

**Urban Design Portfolio
2017-2018**

Ka Yee (Christy) Lai



Ka Yee (Christy) Lai

CONTACT

6/14 Arcadia Street,
Penshurst NSW 2222

+61 435 545 361

christy.lai@live.com

ABOUT ME

Well-developed problems solving, communication and team work skills through work placements. Civil Engineering Graduate with great interests in urban design and development discipline. Currently graduating from Master of Urban Development and Design at UNSW and seeking an urban designer position to gain more exposure and work experience.

WORK PLACEMENT EXPERIENCE

International Workshop, Sasaki Associates, Boston, MA, U.S.A Oct 2017 – Nov 2017

In related to current Sasaki Seaport District project, the workshop address the opportunities of the surrounding area and delivered an urban design framework of nearby district of Fort Point Channel on addressing the development opportunities and challenges.

Summer Intern, Government - Transport Department (Tsing Ma & Tunnel section), Hong Kong Jun 2017 – Aug 2017

Assisted Senior Transport Officers on tunnel management including launching the e-payment scheme for Shing Mun Tunnel and update the tunnel traffic flow and financial data for Transport Information System.

Intern Engineer, Shun Yuen Construction Co. LTD, Hong Kong Dec 2013 – Feb 2014

Local roadwork redevelopment - Responsible for project management for tasks including improving design, cost estimation and construction oversight. Also responsible for safety audits and revised the Health and Safety risk assessments to comply with updates government regulations.

EDUCATION

Master of Urban Development and Design University of New South Wales 2017- 2018

- Average WAM: 75
- Coursework involved three urban design studios including projects in Hong Kong, Sydney and Boston. The program synthesized the knowledge of spatial political economy, theories of good city form and urban design as public policy.

Bachelor of Engineering (Civil)

University of New South Wales 2011-2015

- Final year average WAM: 72.125
- Achieved High Distinction in Sustainable Transport and Highway Engineering

