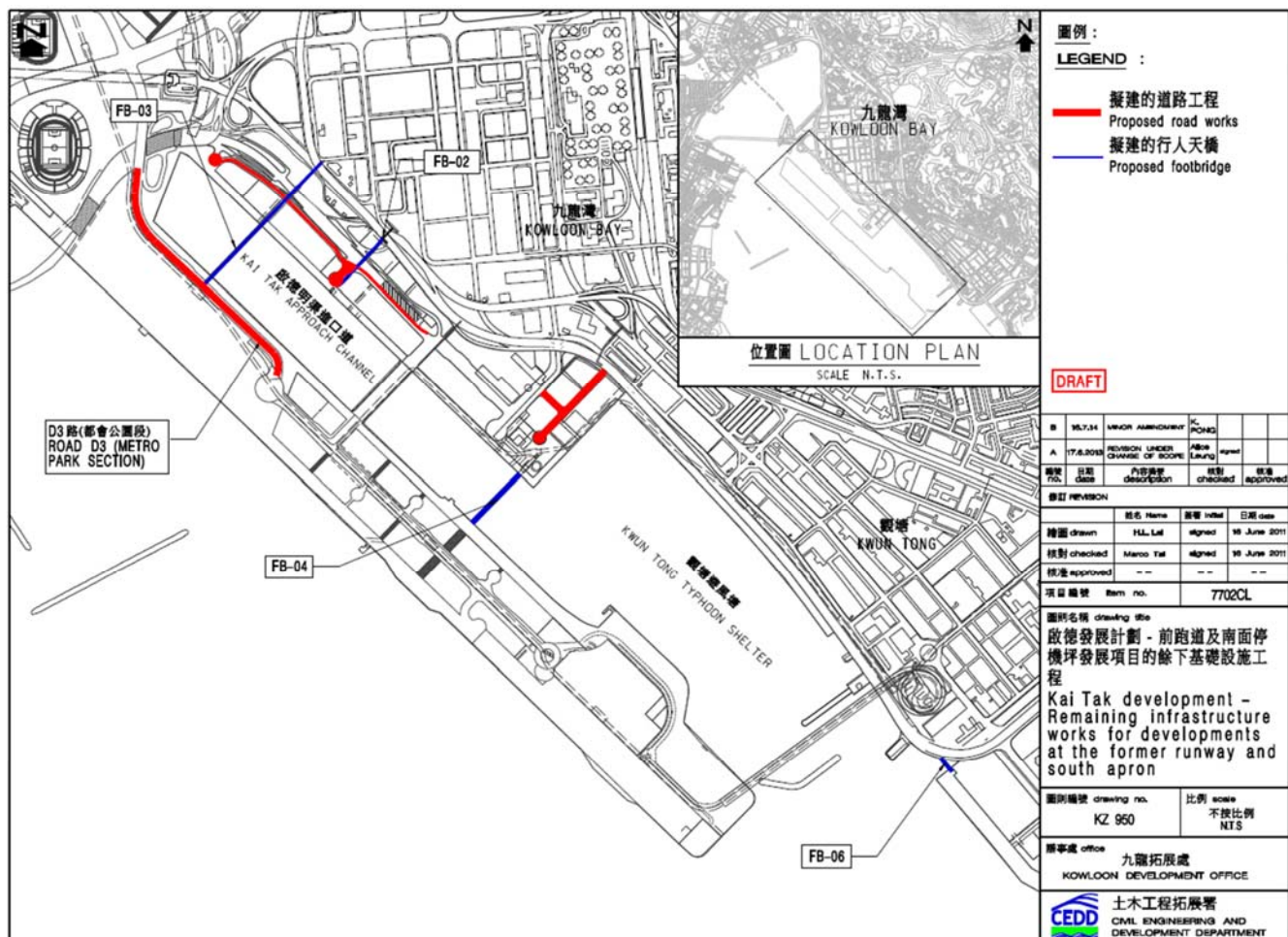
Vision, Planning Principles and Design Considerations for Kai Tak 對啟德發展的理想，規劃原則及城市設計的考慮

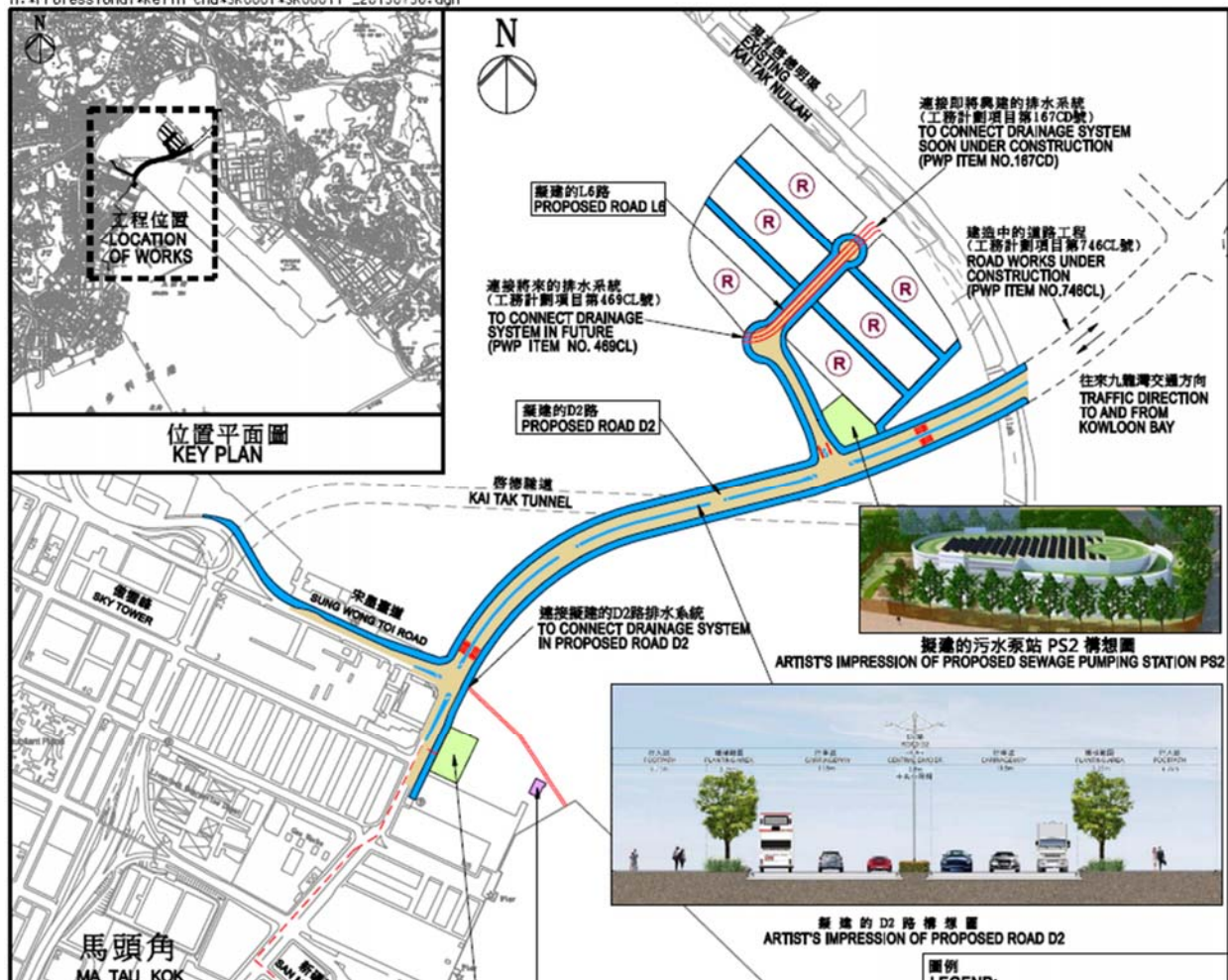
7. To preserve the historical and cultural interests of Kai Tak to reflect the Chinese Culture.
保留啟德的歷史及文化遺產，以彰顯中國文化。
8. To preserve the aviation culture of Kai Tak.
保留啟德航空文化。
9. To preserve the views to the ridgeline. Restriction of building height should be imposed.
應設建築物高度限制以保留山脊線的景觀。
10. A truly people-oriented Kai Tak Development and not a property- led Kai Tak Development.
一個真正以人為本的啟德發展而不是以地產為主導的啟德發展。
11. Enhance the accessibility of Kai Tak to allow maximum public enjoyment.
提高啟德的可達性以方便市民享用。
12. A place enjoyed by all and not only for a small proportion of people.
啟德應讓所有市民共享而不應局限於少數市民。
13. Environmental problems associated with KTAC should be urgently dealt with whether Kai Tak development will proceed or not.
即使啟德發展還未落實，啟德明渠的環境問題應要儘快解決。

The Kai Tak Development (KTD) comprises government, institution and community facilities, residential and commercial areas and an extensive open space network.

