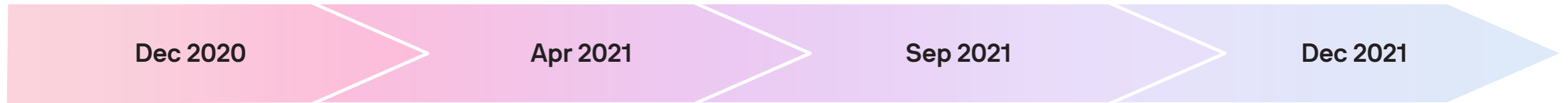


onebite

Research and Survey on Fence-free Design

Fence-free Design

A four-stage approach to promoting water-friendly design



1

Removable Wire Fence



@ Water Sports and Recreation Precinct (Phase 1)

2

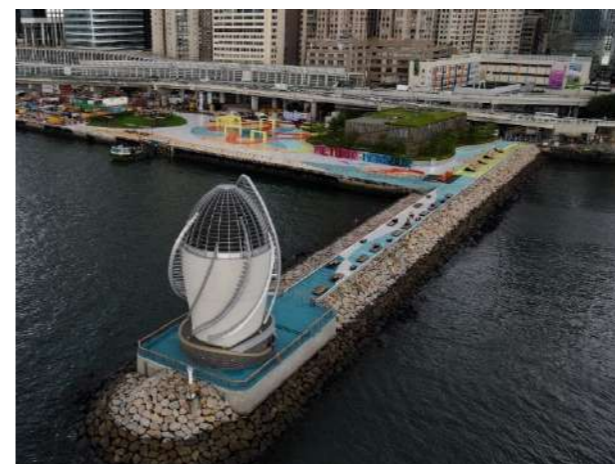
Low Curb Along Sloping Seawall



@ Tsuen Wan Promenade

3

Fence-free Breakwater



@ East Coast Park Precinct

4

Harbour Steps



@ Water Sports and Recreation Precinct (Phase 2)

CASE STUDY

Types of Fence-free Promenade

- Natural
- Big Steps
- Gentle Slope
- Boardwalk
- Examples in Hong Kong
- Examples in Mainland

Natural

Barangaroo Reserve Sydney, Australia

Barangaroo Reserve transforms a huge expanse of empty concrete into humane, usable space, marking the transformation of an industrial site into a modern reinvention of its more sustainable past.

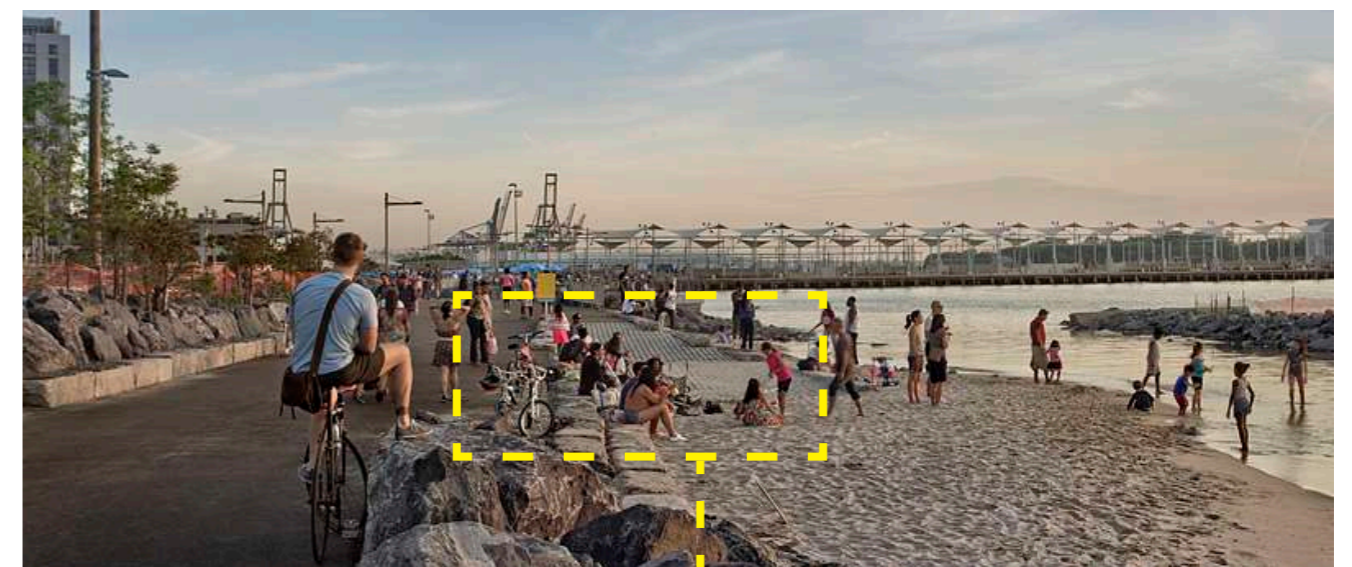


Natural planting and rock steps as buffer zone between walking path and water

Images from Land8

Brooklyn Bridge Park New York, United States

The park transforms its stretch of post-industrial waterfront into a thriving civic landscape featuring unique topographies, plantings, amenities, and cultural artifacts.

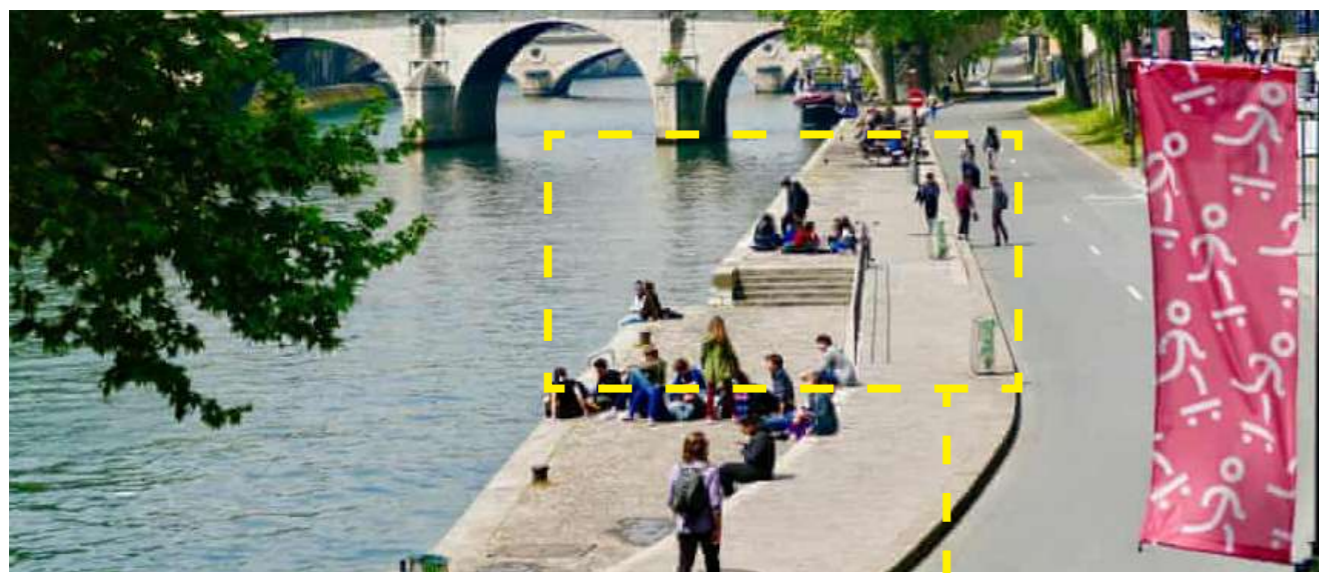


Rock steps and beach as buffer zone between walking path and water

Images from Google

Parc Rives de Seine Paris, France

An oasis where everyone can enjoy sport, nature, a meal or simply relax in central Paris.