AWARD

The Commissioner Hoffman Urban Design Award 2018

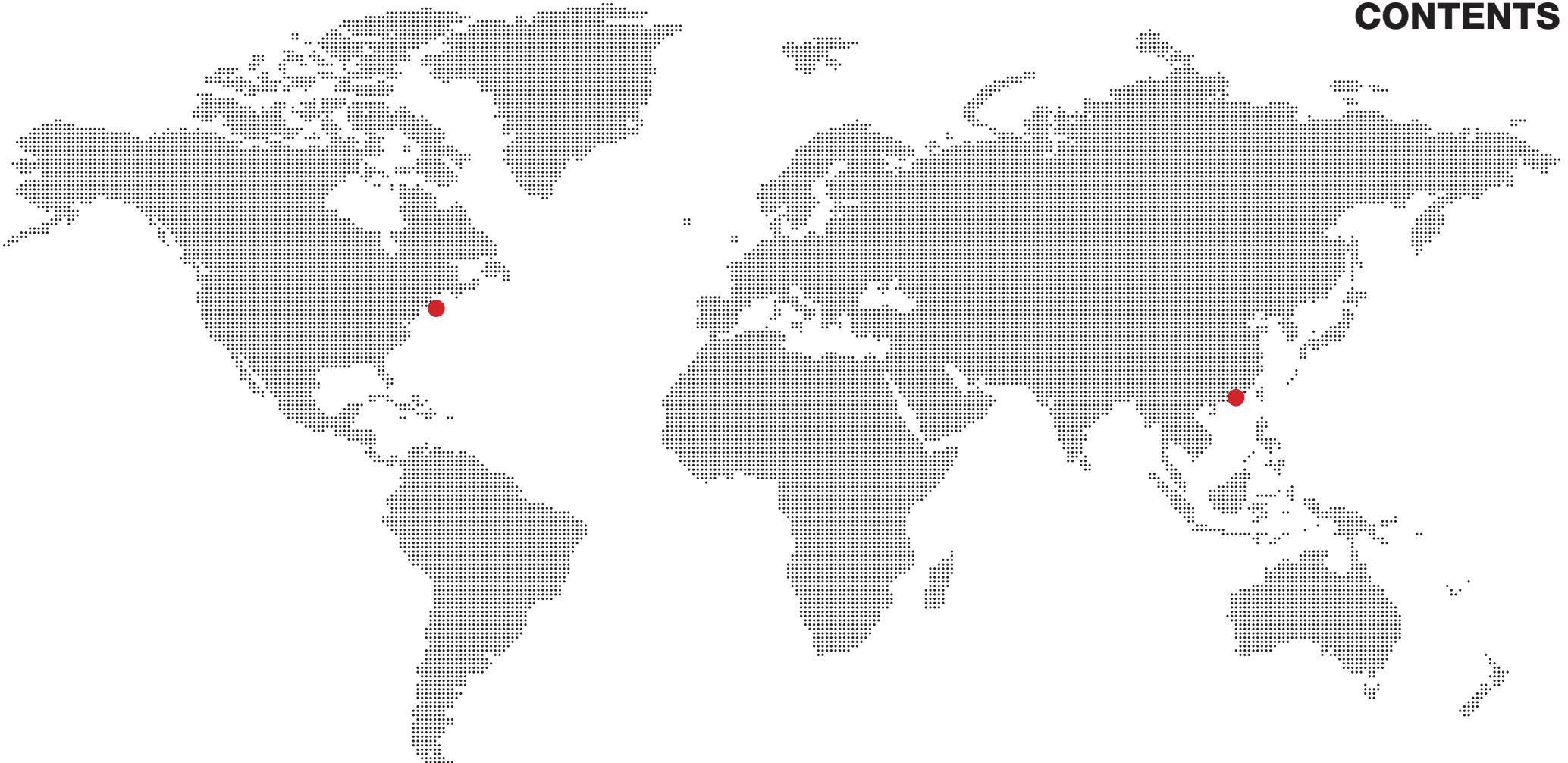
Faculty of Built Environment, UNSW

The Commissioner Hoffman Urban Design Award assessed base upon the academic merit and the demonstrated ability and leadership qualities