Target completion	Some Major Facilities and Developments in KTD
2013	<ol style="list-style-type: none"> 1 - Public Rental Housing Development 2 - Trade and Industry Tower 3 - Kai Tak Cruise Terminal Building cum first berth 4 - Runway Park Phase 1 5 - Kwun Tong Promenade Stage 1 - District Cooling System (early phases) 6 - Bio-remediation of the Kai Tak Approach Channel and the Kwun Tong Typhoon Shelter - Roadworks, pedestrian links, water supplies, drainage and sewerage systems
Post 2013	<ol style="list-style-type: none"> 7 - Multi-purpose Sports Complex 8 - Kai Tak River 9 - Two Primary Schools 10 - Kai Tak Cruise Terminal second berth 11 - Metro Park (24 hectares) 12 - Centre of Excellence in Paediatrics 13 - Kwun Tong Promenade Stage 2 14 - Route 6 in KTD (Central Kowloon Route and Trunk Road T2) 15 - Shatin to Central Link - District Cooling System (remaining) - Roadworks, pedestrian links, water supplies, drainage and sewerage systems

- Kai Tak Development - Engineering Review
- Kai Tak Development - Stage 1 Advance Infrastructure Works for Developments at the Southern Part of the Former Runway
- Site Formation for Kai Tak Cruise Terminal Development
- Kai Tak Development - Stage 1 Infrastructure Works at North Apron Area of Kai Tak Airport
- Sewage Interception Scheme in Kowloon City
- Kai Tak Development - Remaining Infrastructure Works for Developments at the Former Runway
- Kai Tak Development - Kai Tak Approach Channel and Kwun Tong Typhoon Shelter Improvement Works
- Trunk Road T2
- Kai Tak Development - Infrastructure at North Apron Area of Kai Tak Airport
- Kai Tak Development - Advance Infrastructure Works for Developments at the Southern Part of the Former Runway
- Kai Tak Development – Reprovisioning of radar on top of the Cruise Terminal Building
- Kai Tak development – Stage 2 Infrastructure at North Apron Area of Kai Tak Airport
- Kai Tak development – Kai Tak approach channel and Kwun Tong typhoon shelter improvement works (Phase 1)
- Central Kowloon Route
- Shatin to Central Link

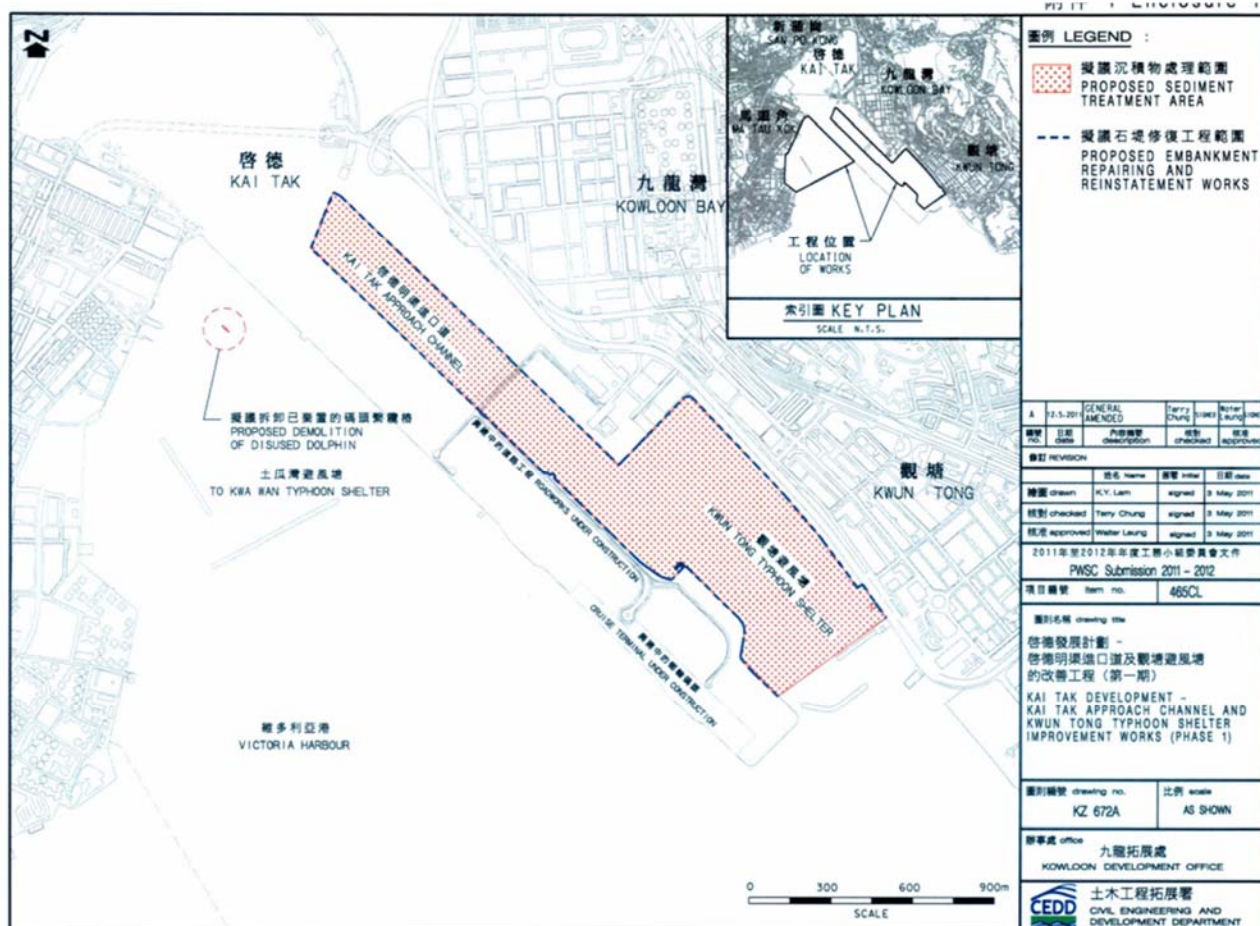




Highlight of Major Projects

Kai Tak development – Kai Tak approach channel and Kwun Tong typhoon shelter improvement works (465CL), work included:

- (a) bioremediation treatment of the contaminated sediments over an area of about 90 hectares (ha) of seabed at KTAC and KTTS;
- (b) dredging of about 13 ha of seabed at KTAC;
- (c) repairing and reinstatement works to the embankments of the associated waterways;
- (d) demolition of a disused dolphin connecting to the former airport runway and associated improvement works in the vicinity of To Kwa Wan typhoon shelter; and
- (e) provision of necessary environmental mitigation measures and implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in paragraphs (a) to (d) above