Change of level and paving material to create buffer zone between walking path and water

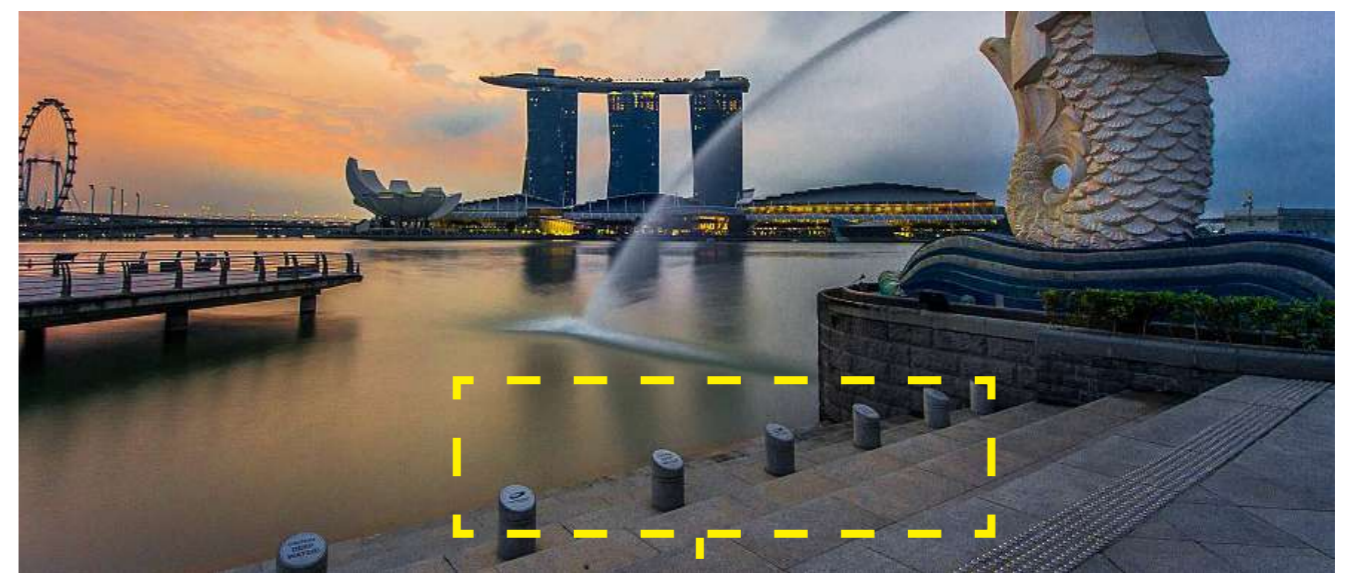
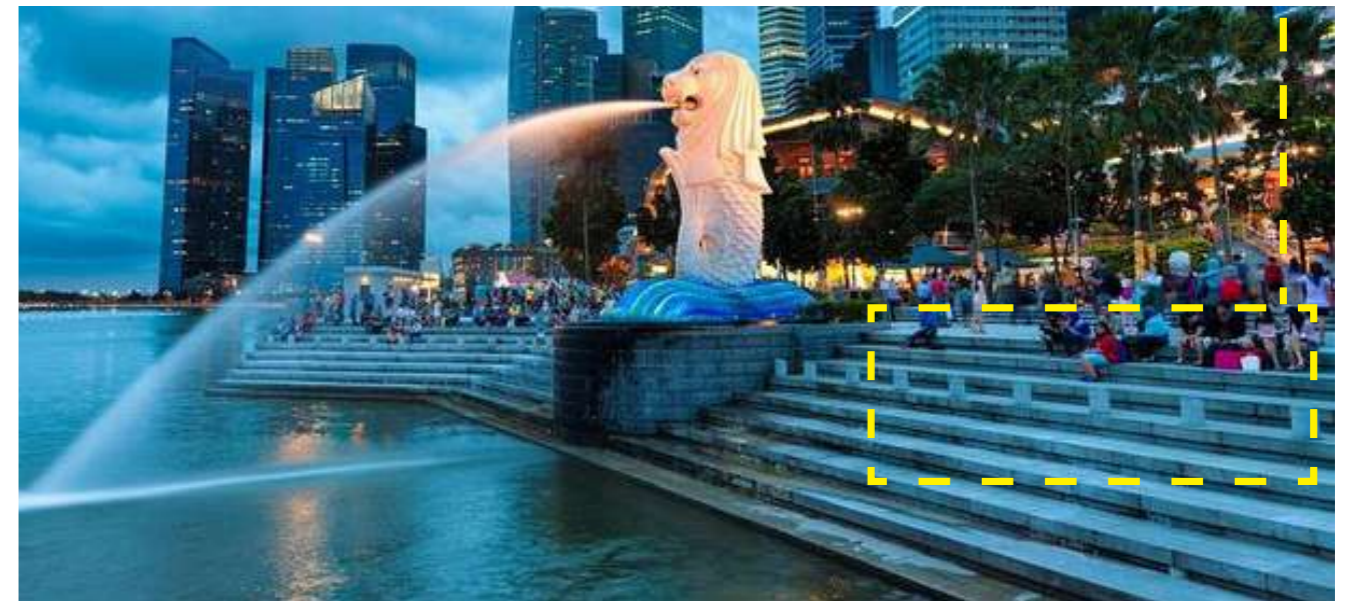
Images from Paris Tourist Office/ Wikipedia/ Google

Big Steps

Marina Bay Waterfront Singapore

The along-the-bay walkway that brings people across many attractions at Marina Centre, Collyer Quay, and the Bayfront.

Big steps as buffer zone between walking path and water



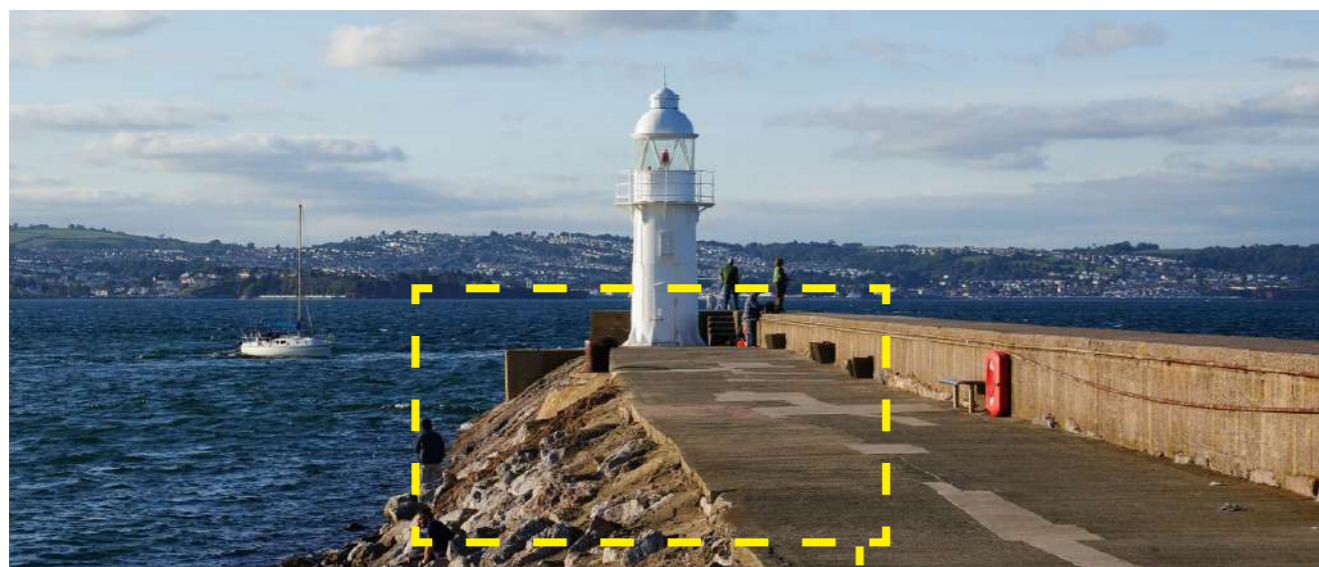
Bollards to create border

Images from Google

Breakwater Beach

Brixham, England

Close to the mouth of Brixham Harbour, one of the cleanest beaches on the South Devon's beautiful bay.