SKILLS

Professional skills





01

Fort Point Channel & South Station
Development
Boston, MA, U.S.A

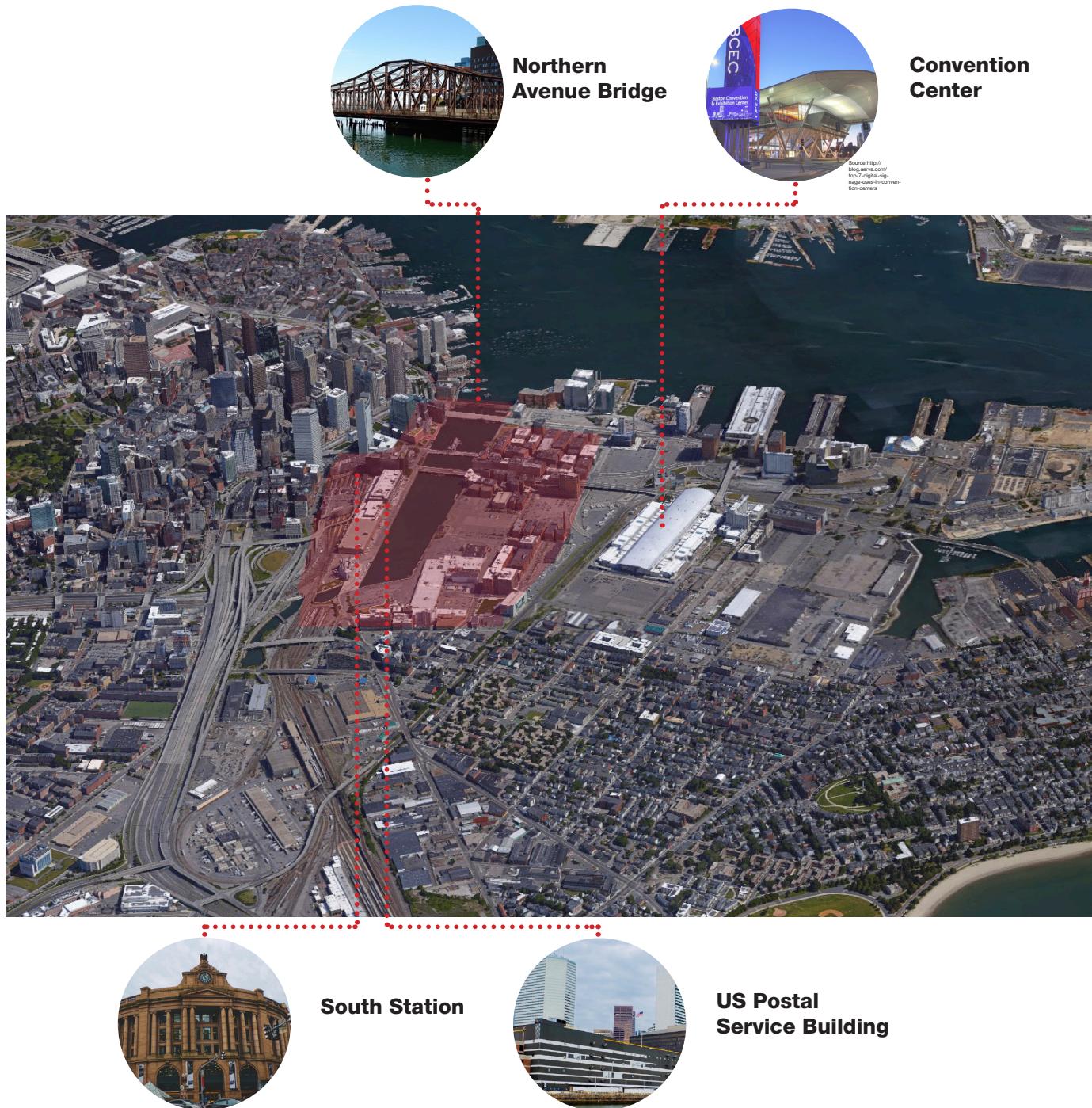
4-9

02

Wan Chai Waterfront
Hong Kong Island, Hong Kong
10-15



Fort Point Channel & South Station Development



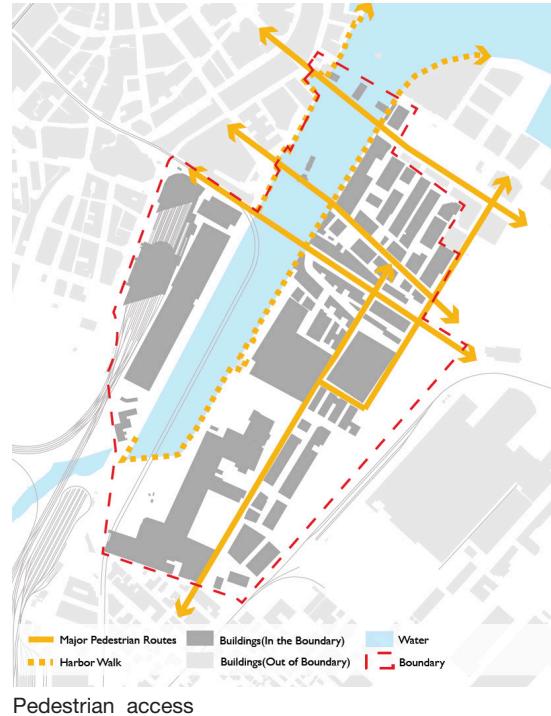
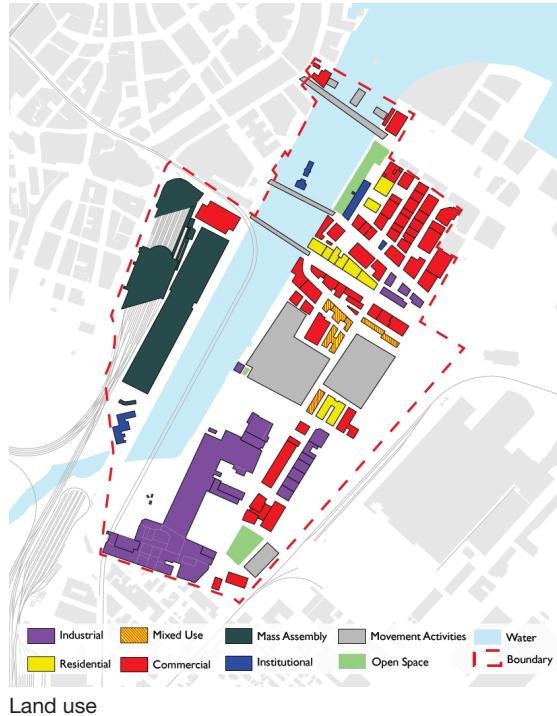
Project Background

Fort Point Channel is an active waterfront that was once an important shipping port and manufacturing centre in Boston. The site situates between South Boston and Landmark District. The northern boundary from west to east, begins at Northern Avenue Bridge to West 2nd Street at Seaport Square. The southern boundary, from west to east that starts from South Station and ends before the Convention Center.

Fort Point Channel was a wool trading centre in the 19th century. The area became diversified with other goods manufactured when more bridges were constructed to improve accessibility. Businesses began to move out of the Fort Point District in the 1940s; the vacant spaces then started to be colonised by artists as studios as the spaces were affordable. The shift is now once again occurring with the art community being replaced by high technology condominiums.

The scheme re-imagine the existing district plan and improve by offering new visions: Bring people to the water, Improve the accessibility, Develop the public transport, Find new economics on the water and Activate ground floor uses

Site analysis



- The existing land use is dominated by industrial and commercial uses in the Landmark District and large areas of surface car parks.
- The site contains very limited open space and residential
- The existing Harborwalk is discontinuous on Dorchester Avenue due to the prohibited road use of U.S Postal Service building
- Requires improvement on connectivity at southern end and Convention Center
- The proposed open space in the 100 Acres Master Plan has significantly increased and some of the surface car parks will be incorporated into Fort Point Park. However, the plan can be improved by adding open space to southern end where Harborwalk is extended to Dorchester Avenue and the entire Fort Point Channel can achieve better connectivity.

Opportunities

- The main driving force of initiating the developments in Fort Point Channel is the moving in of General Electric World Headquarters, the high technology industry Innovation Point acts as an economic catalyst that brings over 800 employees and other great opportunities on development.
- Other driving forces such as USPS relocation, South Station Developments - South Station Expansion (SSX), Air Rights Development, North – South Rail Link (NSRL) and High Speed Rail (HSR) and Northern Avenue Bridge are all crucial factors for stimulating the economic growth.