顧問/工程合約編號

DC/2010/03

顧問/工程合約名稱

太子道東啓德明渠改善工程

批出日期

17/08/2010

顧問/承建商

華益(林氏)建築有限公司

合約開展日期

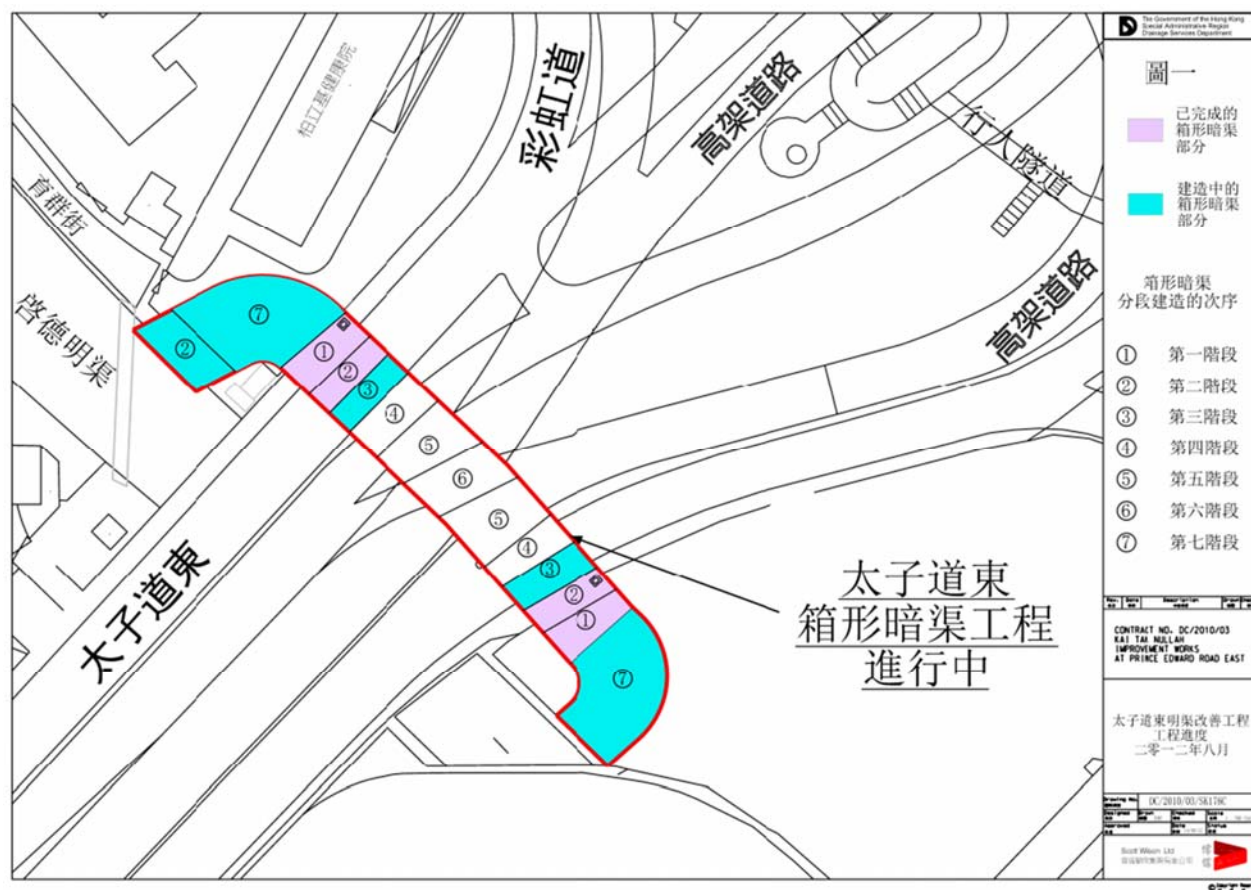
30/08/2010

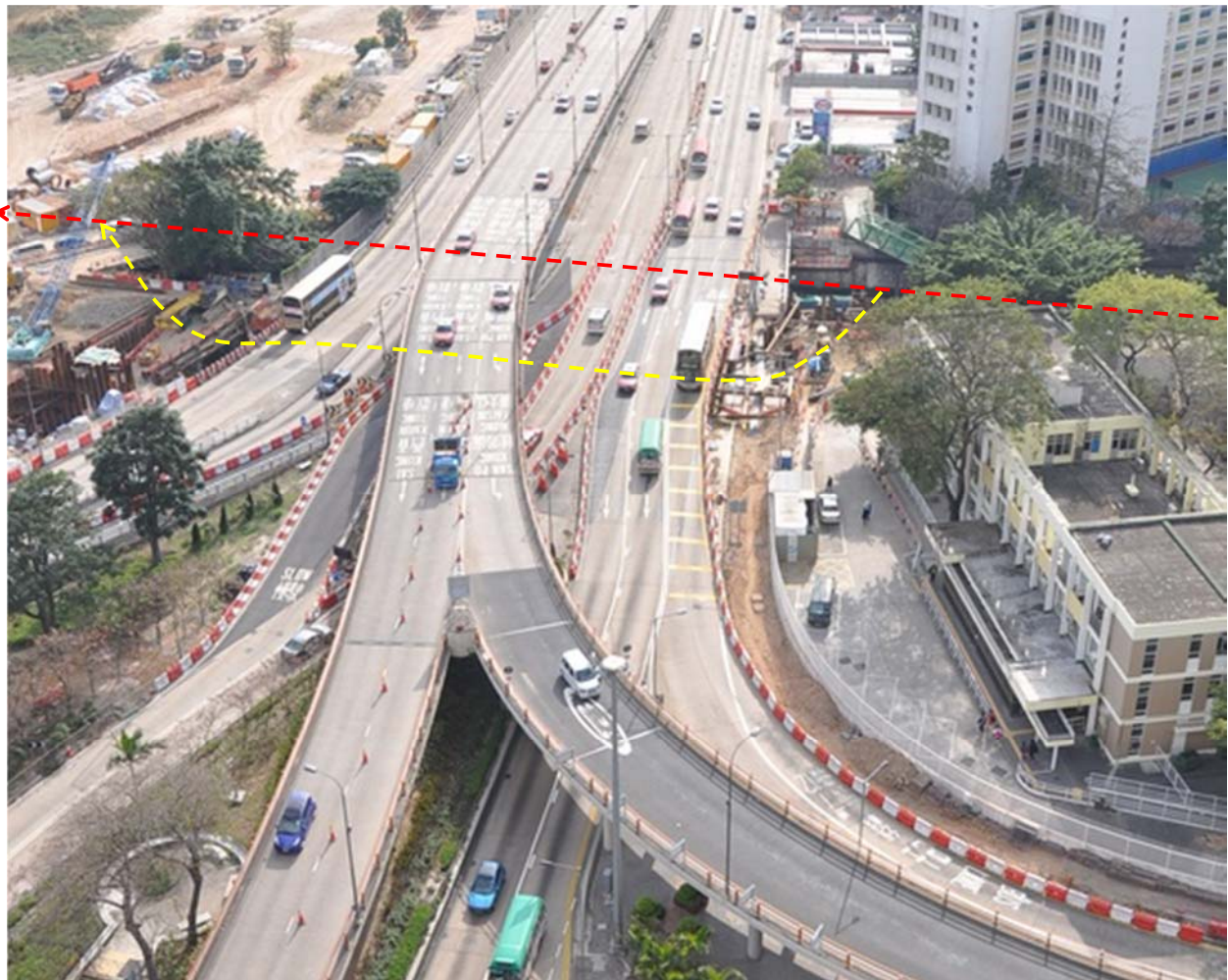
完工日期

28/08/2012

顧問/工程合約金額

港幣 100,179,117.80元







Approx. alignment of
Prince Edward Road



Nullah section crossing the
northern portion (above) &
southern portion (left) of
Prince Edward Road