Gentle slope formed of big rocks as buffer zone between walking path and water

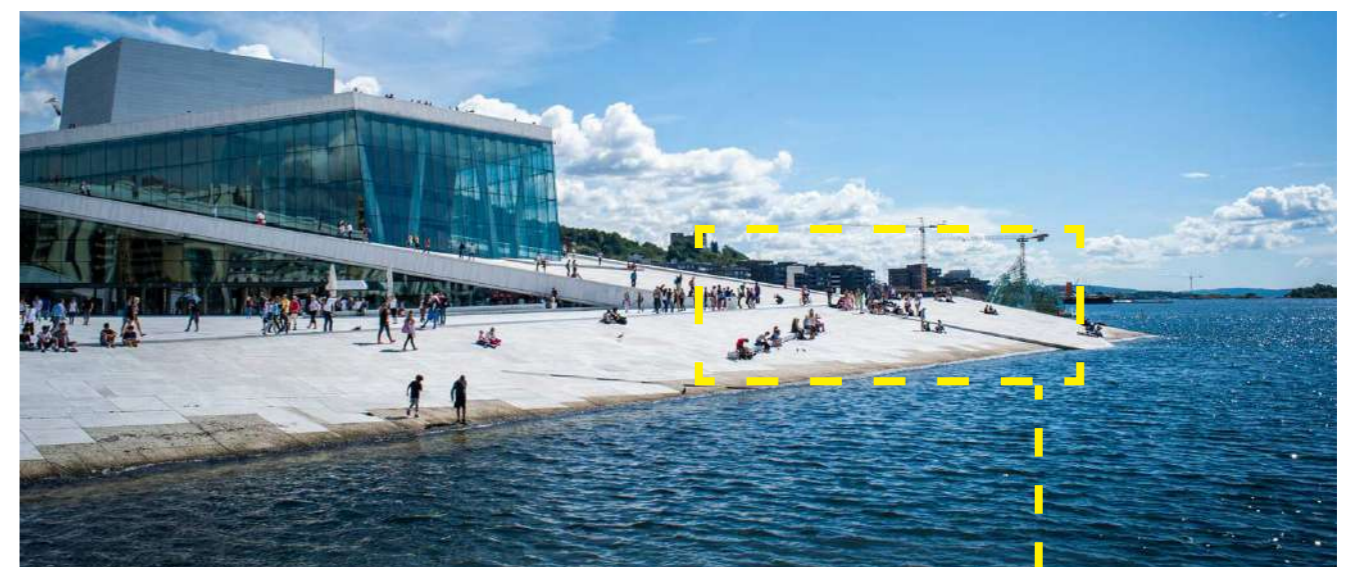
Images from Google

Gentle Slope

Oslo Opera House

Oslo, Norway

Accessible in the widest possible sense, by laying out a 'carpet' of horizontal and sloping surfaces on top of the building.



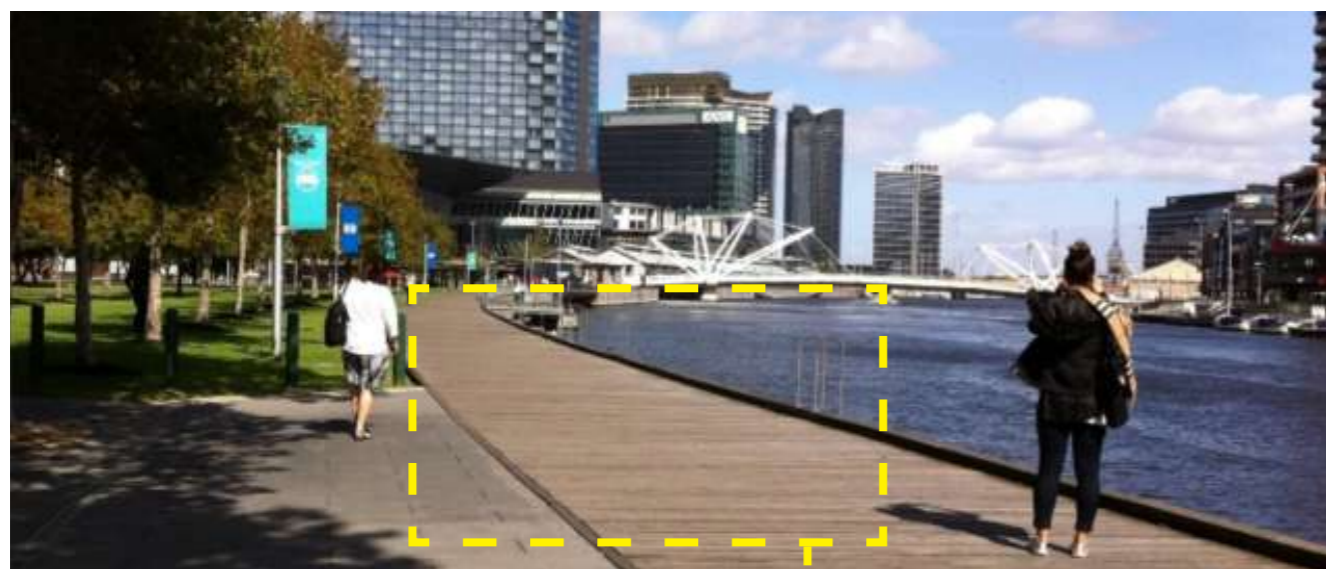
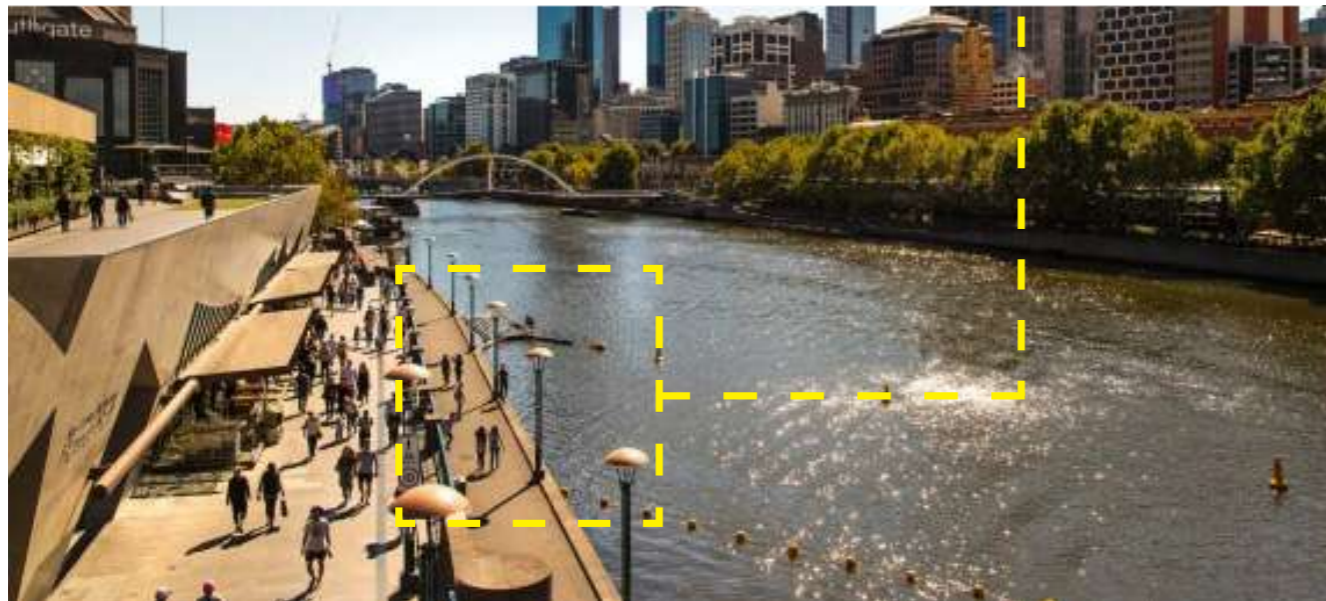
Big slope surface as accessible open area

Images from Google

Southbank Melbourne, Australia

Southbank accommodates lots of restaurants and cultural venues, the open waterfront extends beyond for an enjoyable walk under the sun.