Challenges

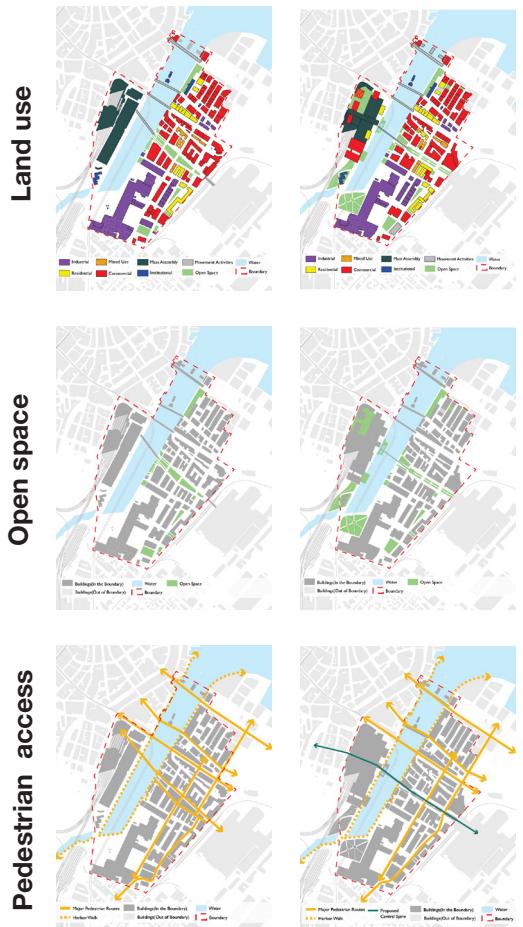
- Anticipated serious flooding events in 70 years due to sea level rises, Fort Point Channel is under threat and requires designs to resolve the issue.



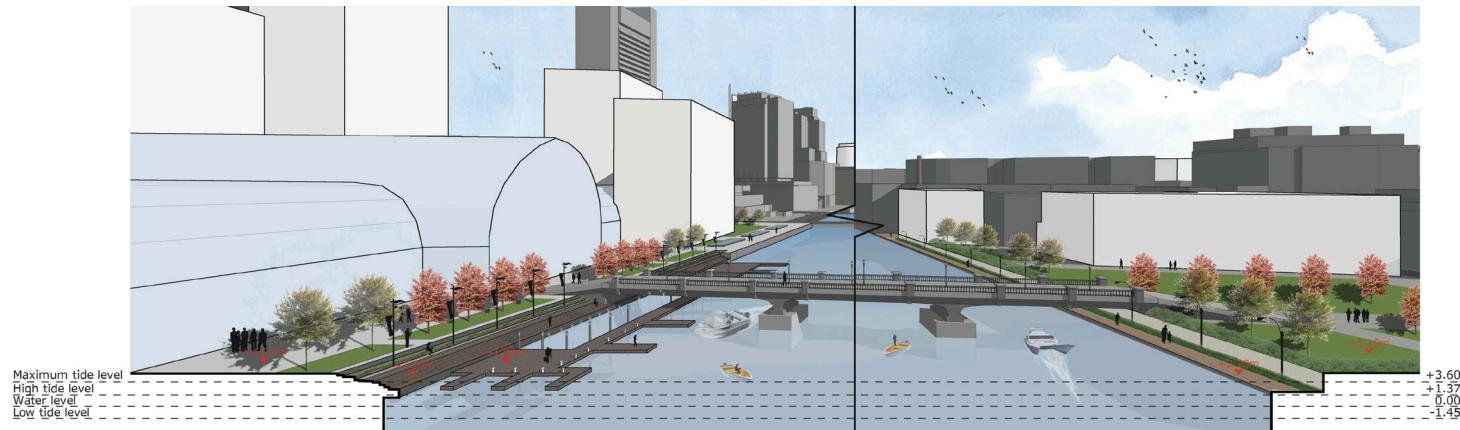
Strategies

- The scheme adopts 80% of the district plan - 100 Acres Master Plan and integrating new designs with our visions.
- The proposed scheme improves the land use variety and assigns new commercial use on South Station.