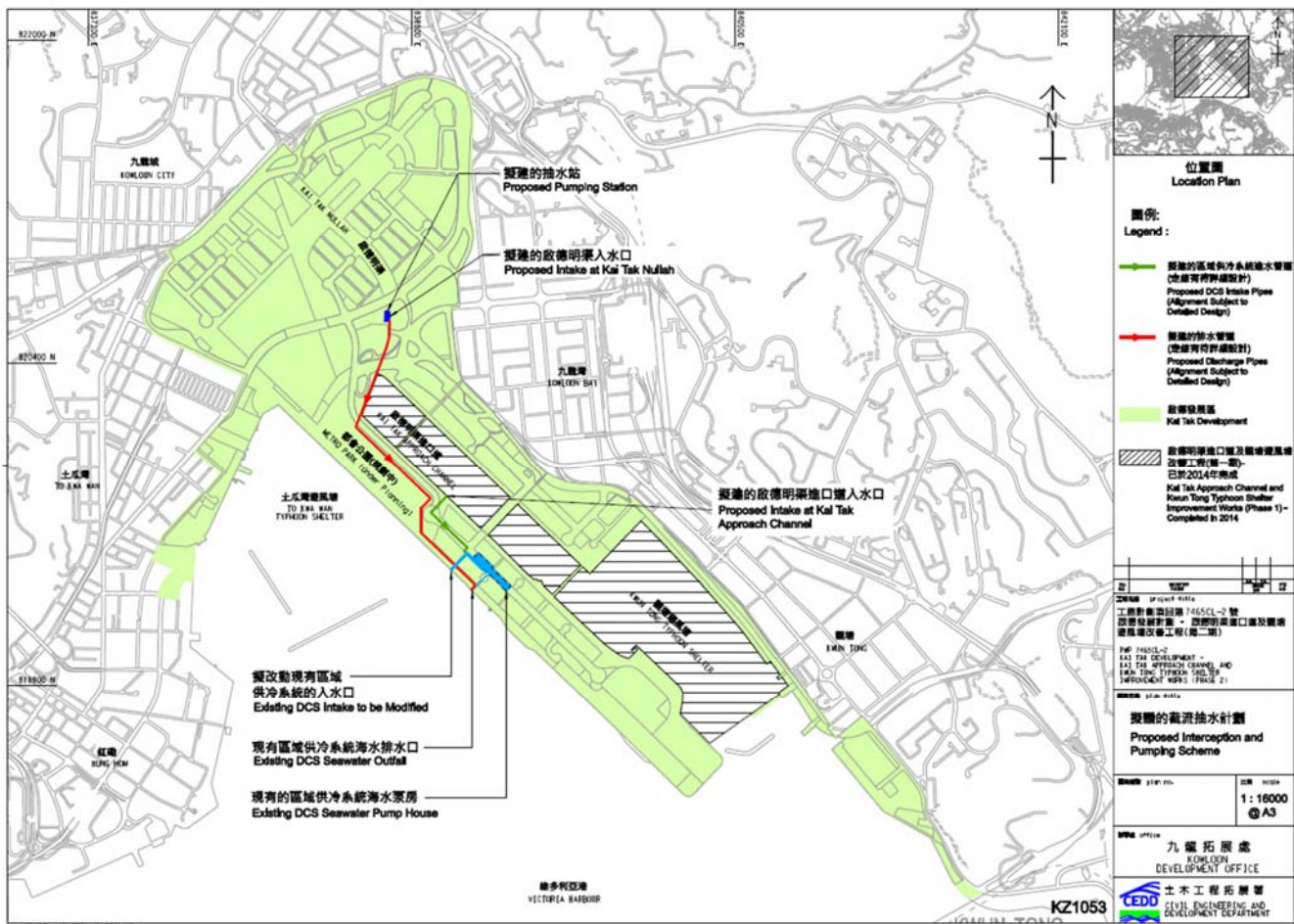


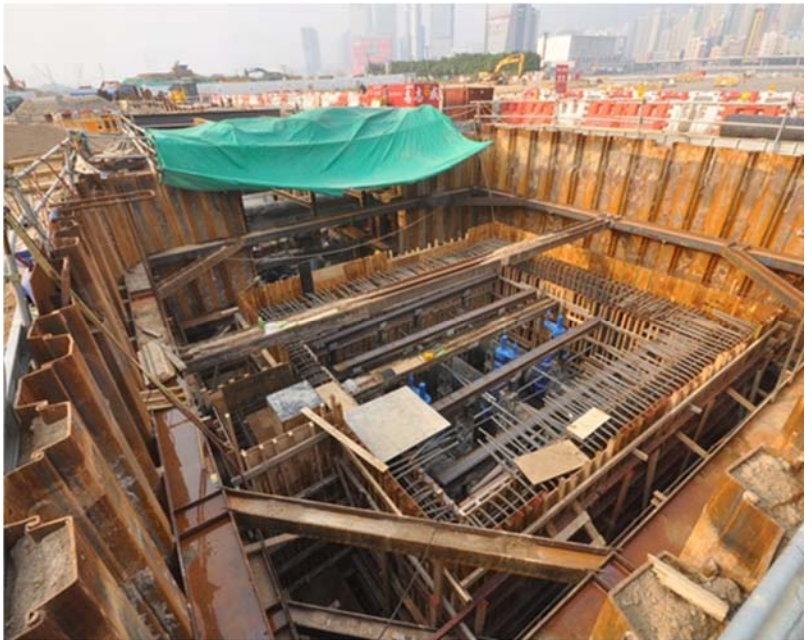
Major project 3

Kai Tak approach channel and Kwun Tong typhoon shelter improvement works (Phase 2)

An Interception and Pumping Scheme will be implemented under the Kai Tak approach channel (KTAC) and Kwun Tong typhoon shelter (KTTS) improvement works (Phase 2), which includes:

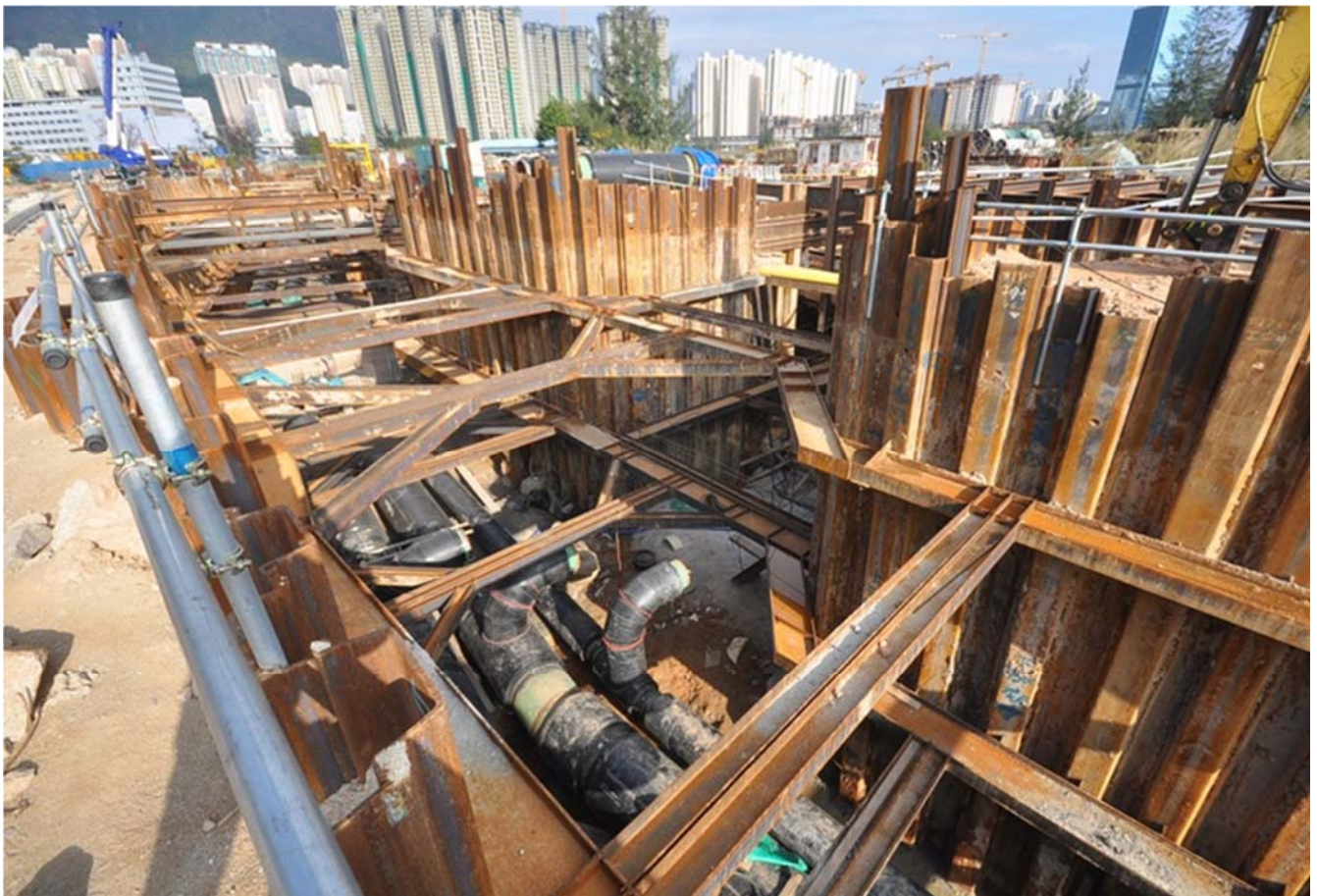
- Construction of a [new pumping station](#) near the outlet of Kai Tak Nullah;
- Modification of intake of [seawater pump house of District Cooling System](#) located at the former runway; and
- Laying of associated [drain pipes and construction of outfalls](#) at the former runway.







Laying of the cooling
water pipework





Construction site for the Sewage Pumping Station 1 as in 2012



Sewage Pumping Station No. 3

Sewage Pumping Station No. 1

Sewage Pumping Station No. 2

Kowloon City No. 1 and No. 2 **Sewage Pumping Stations** together with the associated sewers are important elements of the “Sewage Interception Scheme in Kowloon City”. This is an outcome of the “Review of Central and East Kowloon Sewerage Master Plans” completed by Environmental Protection Department (EPD) in August 2003.

The sewage pumping stations will serve the populations in the hinterland built-up areas in Kowloon City and they will convey the collected sewage to the To Kwa Wan Preliminary Treatment Works.