Prominent lighting to highlight the river edge



Changing floor finish material by the edge of waterfront, curb as border

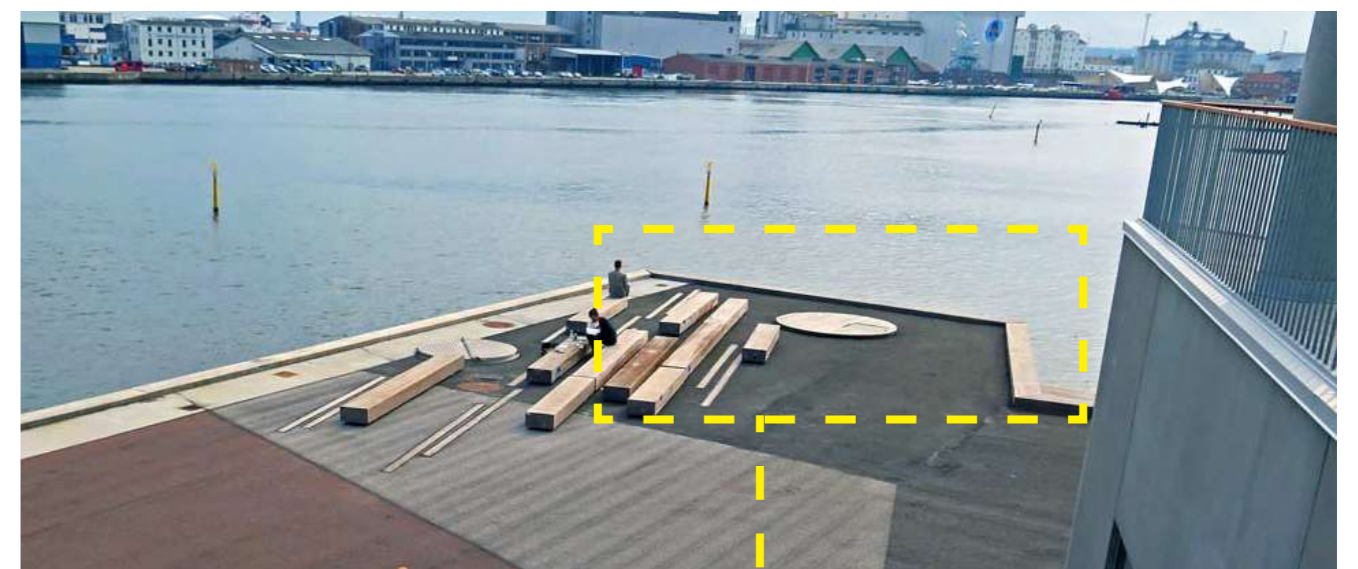
Images from Landezine

Boardwalk

Navitas Harbourfront Aarhus, Denmark

A comfortable wood sundeck catches much needed warmth in Denmark.

Different material to for circulation and viewing deck



Curb to create border

Images from Google

Examples in Hong Kong

Castle Peak Bay Waterfront Promenade

The 850m long breakwater gives view of Castle Peak Beach and Tuen Mun Typhoon Shelter, invites people to have a relaxing walk in daytime or enjoy the sunset.



Gentle slope formed of big rocks as buffer zone between walking path and water

Images from Google

Repulse Bay Beach

Popular beach next to luxury residences gives a resort feeling to visitors and swimmers.



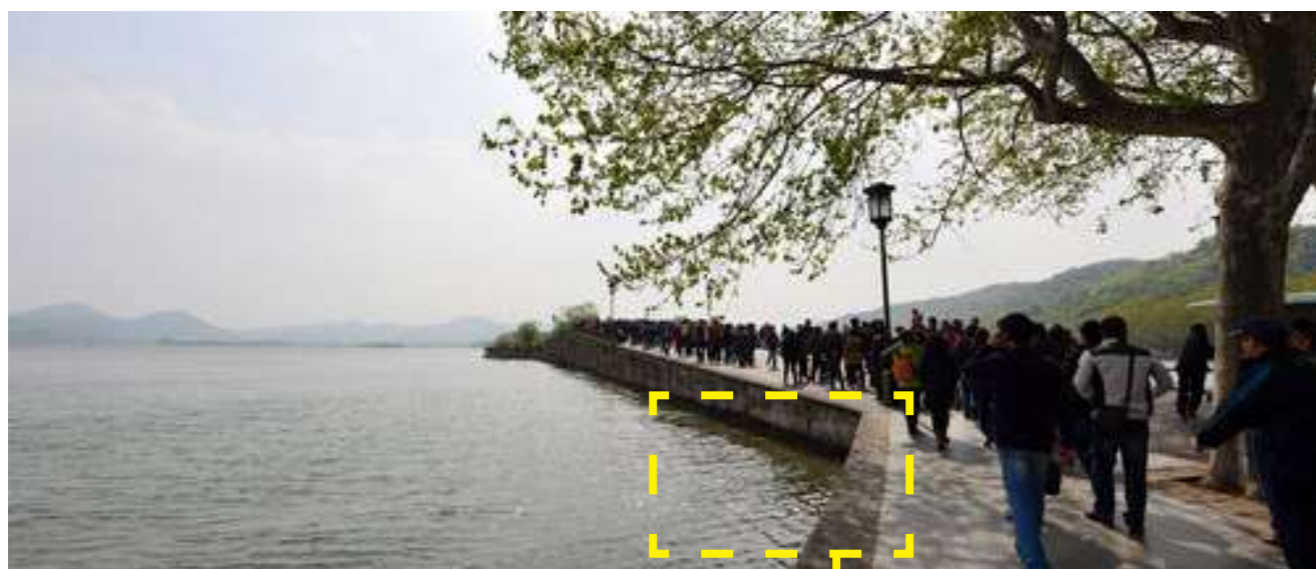
Steps and subtle bollards to create buffer zone

Images from Google

Examples in Mainland

Bai Causeway Hangzhou, China

Distinctive seasonal landscape can be captured along the embankment all year long.



Material change to create border - - -

Images from Google

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OCT Bay Shenzhen, China

An urban cultural and entertainment destination with significant view of waterbody for visitors to enjoy the natural beauty of the site.



Big steps as buffer zone - - - between walking path and water

Images from Google

Design Strategies as Safety Measures

Create Buffer Zone

1. Planting and rock steps
2. Big steps and widened pedestrian path
3. Sloped big rock
4. Big slope surface

Create Border

1. Bollards
2. Planting and landscaping
3. Raised platform and curb
4. Material change and lighting

Slow Down Traffic

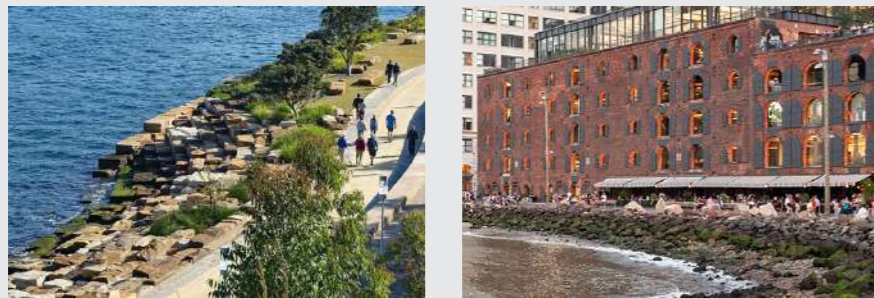
1. Diverge circulation through leveling
2. Diverge circulation from boardwalk
3. Set back furniture

Design Strategies as Safety Measures

Create Buffer Zone

Create Border

Slow Down Traffic



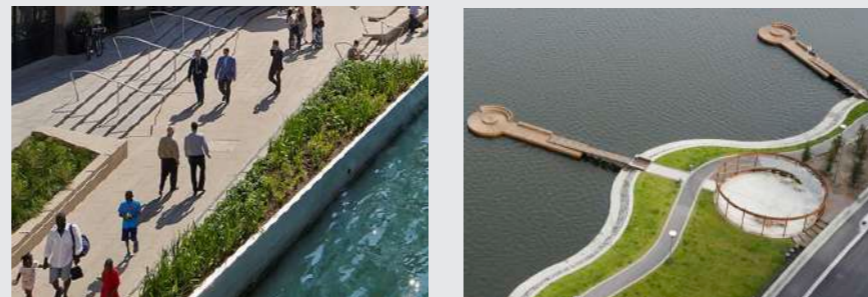
1. Planting and rock steps
Examples: Barangaroo Reserve (Australia), Brooklyn Bridge Park (United States)



