

# Reviving Pearl River Banks Through A CBD Pedestrian Promenade



GUANGZHOU. GUANGDONG. CHINA



# Master Plan

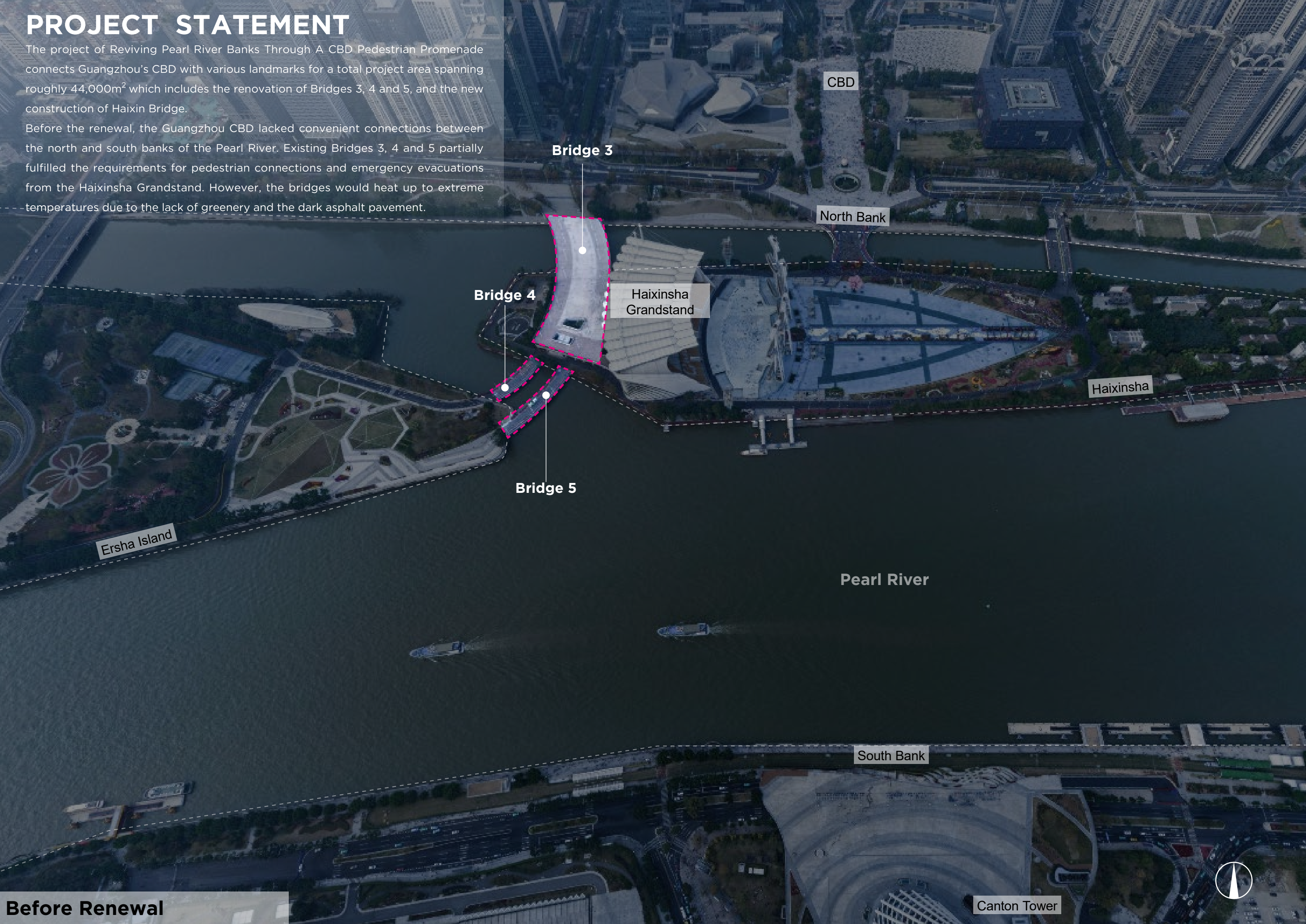




# PROJECT STATEMENT

The project of Reviving Pearl River Banks Through A CBD Pedestrian Promenade connects Guangzhou's CBD with various landmarks for a total project area spanning roughly 44,000m<sup>2</sup> which includes the renovation of Bridges 3, 4 and 5, and the new construction of Haixin Bridge.