Pumping Station	Average Dry Weather Flow (ADWF)		Peak Capacity m ³ /day	Site Area m ²
	m ³ /day	m ³ /s		
SPS No.1	60,480	0.7	140,000	3,247
SPS No.2	64,800	0.75	152,000	2,427



Kowloon City Sewage Pumping Station No. 1
(near junction of Ma Tau Chung Road and Argyle Street)



Kowloon City Sewage Pumping Station No. 2
(near junction of Prince Edward Road East and Choi Hung Road)



Other supportive works carried out since 2010 as
the advance stage of the Kai Tak Development –
regenerate the seawall

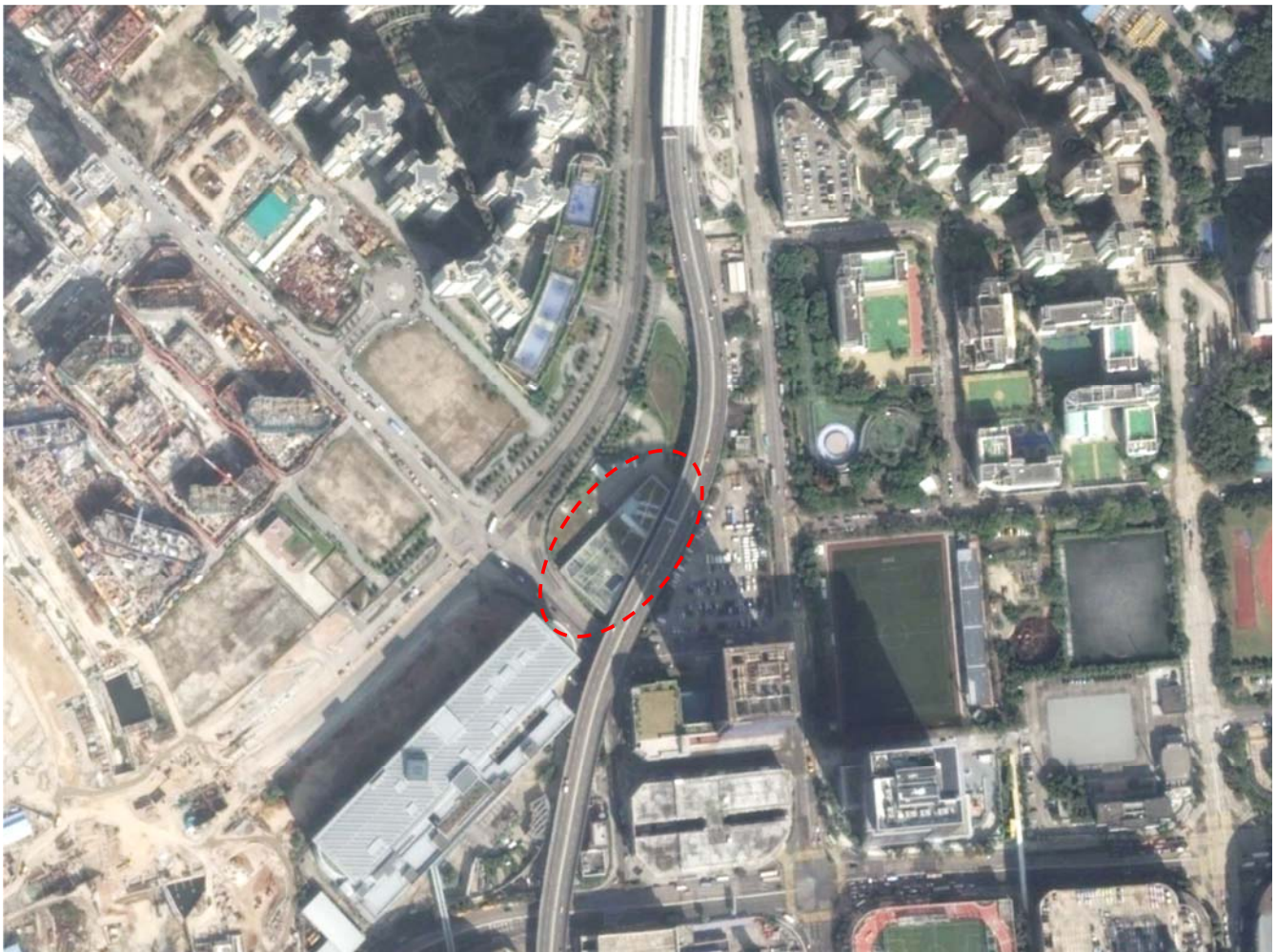


The Kai Tak Development is a huge development project spanning a total area of over 320 hectares covering the ex-airport and nearby areas with large demand for air-conditioning. **District Cooling System (DCS)** is considered to be an energy efficient air-conditioning system in the new development of a larger scale.

The DCS at Kai Tak is a large scale centralized air-conditioning system. It utilizes sea water to produce chilled water at the central plants and distributes the chilled water to consumer buildings through underground water piping network.

The DCS comprises two central chiller plants, underground chilled water distribution piping network, seawater supply and discharge pipes and consumer substations located in the buildings to interface with the building's own chilled water circulation systems.

The cooling capacity of the DCS is about 284 megawatt of refrigeration for serving the non-domestic air-conditioned floor area of about 1.73 million m², equivalent to a cooling supply for 40 nos. of 30-storey high commercial buildings. Upon completion of the project, about 40 km of underground chilled water pipes would have been laid and there would be around 60 buildings in KTD connected to the system.







Foundation work for the district cooling system as seen in early 2012



Kai Tak development – infrastructure works for developments at the southern part of the former runway

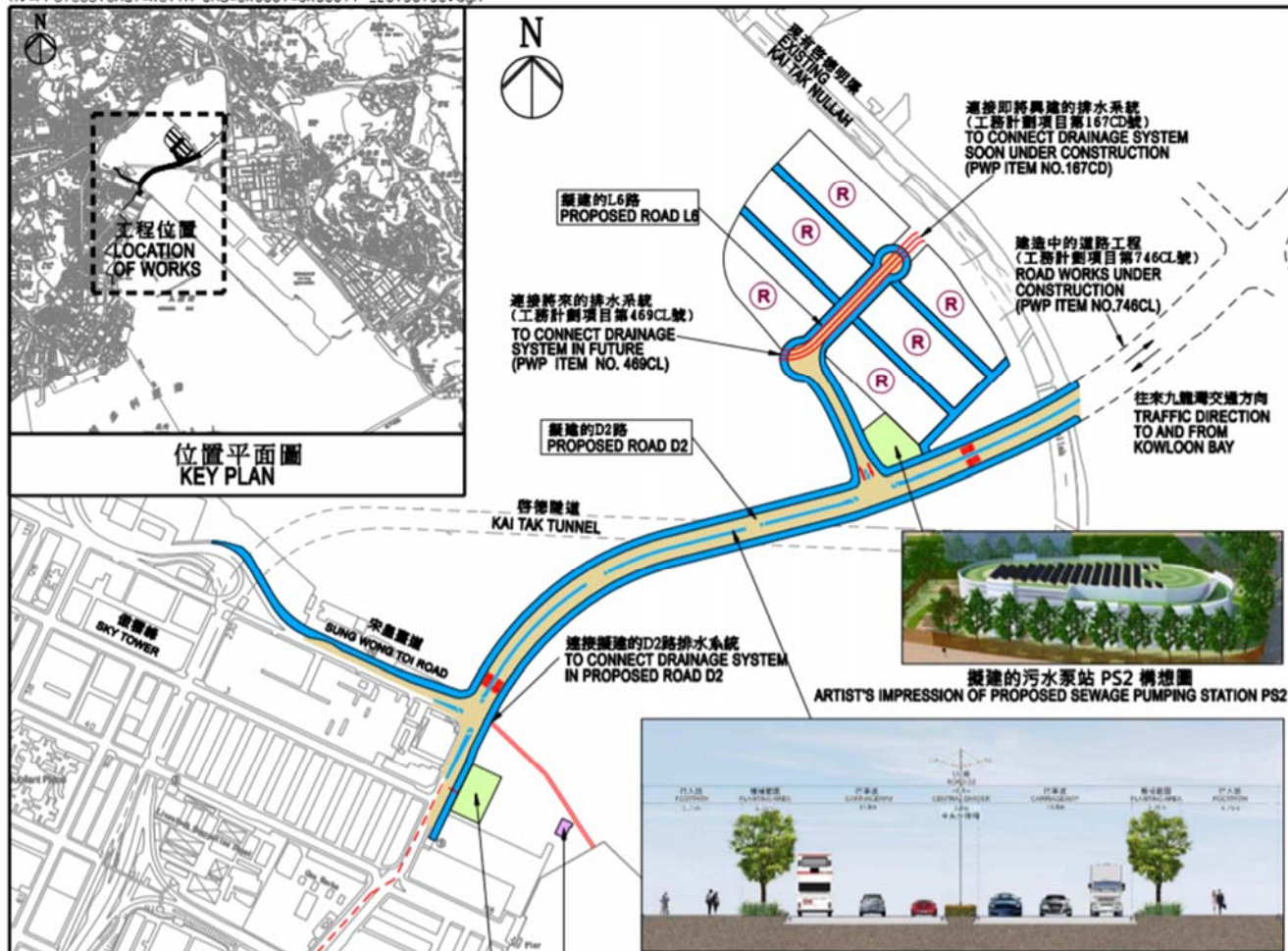
The scope of Stage 2 comprises:

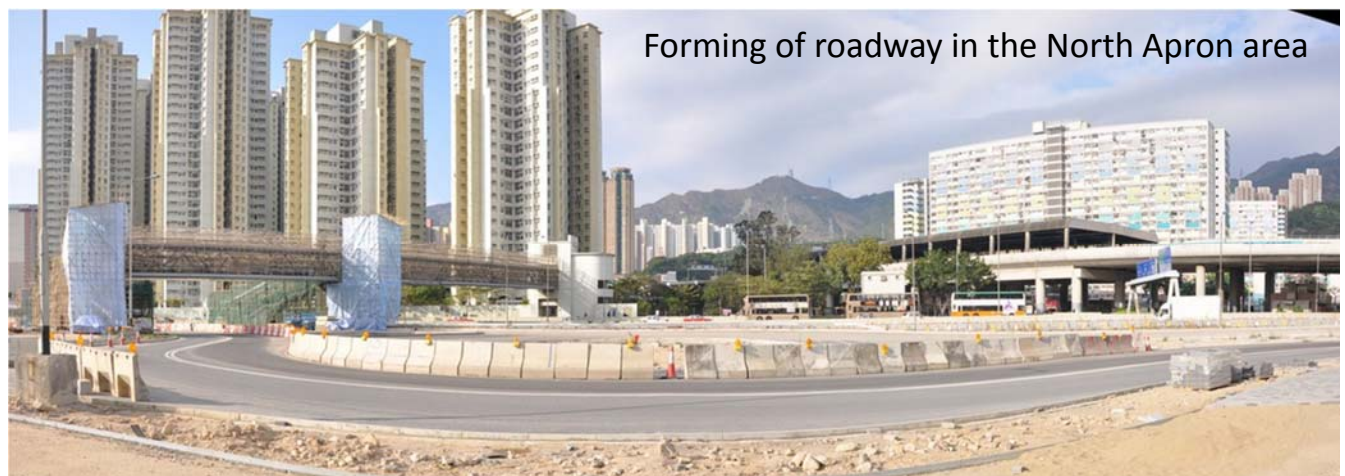
- realignment and widening of the existing single 2-lane Shing Fung Road to form a dual 2-lane distributor road of about 1.4 km long; associated single 2-lane roads (including a vehicular underpass) with a total length of about 0.6 km branching off from the realigned Shing Fung;
- an elevated landscaped deck with lifts and staircases of about 1.4 km long with minimum 11m in width above the realigned Shing Fung Road serving as part of a semi-enclosure noise barrier and also as a public open space;
- roadside noise barriers with a total length of about 1.1 km long alongside the realigned Shing Fung Road and integrated with the elevated landscaped deck;
- upgrading of the existing single 2-lane carriageway of about 0.3 km long on Kai Tak Bridge to a dual 2-lane carriageway;
- improvement to 3 existing road junctions along Wang Chiu Road at its junctions with Kai Cheung Road, Lam Hing Street and Sheung Yee Road;
- construction of associated footpaths, pedestrian streets, street lighting, drainage, sewerage, water mains, landscaping and ancillary works; and
- implementation of environmental mitigation measures and an environmental monitoring and audit program for the works mentioned above.

Kai Tak development – infrastructure works for developments at the southern part of the former runway

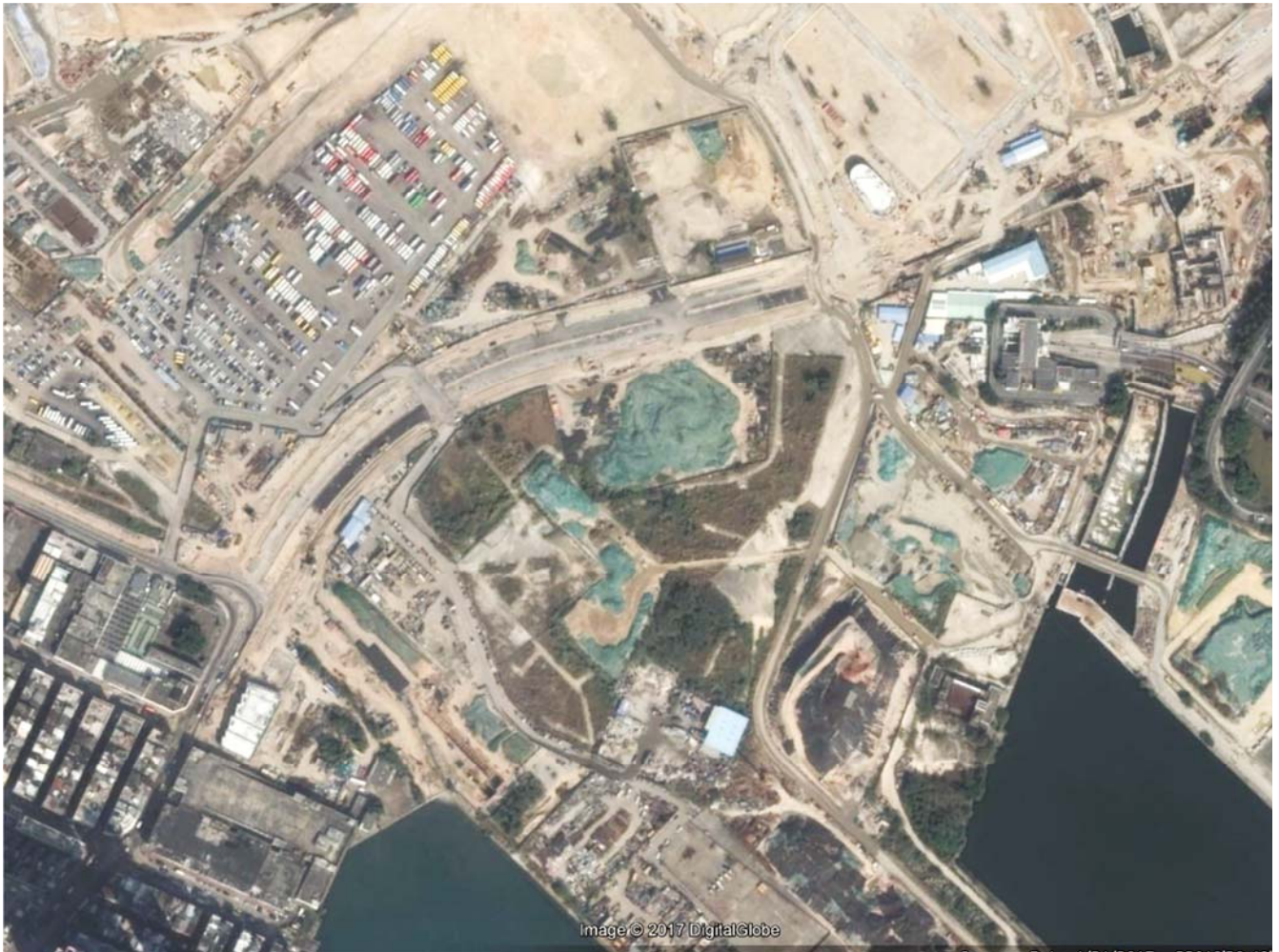
The scope of Stage 3 comprises:

- reconstruction and widening of Shing Cheong Road and part of Cheung Yip Street from the existing single 2-lane roads to form dual 2-lane roads with a total length of about 0.7 km;
- construction of a supporting underground structure of about 0.4 km long along Shing Cheong Road and across Cheung Yip Street as enabling works to facilitate future construction of Trunk Road T2;
- construction of associated footpaths, pedestrian streets, street lighting, traffic aids, drainage, sewerage, water mains, landscaping and ancillary works; and
- construction of two sewage pumping stations, about 2 000m long of twin rising mains and 2 300m long of gravity sewer;
- implementation of environmental mitigation measures and an environmental monitoring and audit program for the works mentioned above.









Kai Tak development – stages 3B infrastructure works at former north apron area

The scope of Stage 3B infrastructure works comprises the following items:

- construction of a section of dual two-lane Road L2 of about 320 m long connecting Shing Kai Road with Concorde Road, and a pair of single-lane slip roads of about 650 m long linking the eastbound Prince Edward Road East (PERE) with San Po Kong;
- construction of an elevated landscaped walkway about 290 m long across PERE connecting San Po Kong and Kai Tak Development (KTD);
- demolition of existing flyover K9 in San Po Kong across PERE;
- construction of a pedestrian subway about 180 m long across PERE, Kwun Tong Bypass and Shing Kai Road connecting Choi Hung and KTD;
- road modification works in San Po Kong area;
- construction of associated footpaths, street lighting, traffic aids, drainage, sewerage, water mains, landscaping and ancillary works; and
- implementation of environmental mitigation measures and related environmental monitoring and audit (EM&A) programme.