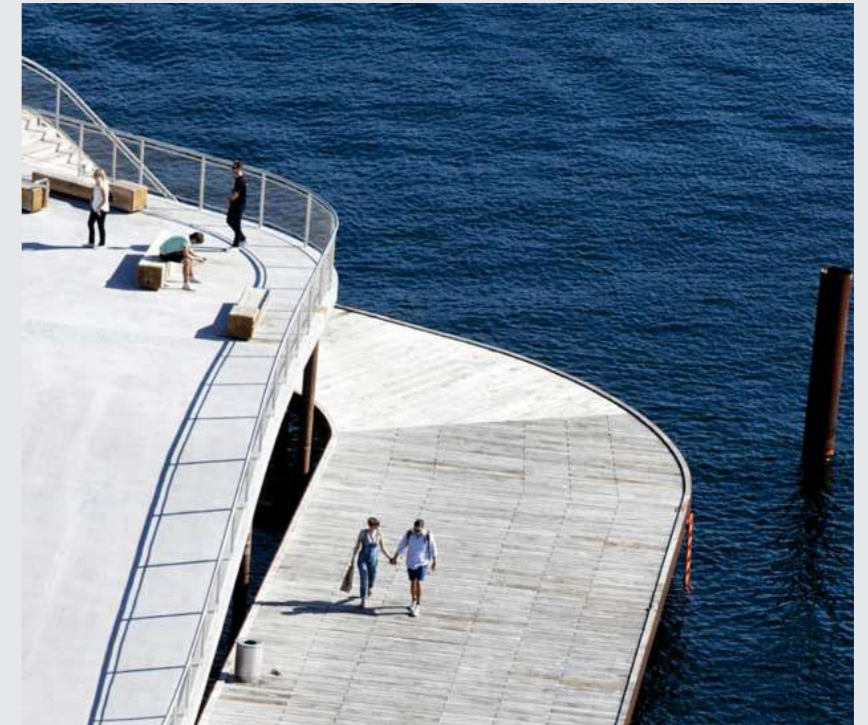
1. Bollards
Examples: Repulse Bay Beach (Hong Kong), Marina Bay Waterfront (Singapore)



2. Big steps and widened pedestrian path
Examples: OCT Bay (Mainland), Marina Bay Waterfront (Singapore)



2. Planting and landscaping
Examples: Chicago Riverwalk (USA), Hornsbergs Strandpark (Sweden)



1. Diverge circulation through leveling
Example: The Kalvebod Waves (Denmark)

Design Strategies as Safety Measures

Create Buffer Zone

Create Border

Slow Down Traffic



3. Sloped big rock

Examples: Turkey Harbourfront (Turkey), Breakwater Beach (England)

3. Raised platform and curb

Examples: Navitas Harbourfront (Denmark), Bostanlı Sunset Lounge (Turkey)

2. Diverge circulation from boardwalk

Examples: Aker Brygge Waterfront Promenade (Norway), Navitas Harbourfront (Denmark)



4. Material change and lighting

Examples: Bai Causeway (China), Hasle Harbour Bath (Denmark)



3. Set back furniture

Example: Aker Brygge Waterfront Promenade (Norway)

COMMUNITY ENGAGEMENT

A. PUBLIC VOTING

B. SITE SURVEY

COMMUNITY ENGAGEMENT

Objectives

- To communicate with general public their satisfaction level and opinion on ECP breakwater
- To understand current public opinion regarding fence-free design
- To understand public aspiration to fence-free “harbour steps” design with reference images from overseas
- To collect data on general public satisfaction level towards ECP breakwater & fence-free “harbour steps” design
- To collect public views on how effective the fence-free breakwater has catered the needs of the public

I. Public Voting

DATE AND TIME	LOCATION	WEATHER	NO. OF RESPONDENT
10 Dec 2021 (FRI) 10am-7pm	Inside East Coast Park	Sunny	366
11 Dec 2021 (SAT) 10am-7pm	Precinct		

II. Site Survey

DATE AND TIME	LOCATION	WEATHER	NO. OF RESPONDENT
6 Dec 2021 (MON) 9am-7pm	Inside East Coast Park	Sunny	190
7 Dec 2021 (TUE) 10am-6pm	Precinct		
8 Dec 2021 (WED) 9am-7pm			
9 Dec 2021 (THUR) 11am-4pm			
10 Dec 2021 (FRI) 7am-6pm			
11 Dec 2021 (SAT) 10am-10pm			
12 Dec 2021 (SUN) 3pm-8pm			



III. Location



Spot 1 -
Entrance to the Precinct underneath
the Central-Wanchai Bypass flyover

Spot 2 -
Near the Central-Wanchai
Bypass East Vent Shaft

Public Voting

Voting Questions Responses

Q1	Q2	Q3	Q4	Q5	Q6
366	315	300	217	288	280

Q1 Which image best represents the East Coast Park Precinct?

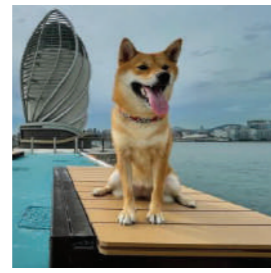
Most of the respondents voted for the fence-free breakwater to best represent the ECP because they enjoyed the sea view a lot. Some also voted for artistic photo spots and pet-friendly venues, a lot of the respondents expressed that they are happy to see more pet-friendly venues in Hong Kong.



Fence-free breakwater



Balance bike court



Pet-friendly venue



Artistic photo spot



Colourful design



Harbour steps leading to the water



Water sports facilities



More seating/ flexible urban furniture



Artistic lighting installation



Festive decoration

Q3 Which of the elements below can increase the attractiveness of the breakwater?

Most of the respondents voted that they want more artistic lighting installation and festive decoration, some of them wished to see a more unique view at night. The next most popular option was harbour steps leading to the water, it reflects the certain level of acceptance of harbour steps from the general public.

Q2 What makes the fence-free breakwater design attractive?

The majority of respondents chose the panoramic sea view as their favourite. The second favourite option was the fence-free breakwater, which shows that the sea view and water friendly design is the most attractive point of ECP.



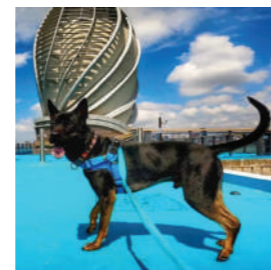
Panoramic sea view



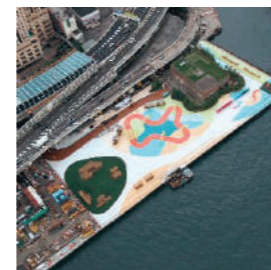
Fence-free breakwater



Multiple photo spots



Less regulated and pet-friendly



Adjacency to where I live/work



Lifebuoy along the breakwater



24 hours security



Safety reminders along the breakwater



Helpers along the breakwater



Closure during extreme weather

Q4 Do you think the existing safety measures on the breakwater listed below are effective?

Some respondents think all the safety measures were effective. Among those, most of them found the lifebuoy along breakwater and closure during extreme weather are the most effective.

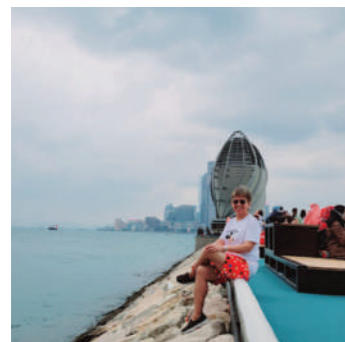
Public Voting

Voting Questions Responses

Q1	Q2	Q3	Q4	Q5	Q6
366	315	300	217	288	280

Q5 Where do you like to stay on the breakwater?

The majority of respondents loved the beach chairs facing the water. They expressed that it is nice to sit with family on the same bench. A lot of respondents also enjoy sitting on the benches along the breakwater. They found it nice to quietly look at the water without obstruction.



On the edge of the breakwater



On the rocks of the breakwater



On the beach chairs



On the benches

Q6 Which international waterfront example(s) do you find the most attractive?

Most people love the idea of natural landscaping. Their second favourite was harbour steps and seats along the water. Most of the respondents were more drawn to a naturalistic design approach.