Before the renewal, the Guangzhou CBD lacked convenient connections between the north and south banks of the Pearl River. Existing Bridges 3, 4 and 5 partially fulfilled the requirements for pedestrian connections and emergency evacuations from the Haixinsha Grandstand. However, the bridges would heat up to extreme temperatures due to the lack of greenery and the dark asphalt pavement.



CBD

Bridge 3

North Bank

Bridge 4

Haixinsha  
Grandstand

Haixinsha

Bridge 5

Ersha Island

Pearl River

South Bank

Canton Tower

Before Renewal

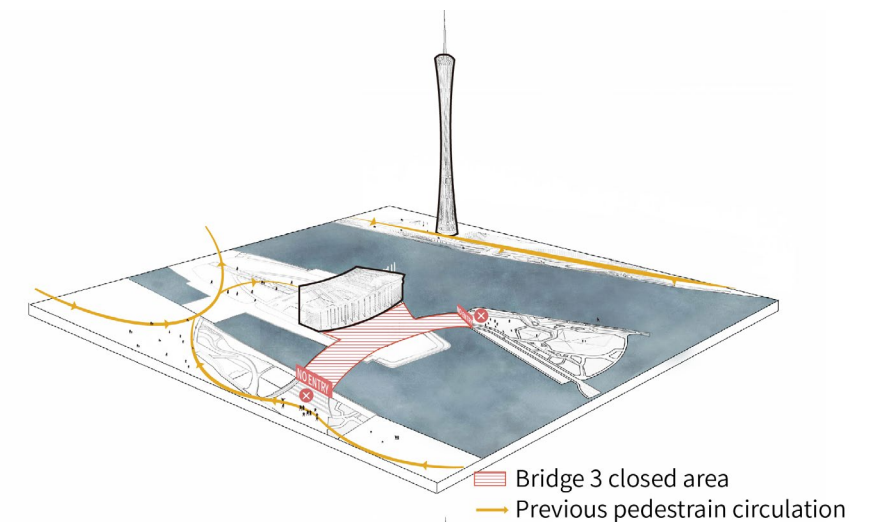


## DESIGN GOAL

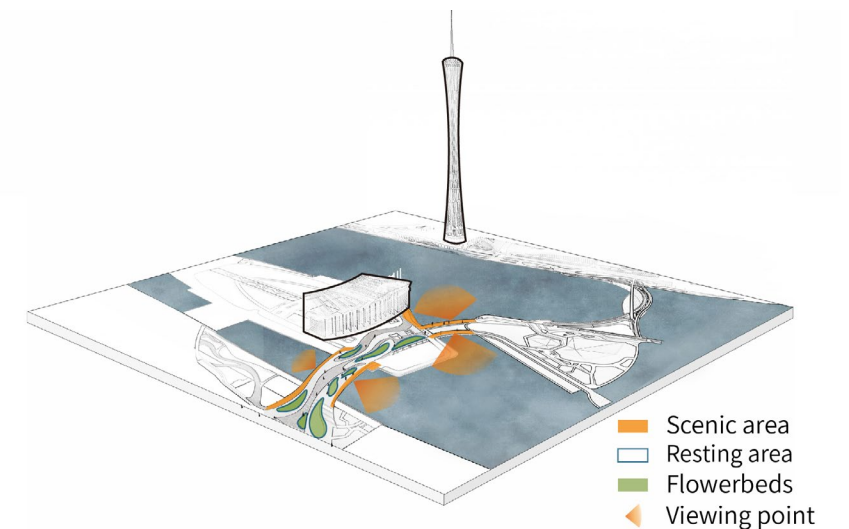
How to improve these scenic sites and increase their aesthetic appeal while safely evacuating crowds in an orderly manner remained a challenge. To meet these different needs, the landscape design needs to be functional, versatile, and provide comfortable and accessible outdoor spaces.