100 Acres Plan Proposal

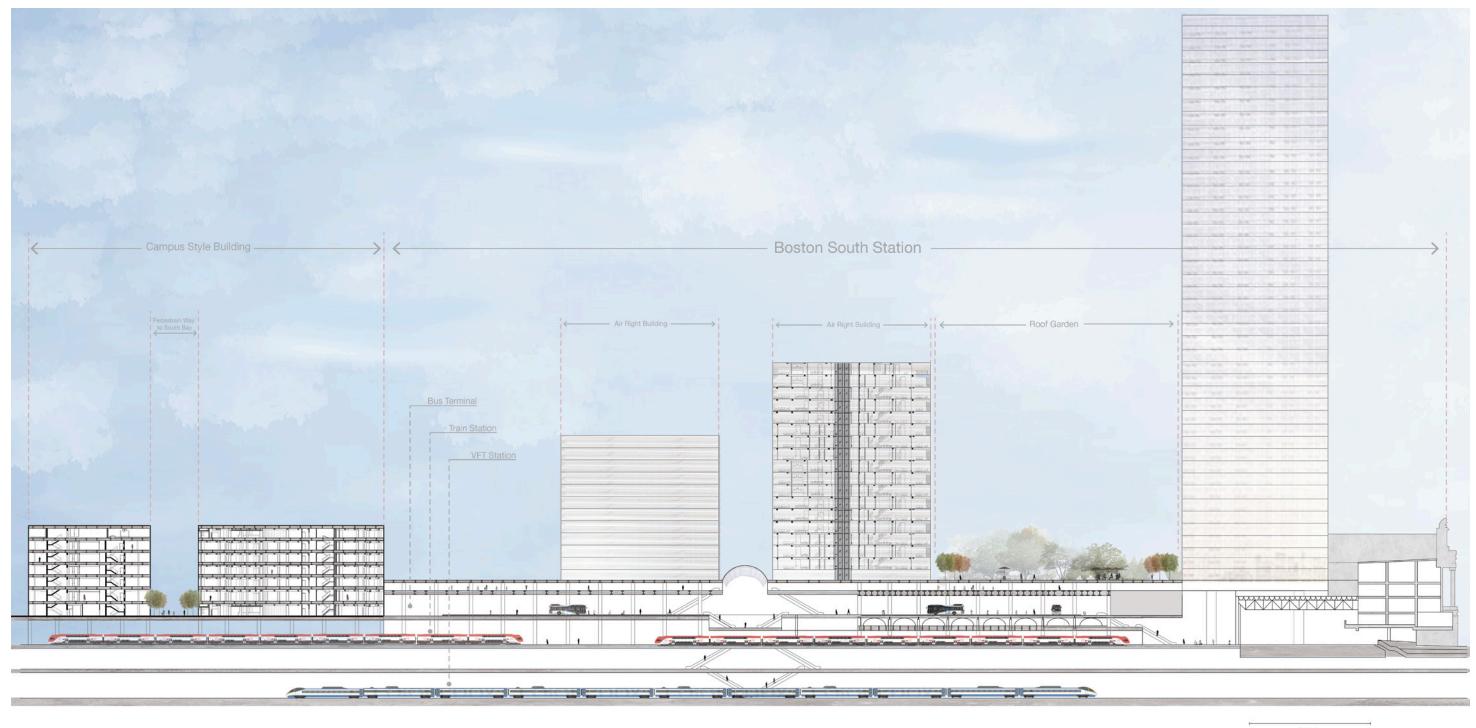


Design Details



- The waterfront design integrates with ground retail activities and open space getting the people close to the water's edge and reinforcing the vision of bringing people to water
- Create large open space for the public and pedestrian friendly environments and the middle part provides a buffer zone between two streets

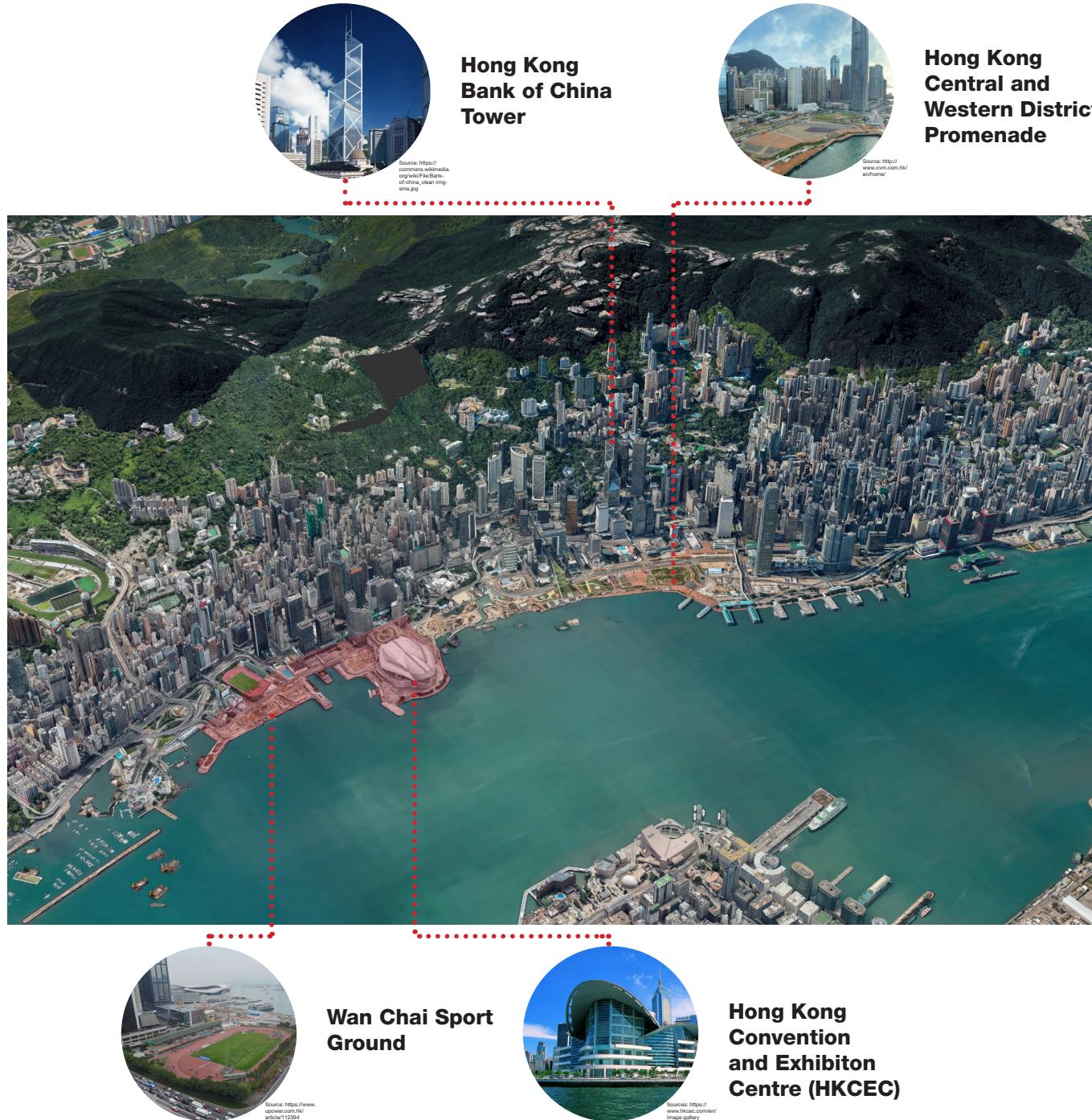
- The South Station Development scheme provides a design combining two projects - Air Rights and South Station Expansion. The Air Rights proposal includes 1 tower (670ft) and 4 buildings (330ft) sitting on the existing South Station. Additional glass galleria is added to South Station as an urban element
- The new composition of towers on South Station match the nearby Federal Reserve Bank Building and One Financial Center