Harbour steps & seats along the water



Gentle slope leading to the water



Steps leading to the water



Undulating wave-like walkway



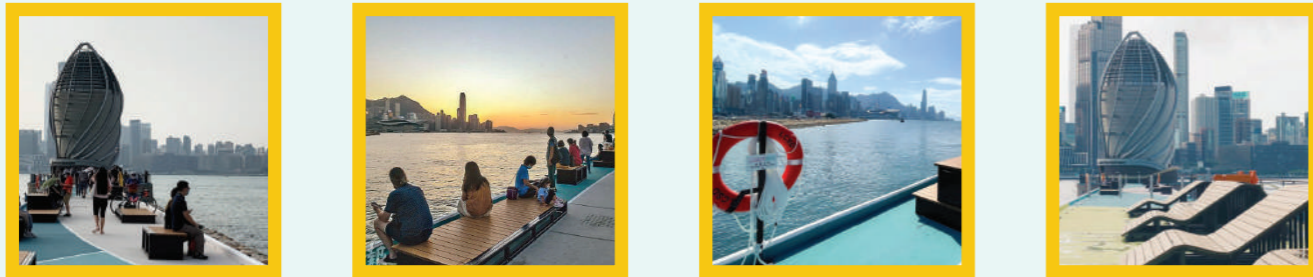
Natural landscaping



Public Voting

Voting Summary

FACILITIES



- The public shared a **positive view** towards the fence-free breakwater design due to the **spaciousness and unobstructed sea view**.
- The **beach chairs and benches** are the most popular spots at the breakwater.
- Many hoped for more basic facilities like **shadings and seatings** as they are **popular and always occupied**.
- Most found the existing safety measures, like placing **lifebuoy and closure during extreme weather**, were effective.
- Only a few expressed **safety concerns** for the fence-less design as the space gets **crowded easily**.

FUTURE DIRECTION



- **More artistic lighting installation and festive decoration** are the most popular potential add-ons to make the breakwater more attractive.
- Many enjoyed the **unique night view**.
- Most people love the idea of **natural landscaping and a naturalistic design approach**.
- Their second favourite were **harbour steps and more seatings and flexible urban furniture** along the coast.
- **Harbour steps** is also a popular choice for several questions, it reflects harbour steps have a **certain level of acceptance** from the public.

Public Voting



Kids choosing their favourite spot at the breakwater.

Public Voting

Pet owner expressing the need for more pet-friendly public space.



Public Voting



Helper explaining the voting boards to visitors.

Public Voting

Citizens dropping by to vote while enjoying family time at the harbour.



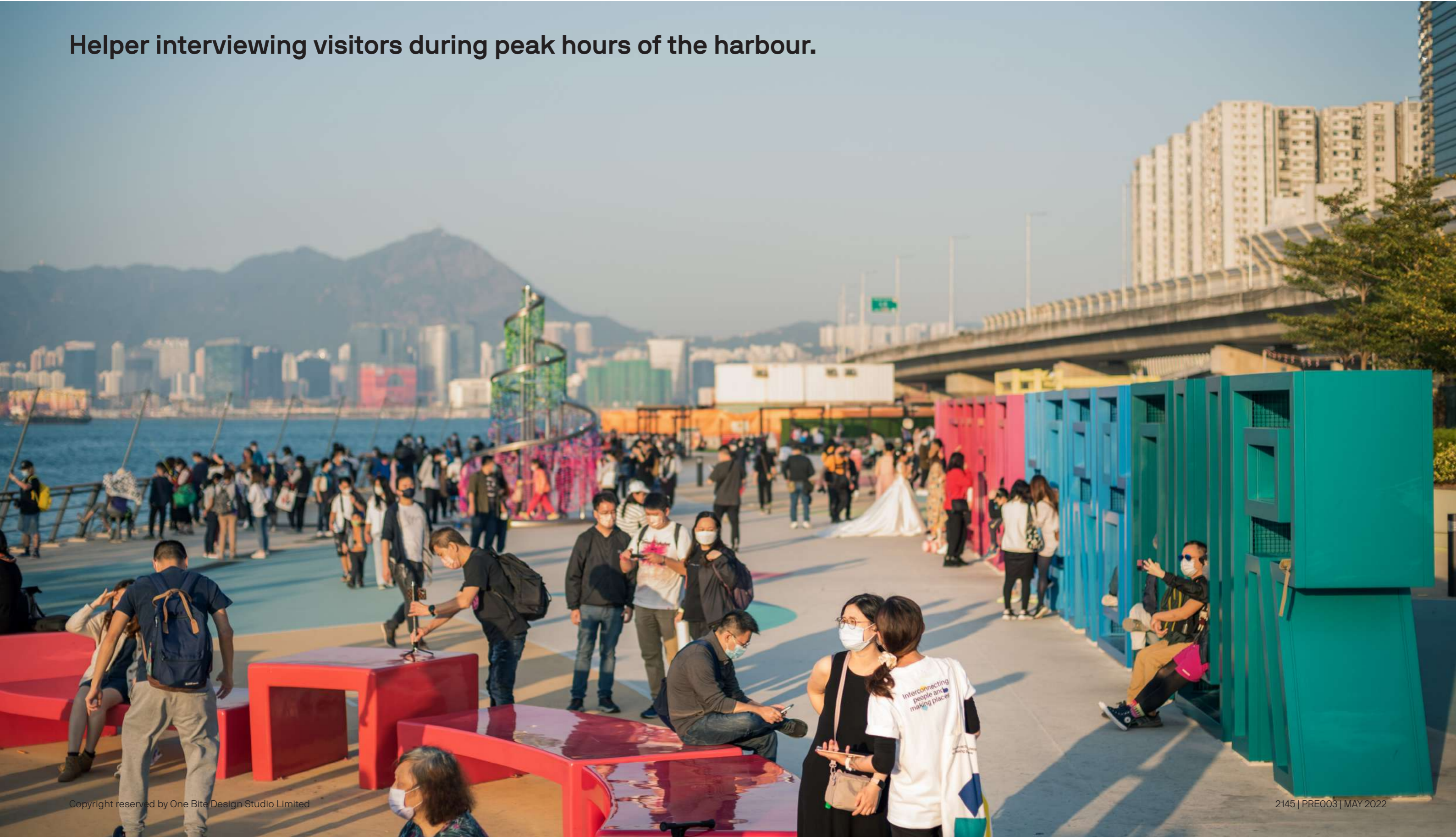
Site Survey

Helper explaining survey objectives to visitors.