## STRATEGIES

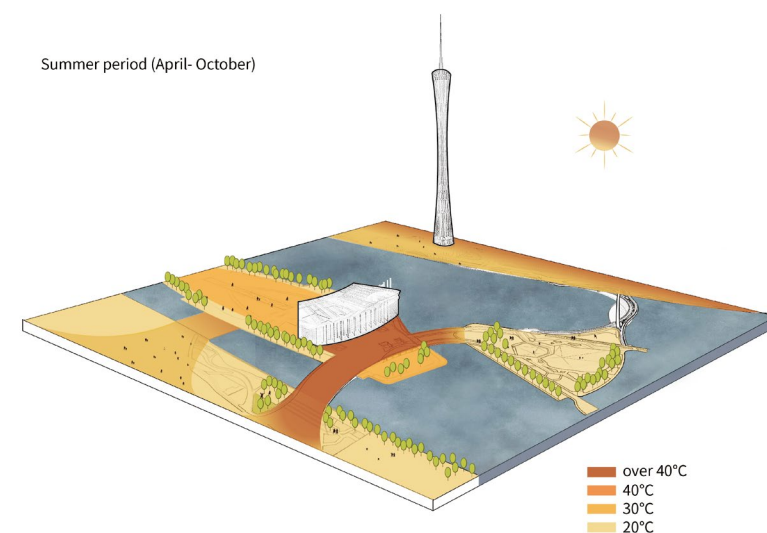
Our design team adopted the strategy of "Connection + Evacuation + View", which is linking up Bridges 3, 4 and 5 to optimize pedestrian circulation, and then connecting to the new Haixin Bridge, effectively uniting the north and south banks to create a landscape promenade. This interconnected, non-motorized passage contributes to an uninterrupted view of major sites along the Pearl River. Bridge 4 serves as a vehicular bridge connecting the underground parking lot of Haixinsha grandstand with the Ersha Island roadway, ensuring the safe separation of pedestrian and vehicles.