Wan Chai Waterfront Development



Project Background

Hong Kong is well recognised as one of the mega cities that accommodates extremely high-density populations and experience land shortage due to the hilly geography.

The city consists three main islands that has Victoria Harbour channeling between Kowloon Peninsula and Hong Kong Island. The selected site indicates in red, Wan Chai locates in Hong Kong Island with dynamic features of the water world and the traditions harbour life of the old Hong Kong.

Hong Kong experienced a long period of economic downturn and a declining property market after the Asian financial crisis. The Government scaled backs the speed and scope of planning of the waterfront development around Victoria Harbour.

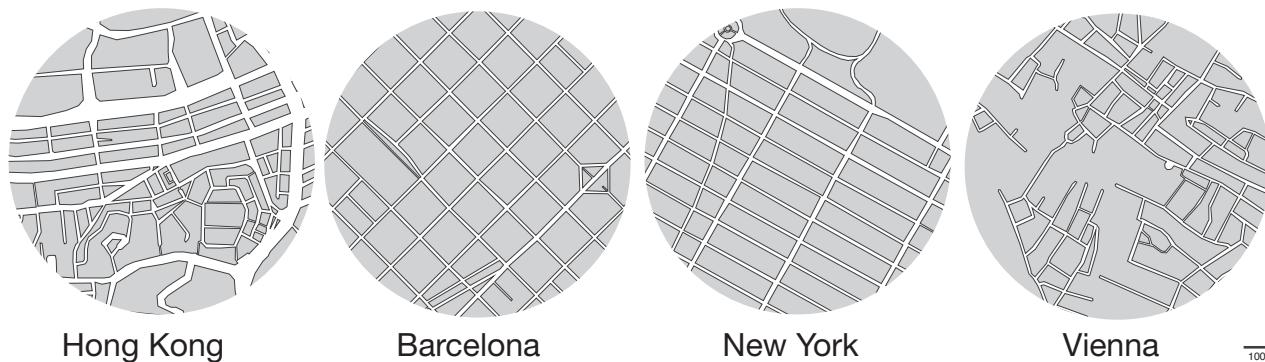
Numerous land reclamation projects were carried out to create build-able land since 1930s. The site is also reclaimed land.

The scheme investigates the opportunities and re-visit to the existing government plans in order to implement a design that meets the local residents needs and also retain the unique waterfront feature.

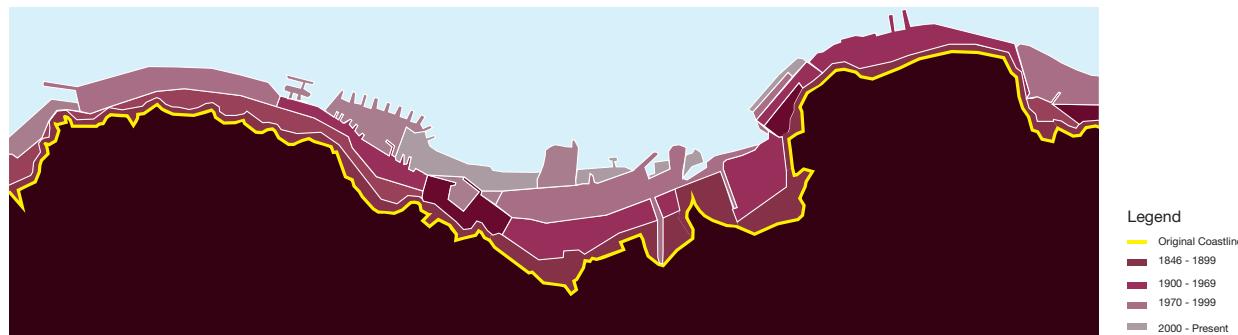
<- The images of left indicate the significant parts in Hong Kong Island

Opportunities & Challenges

Figure ground analysis



Hong Kong Island Reclamation History



Hong Kong Island reclamation map

Existing Urban Form



Strategies

Hong Kong is a city developed without much planning, the figure ground analysis shows the random road network pattern compare with other cities such as Barcelona, New York and Vienna.

The city is facing serious mismatch between the supply of land and the shortages of land supply and housing have led to rising property prices and rents.