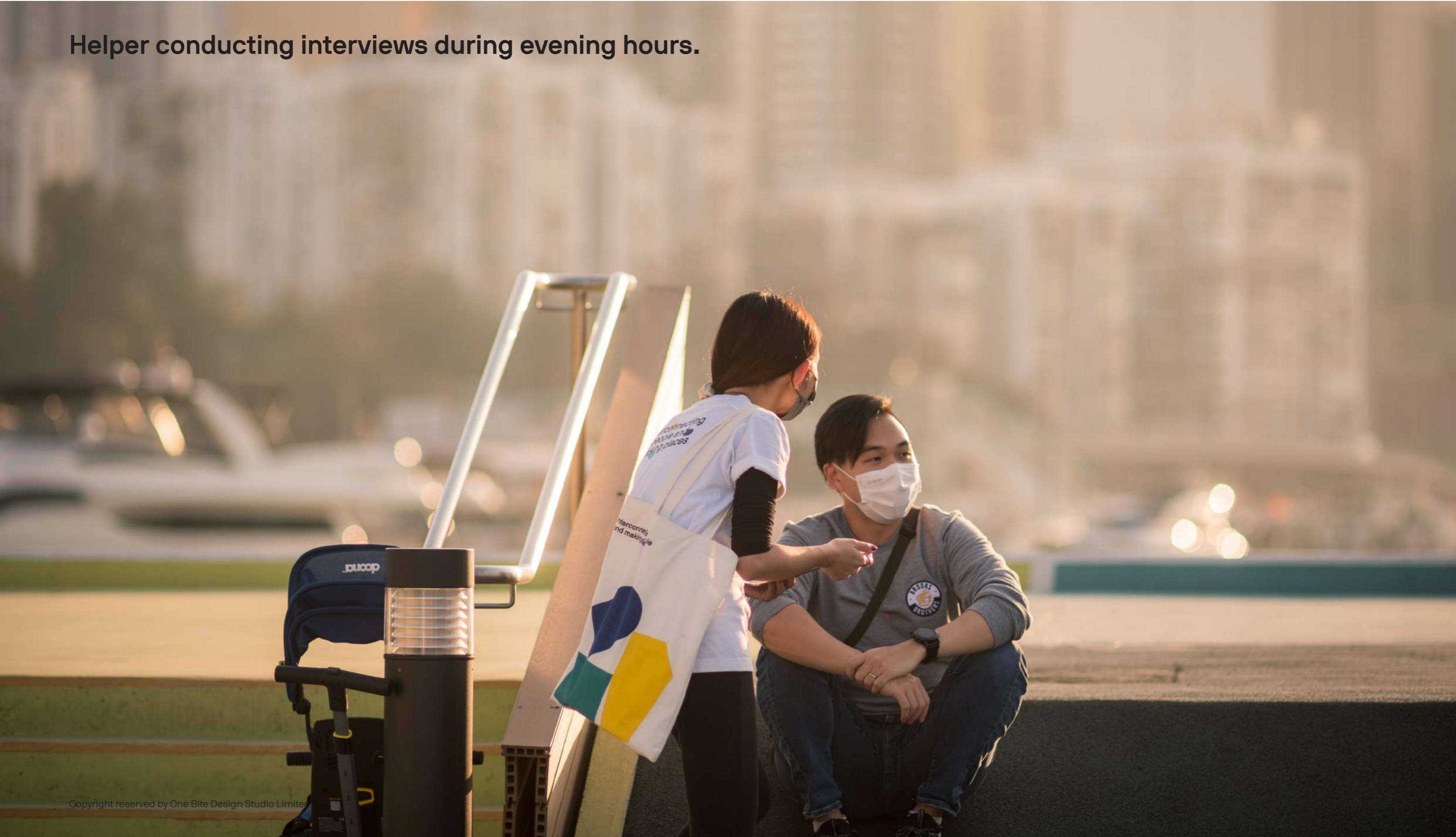
Site Survey

Helper interviewing visitors during peak hours of the harbour.



Site Survey

Helper conducting interviews during evening hours.



Site Survey Key Findings

Supports the design of fence-free breakwater*

~80%

While some believes that it is an **education opportunity** to teach kids about safety, a few are concerned about safety during **crowded hours**.

Is satisfied with the safety measure implemented along the fence-free breakwater*

over 60%

For improvements, some suggested a wider space between the bench and the curb and removing the protruded cap of the **recessed floor uplights**.

Hopes to see more fence-free harbourfront design in HK*

over 70%

Most respondents show **positive attitudes** towards seeing more fence-free harbourfront in HK, while those who are hesitant are concerned about the potential safety risk.

Supports the idea of gentle steps / slope that allow public to interact with water*

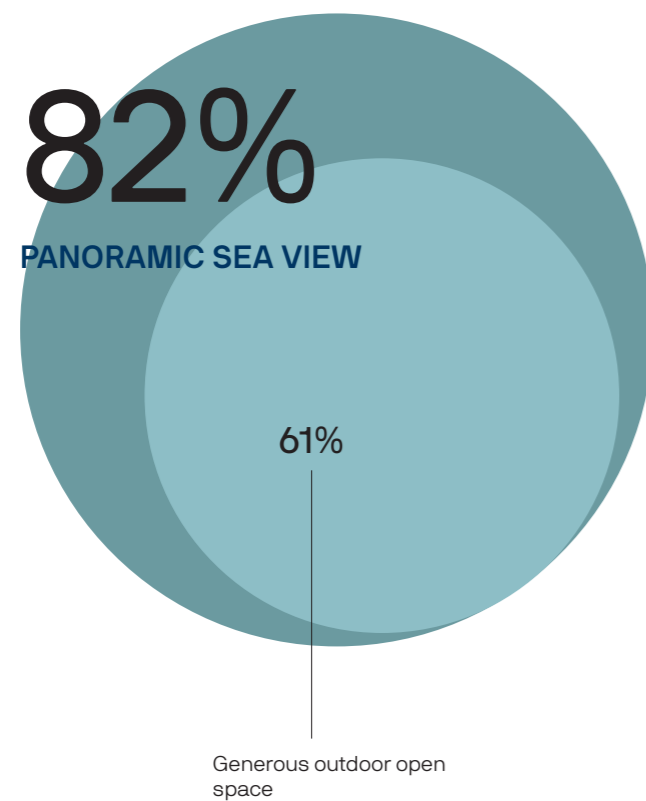
~80%

Most respondents show a certain level of **acceptance** of gentle steps/ slope towards the water.

*chose 6 or above in a scale of 1 - 10

Site Survey Key Findings

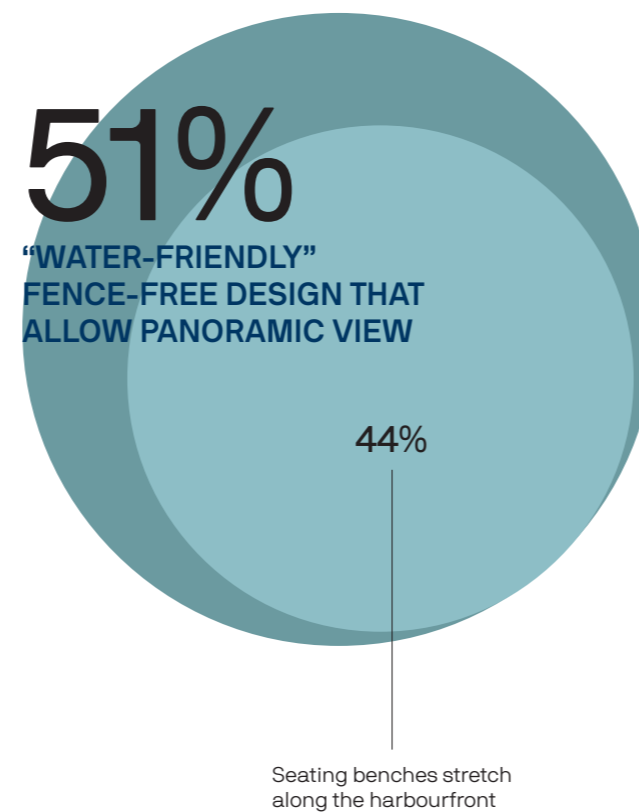
Q. What do you like about these waterfront promenades? *



OTHER RESPONSES

Lawn for recreational activities	23%
Photogenic installations	14%
Adjacency to where I work / live	13%
Exercise opportunities	11%
Less regulated (e.g., pet-friendly/skating/biking)	11%
Well-designed for fishing	2%
Flexible street furniture	2%
Other	3%

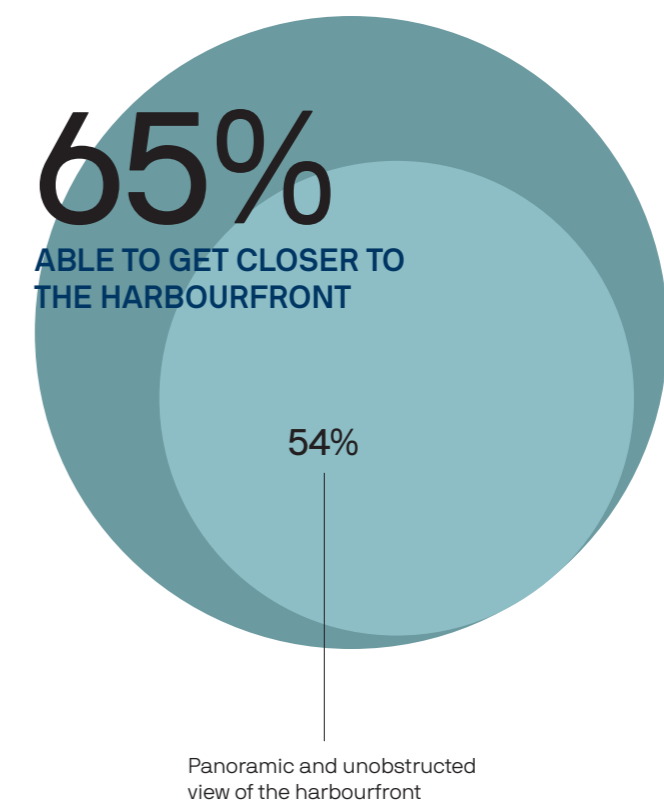
Q. Which aspects/facilities attract you the most? *



OTHER RESPONSES

Victoria Harbour Installation	25%
The lawn area	18%
Recreational facilities, including slides and balance bike track	17%
Open to the public 24/7	16%
Pet-friendly	15%
Shelters and amenities	13%
The Central-Wan Chai Bypass East Vent Shaft	11%
Other	2%

Q. What do you like about this fence-free breakwater design? *



OTHER RESPONSES

New relaxation and luncheon spots	11%
Community and people oriented	9%
Evolving and creative approach	8%
Enhance public realm	5%
Ecological balance	2%
Other	3%

Major Takeaway

1

Majority supports the design of fence-free breakwater and welcome the idea of gentle steps / slope.