Kai Tak development – stages 5A infrastructure works at former north apron area

The scope of Stage 5A infrastructure works comprises the following items:

- construction of a single two-lane Road of about 140 m long and a section of dual two-lane Road about 470 m long connecting with Concorde Road;
- construction of a single-lane slip road about 160 m long linking the proposed Road with existing flyover for connection with PERE eastbound;
- construction of a pedestrian subway about 120 m long across PERE connecting the future preservation corridor for the Lung Tsun Stone Bridge remnants in KTD and Shek Ku Lung Road Playground;
- construction of associated footpaths, street lighting, traffic aids, drainage including about 830 m long box culverts, sewerage, water mains, landscaping and ancillary works; and
- implementation of environmental mitigation measures and related EM&A programme.

Contract period: end 2016 to end 2020. Total estimate about \$2.152 billion





Kai Tak development – Stage 3A & Stage 4 infrastructure works at north apron area of Kai Tak Airport

Stage 3A - infrastructure comprises the following major items:

- new roads about 890m in total length covering L1, Road L11 and a slip road linking Prince Edward Road East to Road D1;
- a vehicular underpass about 225m long across Prince Edward Road East forming part of Road L1;
- a new pedestrian subway of about 205m long, and extension of an existing subway about 60m in total length, across PERE;
- modification and widening of existing roads in former Kai Tak Airport north apron area and San Po Kong area;
- associated footpaths, street lighting, traffic aids, drainage, sewerage, water mains, landscaping works and electrical and mechanical works; and
- provision of necessary environmental mitigation measures and implementation of an environmental monitoring and audit program associated with the above works.

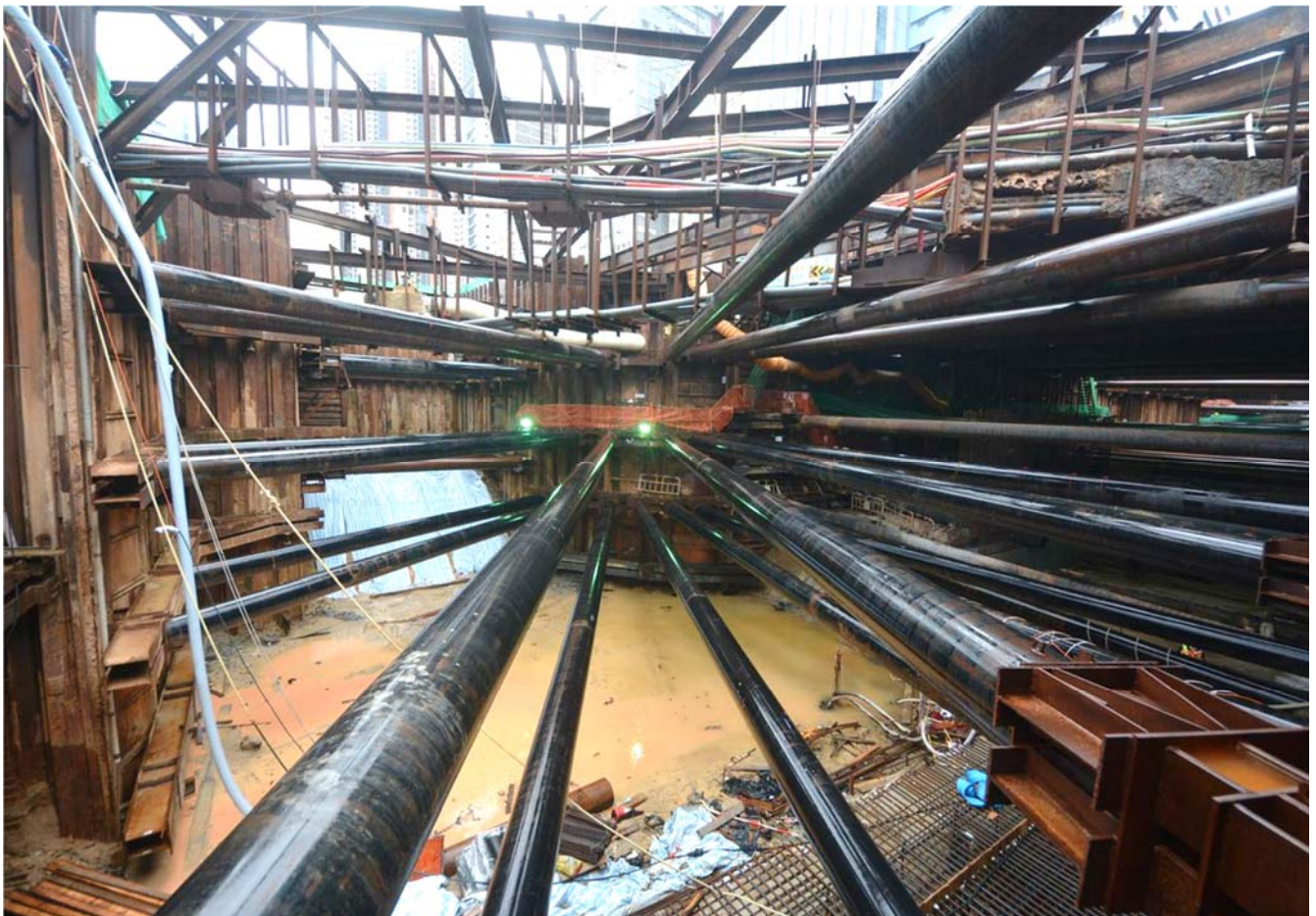
Stage 4 - infrastructure comprises the construction of the following major items:

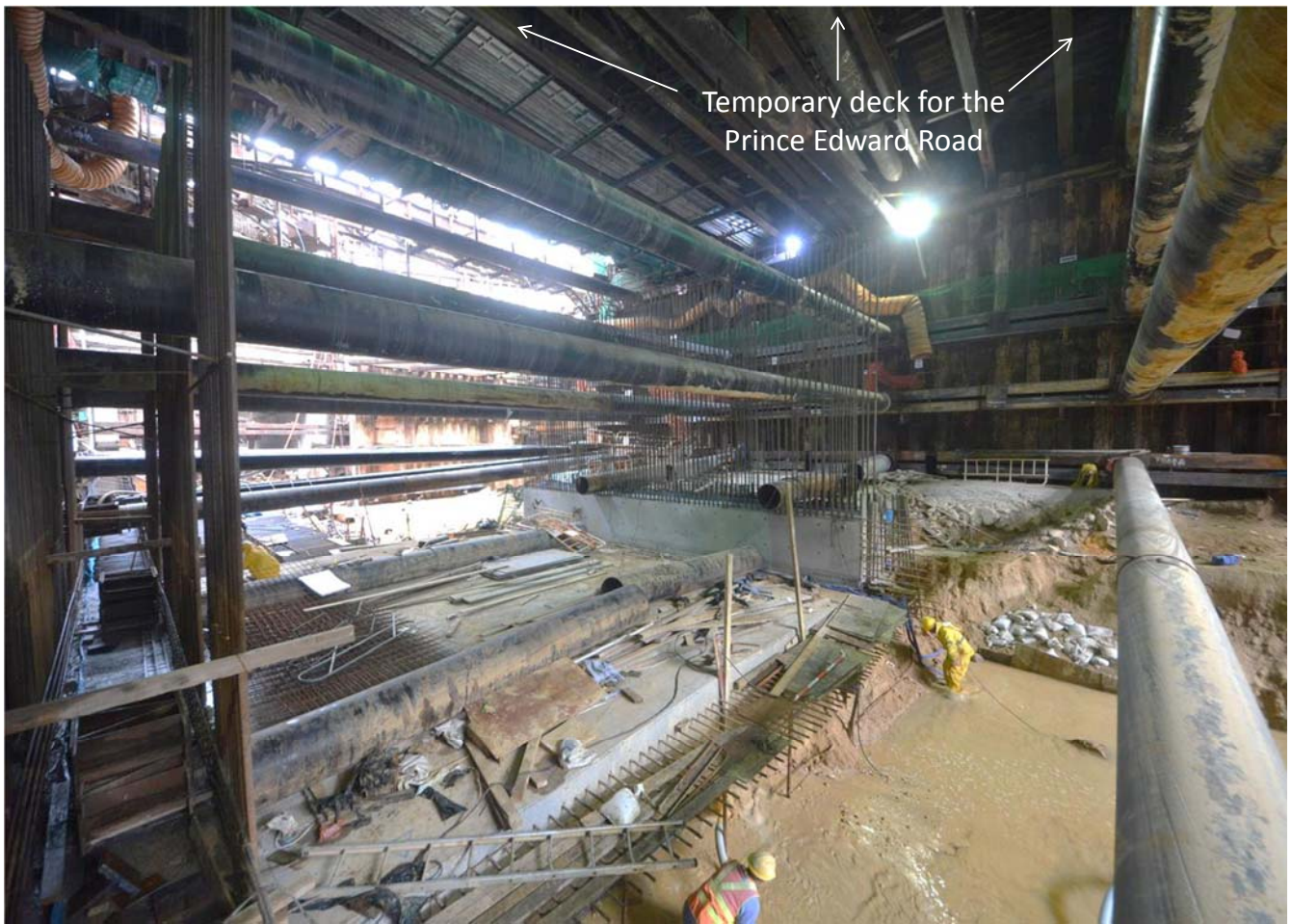
- construction of about 1 630m long of new roads covering part of Road D2, Road L6 and Road L19;
- reconstruction and widening of sections of existing footpaths at Sung Wong Toi Road and To Kwa Wan Road;
- construction of two sewage pumping stations, about 2 000m long of twin rising mains and 2 300m long of gravity sewer;
- construction of storm water drains including about 3 600m long of road drains and 430m long of box culverts;
- associated footpaths, street lighting, traffic aids, water mains and landscaping works; and
- provision of necessary environmental mitigation measures and implementation of an environmental monitoring and audit program for the works associated with the above works.