The scheme aim to use the new reclaimed land to create a continuity of the waterfront promenade with residential, commercials and other mixed uses building from new Convention Centre station to Wan Chai North Waterfront.

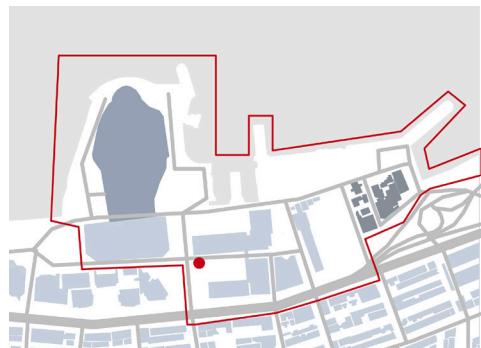
Objectives

- Phase I: Design the reclamation land in Wan Chai waterfront to provide 5000 residential and 1000 employment opportunities.
- Phase II: Provide approximate further 2000 residential on the site and further 9000 employment opportunities.
- Design an innovation precinct in Wan Chai waterfront assigned area with proposed government subside scheme.
- To increase the variety of land use and avoiding singularity generic design of waterfront, assign a new cultural identity.
- To preserve Wan Chai Sports Ground as collective memory to the local residents

The design seeks to solve the high property prices and rents issue, meanwhile provide quality open space to local residents.