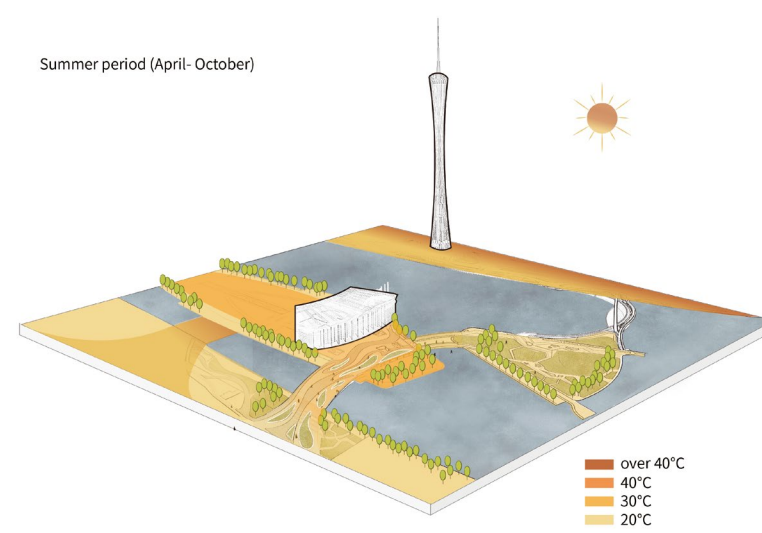
Before renewal circulation



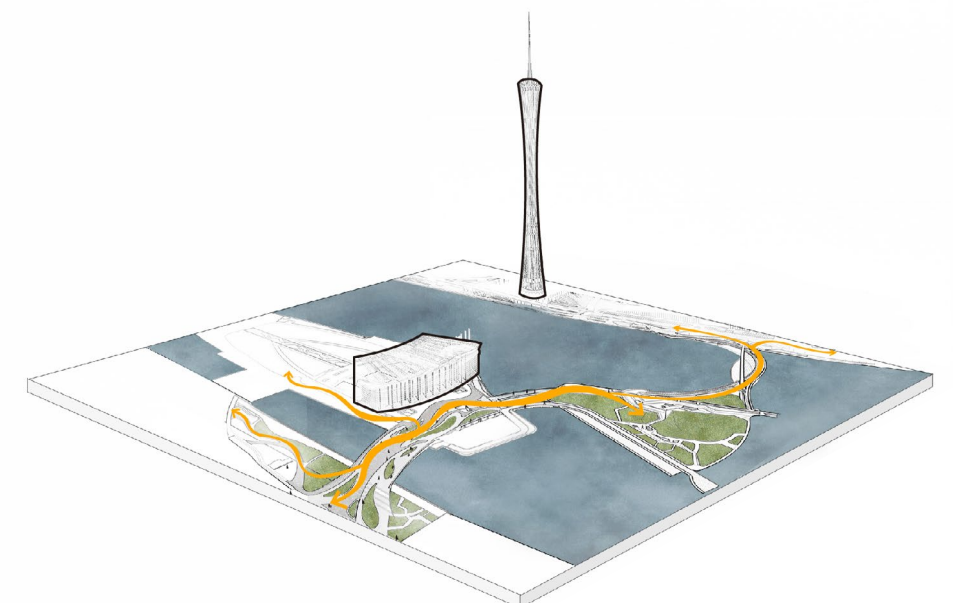
Post renewal circulation



Before renewal temperature analysis



Post renewal temperature analysis