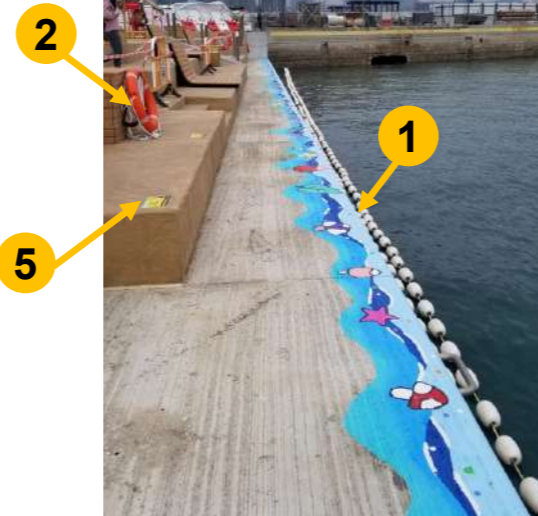
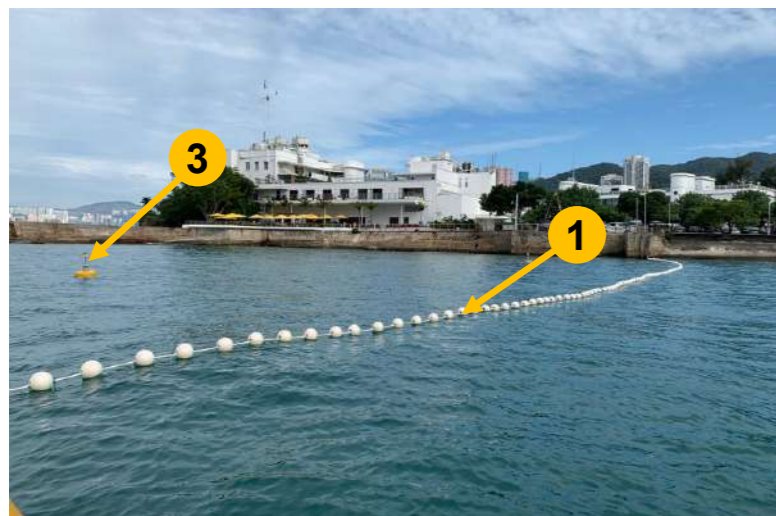
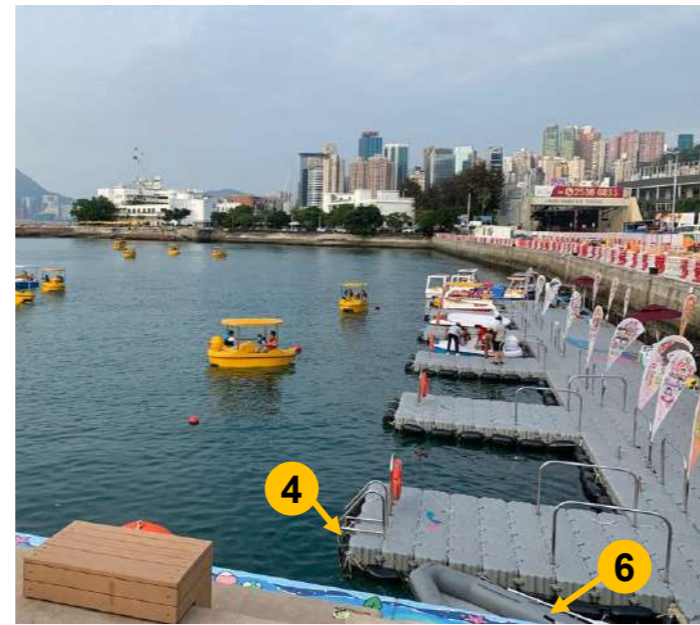
2

Public is mostly attracted by the sea view and proximity to the harbourfront.

3

Some were concerned about potential risk but this was more a perception than a result of real accidents having taken place.

Precautions and Safety Measures



1 Marker Buoys / Safety Buoys

2 Life-buoys

3 Special Mark Buoys

4 Safety Ladders on Pontoon



5 Warning Signage

6 Patrol Boat by Lifeguard

7 2 x CCTV (24 hours)



8 Life-saving services (2 nos.)

9 Security Services (2 nos.)

10 Closure During Extreme Weather



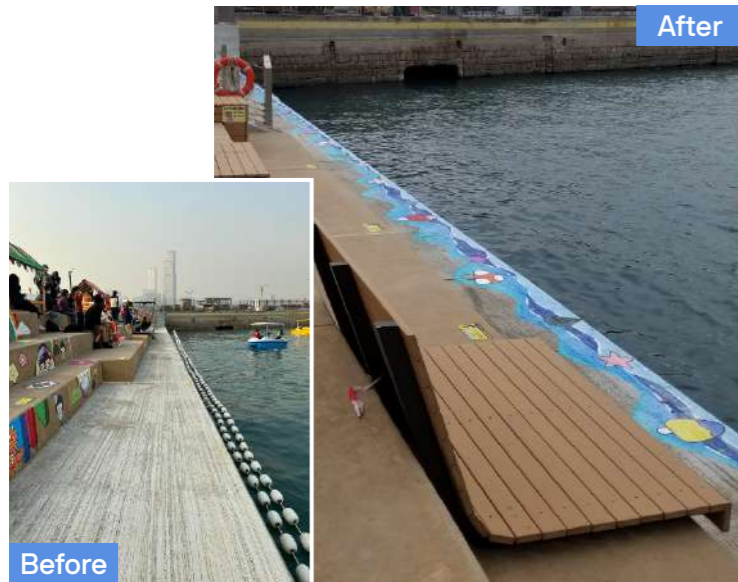
Service Hour:
From 10:00am – 10:00pm
& other water activities
(ad-hoc basis)

Service Hour:
24/7, 3 shifts

Incremental Approach

@ Water Sports and Recreation Precinct

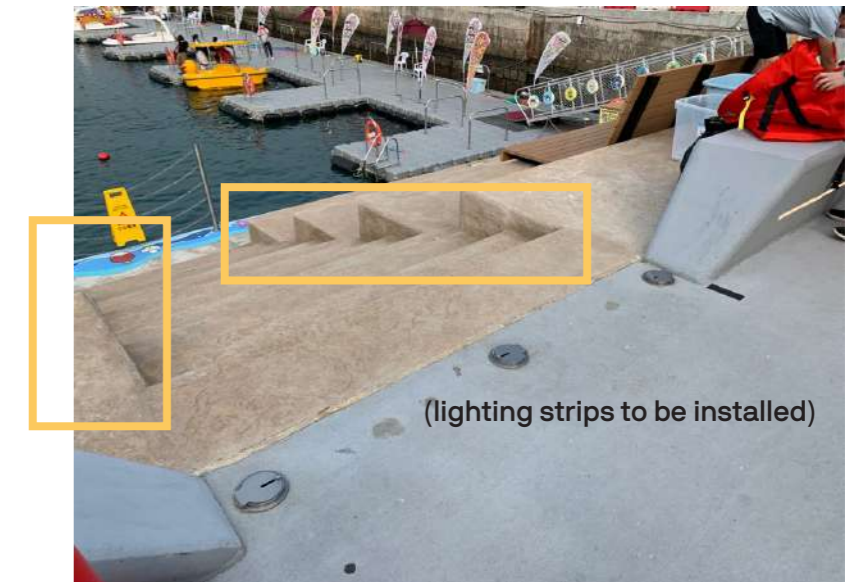
1 Boundary Line Painting



2 Bollards with Signage



3 Lighting on steps



4 Wayfinding Signages



5 Fairy lights



6 Water Scale



... and many more (e.g. shower and toilet facilities)

Thank you

“Interconnecting People and Making Places”

Address

G/F, 50-54 Lok Ku Street,
Sheung Wan, Hong Kong

105 Cecil Street, #18-00,
The Octagon, Singapore (069534)

Phone

Hong Kong: +852 2803 0202
Singapore: +65 9336 8937

Email

studio@onebitedesign.com