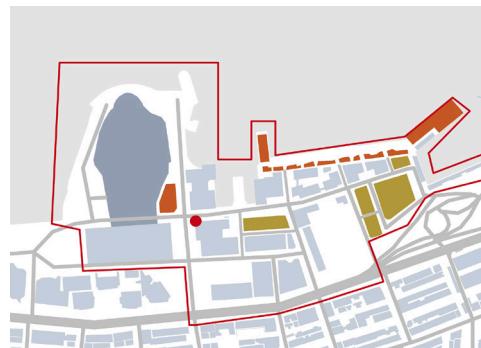
Analysis

Existing Conditions

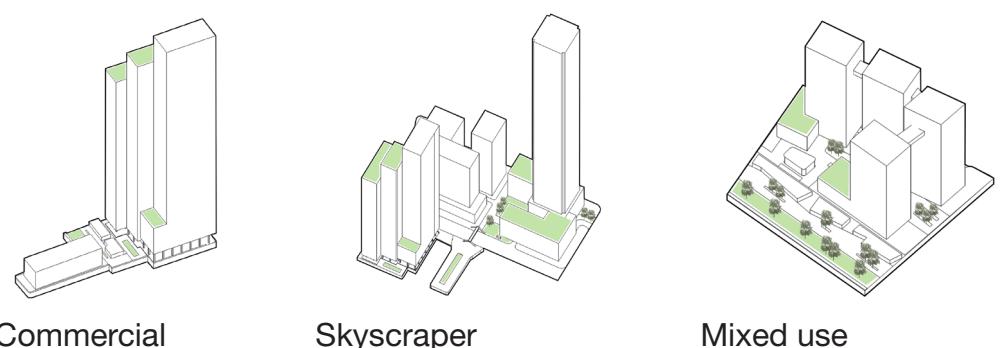


Development

Proposed



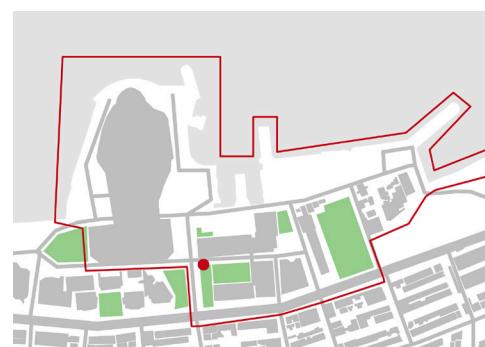
Proposed Building Blocks



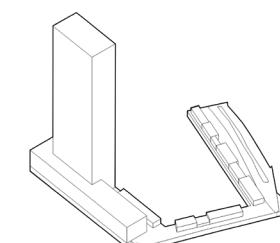
Commercial

Skyscraper

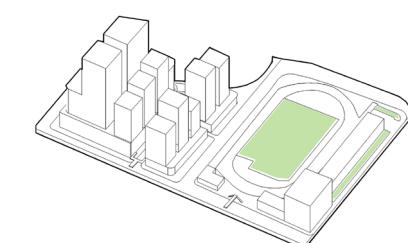
Mixed use



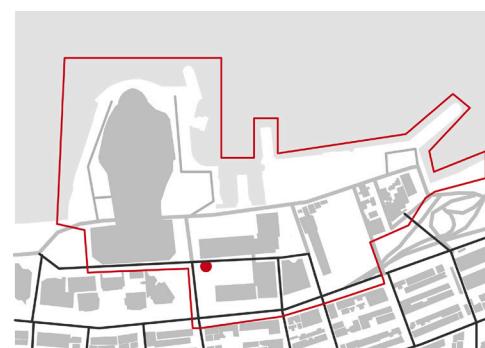
Open space



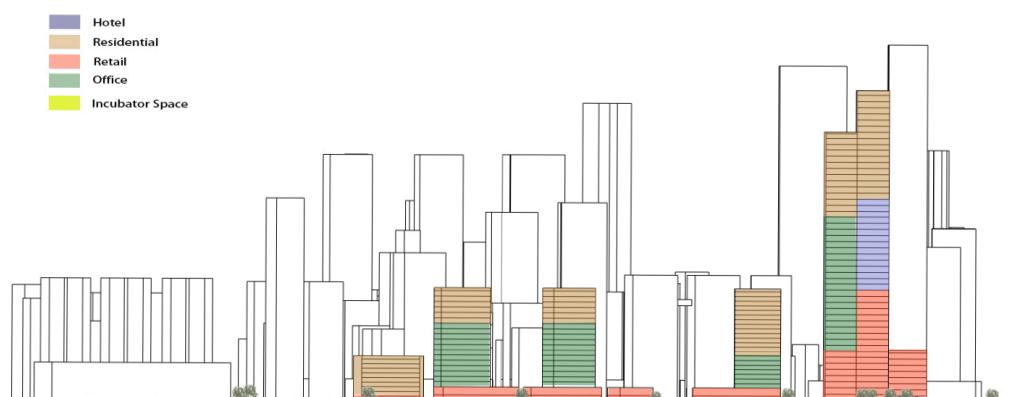
Edge space



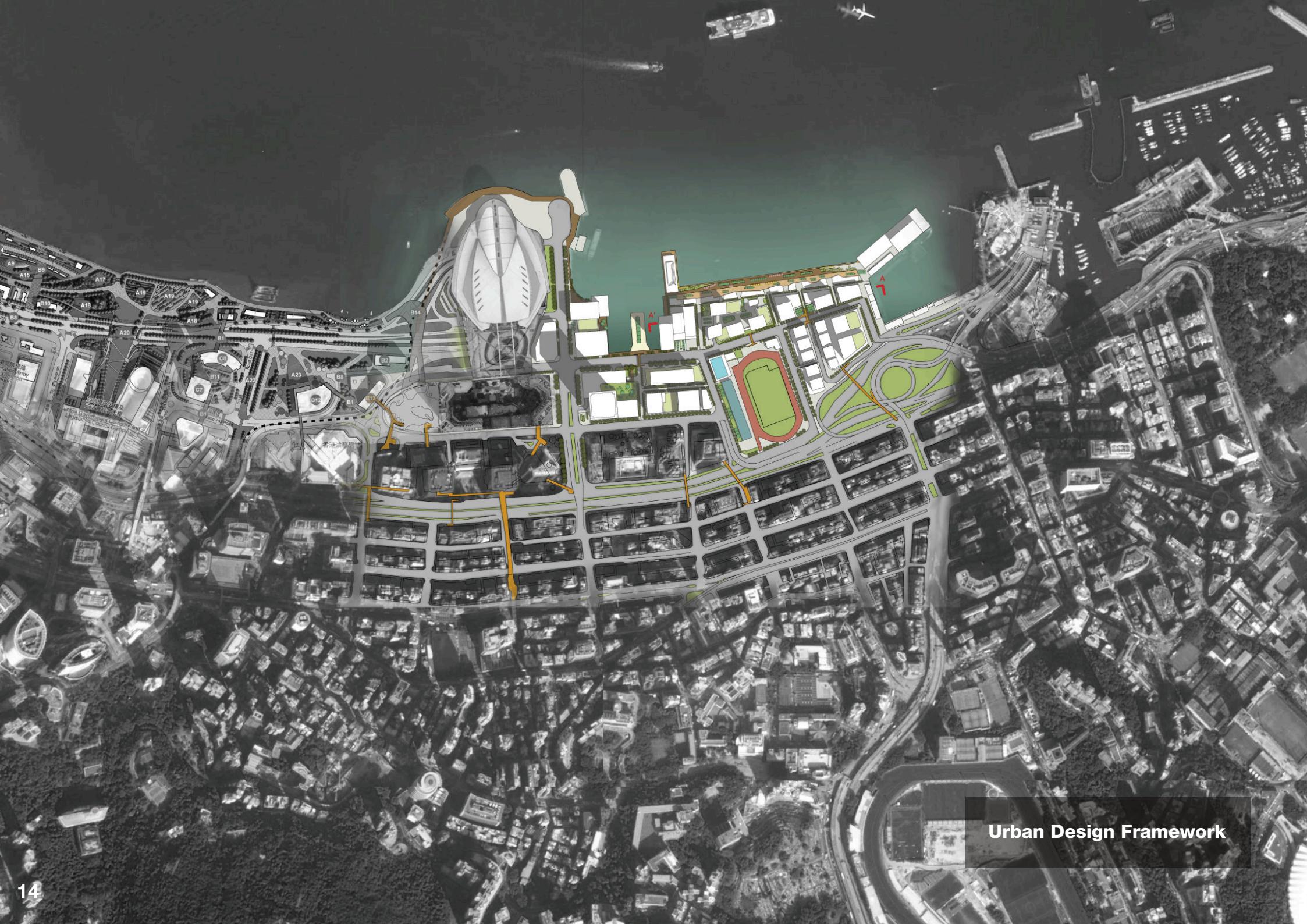
Sports centre & Mansions



Pedestrian access



Section of proposed building use



Urban Design Framework