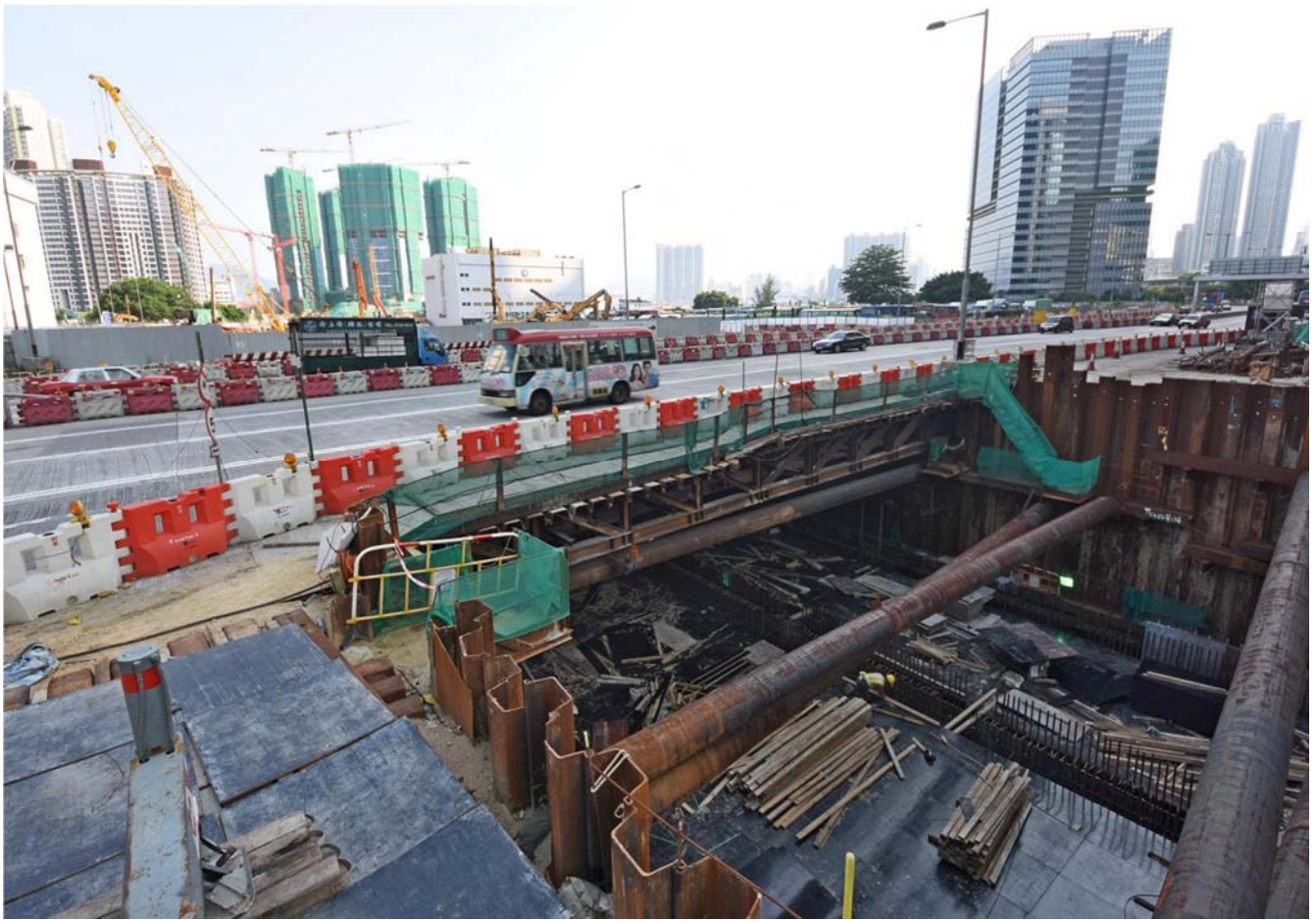
Approved Project Estimate: \$2.255 billion



Approach carriage on the north of Prince Edward Road



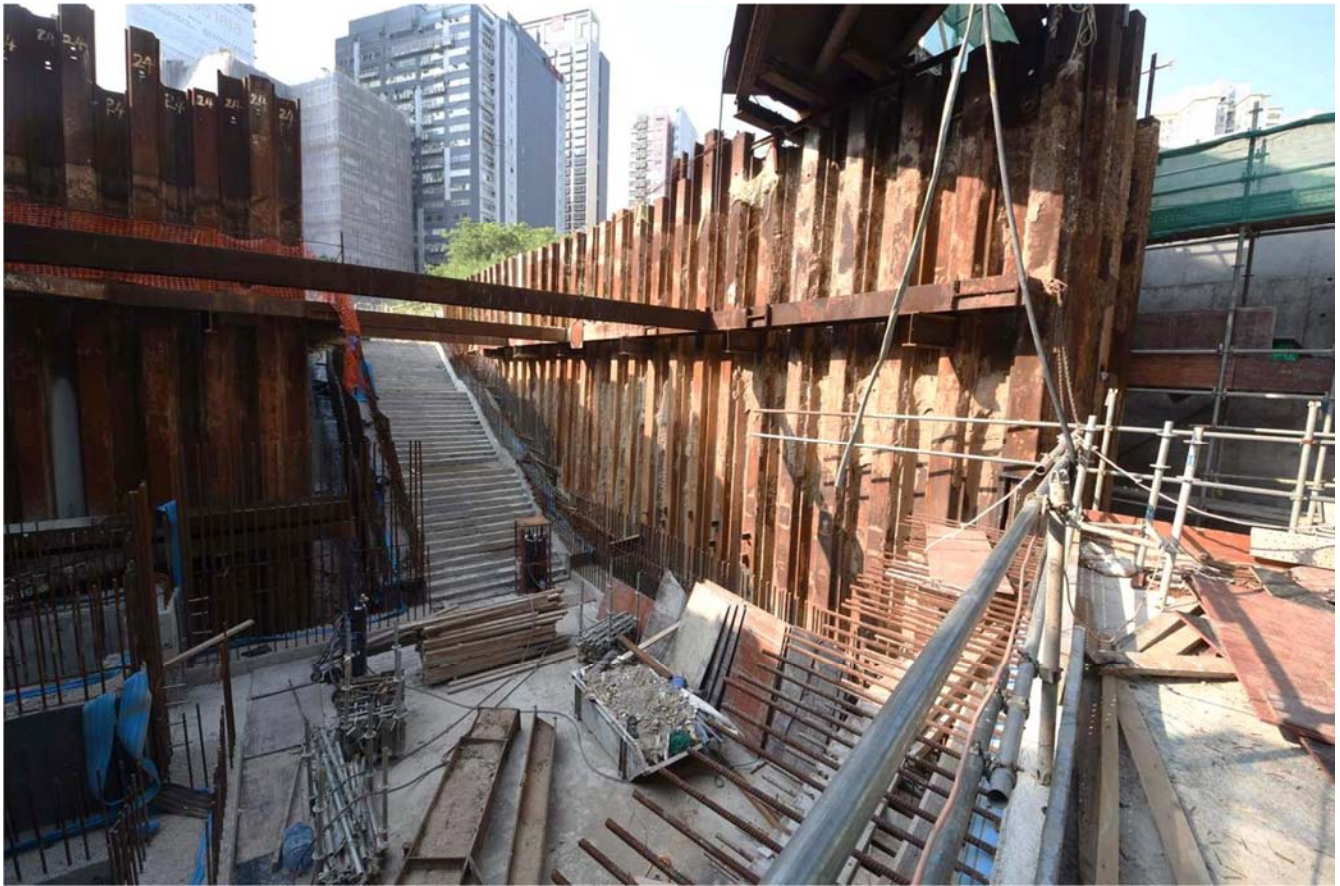




Vehicular underpass and pedestrian subway as seen from the San Po Kong side



Entrance of the pedestrian subway under construction (July 2016)





End of Part 1 Presentation