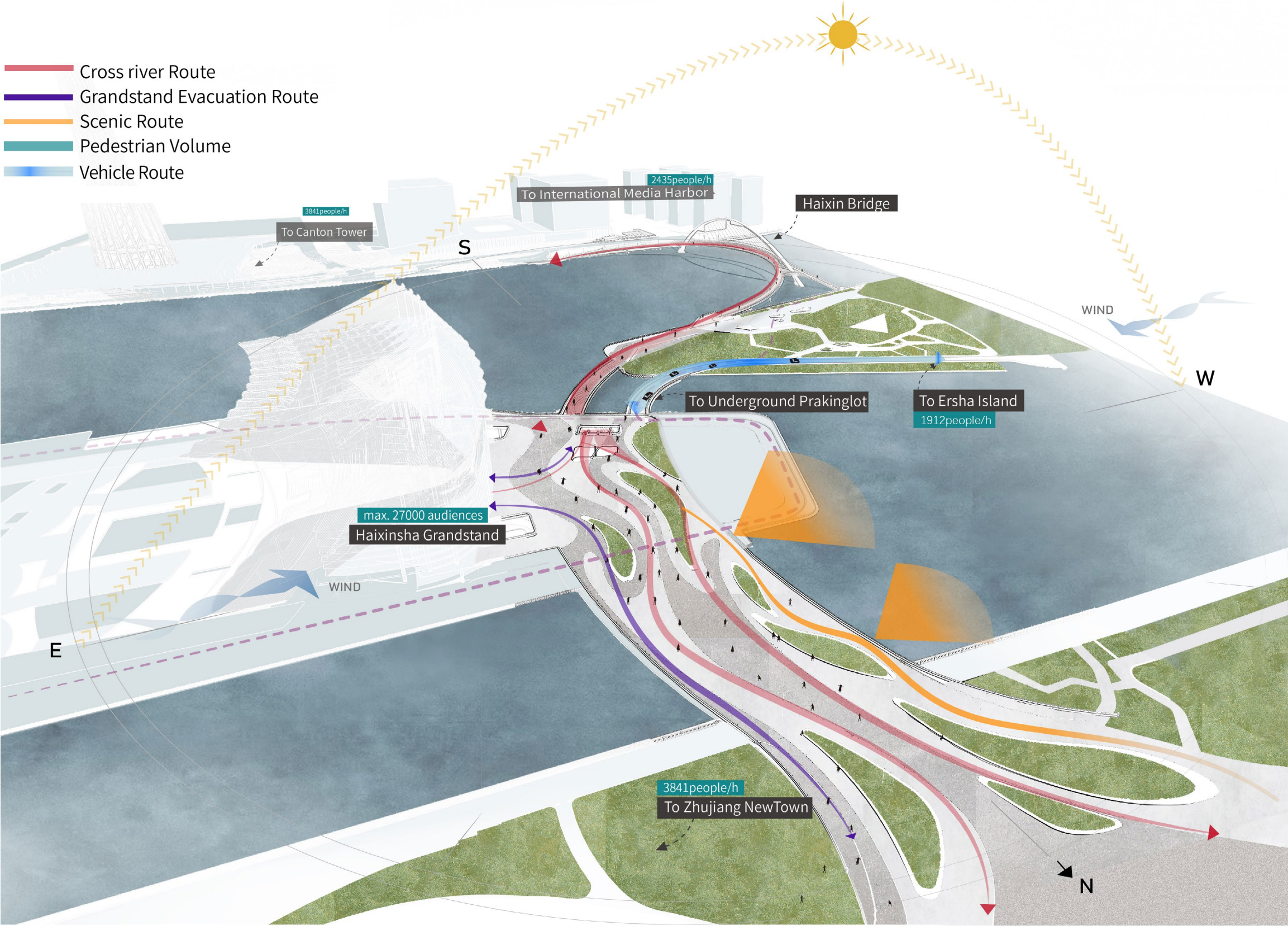


Strategy: Connection + Evacuation + View

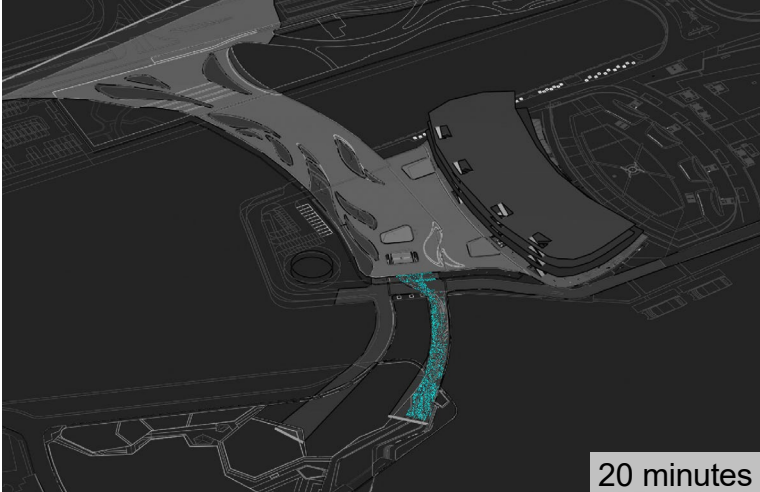
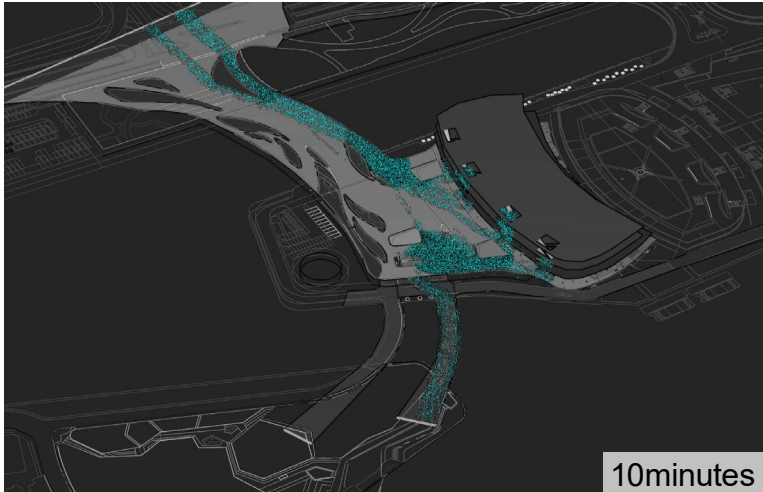
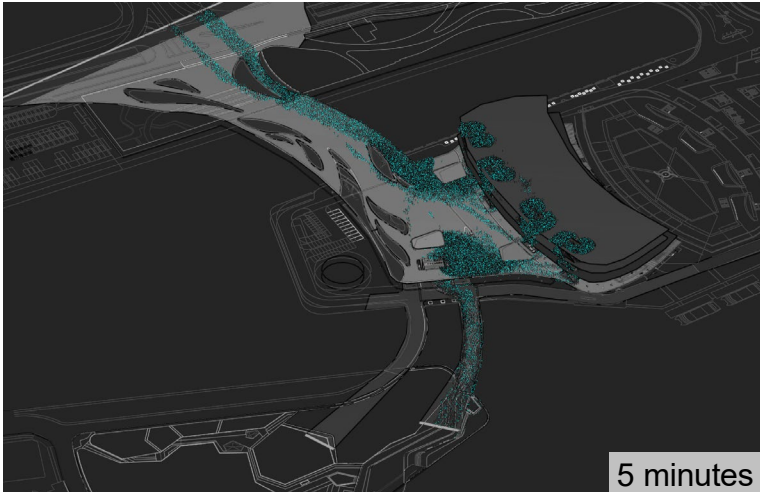


# STRATEGIES

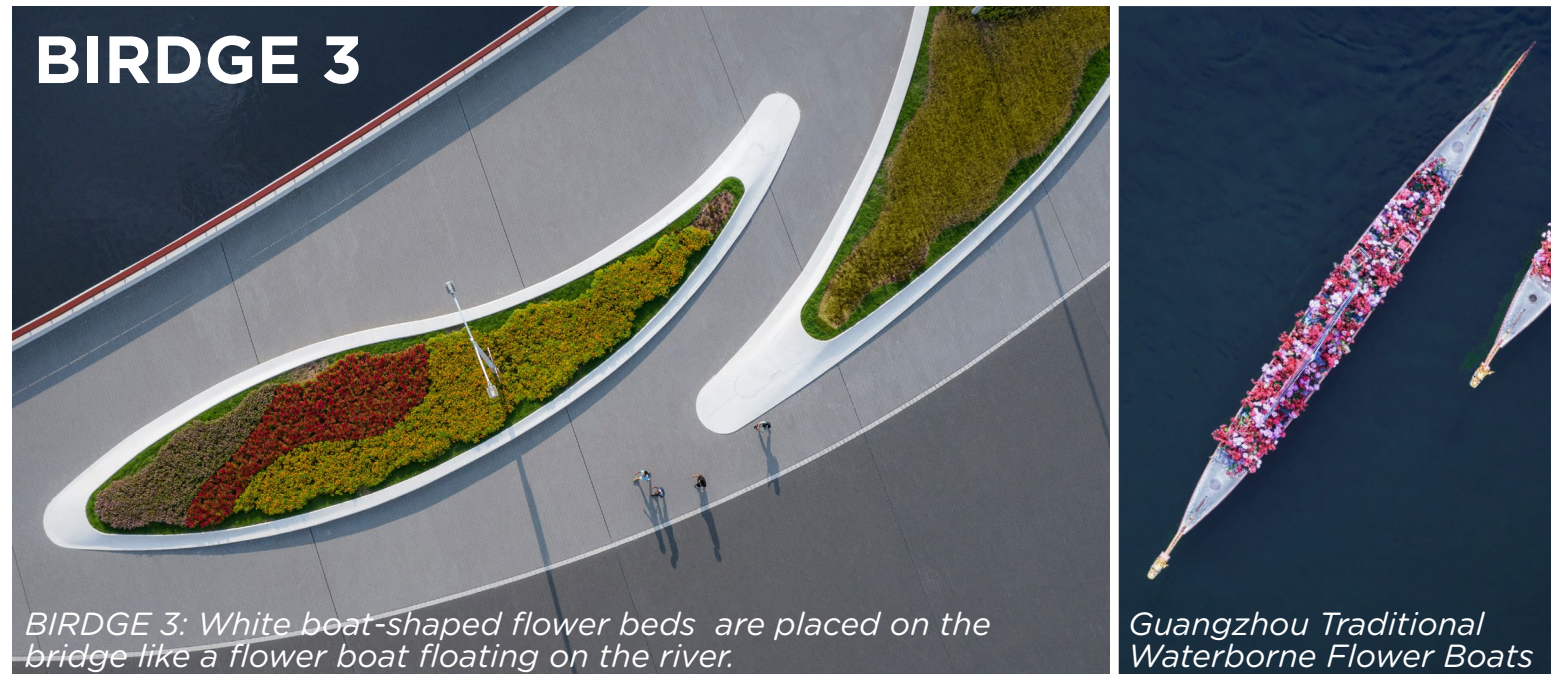
The pedestrian circulations are divided into three different routes on Bridge 3 based on the analysis of a pedestrian circulation simulation, which includes the Grandstand Route, the Pedestrian Evacuation Route, and the Scenic Route. The new design guides free traffic flow and river scenic spots by using a flowerbed layout and visual cues in the landscape pavement. To meet the city code and the necessary road surface requirements for fire trucks, the asphalt pavement was replaced with 18mm quartz bricks.



Evacuation Simulation of emergency







## BIRDGE 3/4/5 SECTION

Our design team offered several methods to solve the limit load problem of Bridges 3, 4 and 5, which were all unable to support heavy landscaping installations or tall plants due to structural load restrictions. To minimize the weight of flowerbeds on Bridge 3, the ends of the contour-shaped flowerbeds gradually slope toward ground level, seamlessly integrating into the pavement design. These flowerbeds use precast hollow concrete which effectively controls the load and avoids construction quality problems due to complex height differences with the existing bridge. On Bridges 4 and 5, paving patterns were shaped by lightweight pavers and designed to integrate with the existing expansion joint.



*BIRDGE 3: Follow by sustainable design principles, existing trees and lighting are preserved.*



## BIRDGE 3/4/5 SECTION

Traditional culture is also reflected in the design elements. Flowerbeds are placed on Bridge 3 that resemble traditional Guangzhou flower boats floating along the Pearl River. The plants not only reduce the “heat island” effect, but the edges of the flowerbeds also serve as seats to pedestrians. Following sustainable design principles, existing trees and lighting are all preserved.



*BIRDGE 3: The Pearl River North Bank has become a popular recreational space for local residents and tourist.*

**BIRDGE 3**

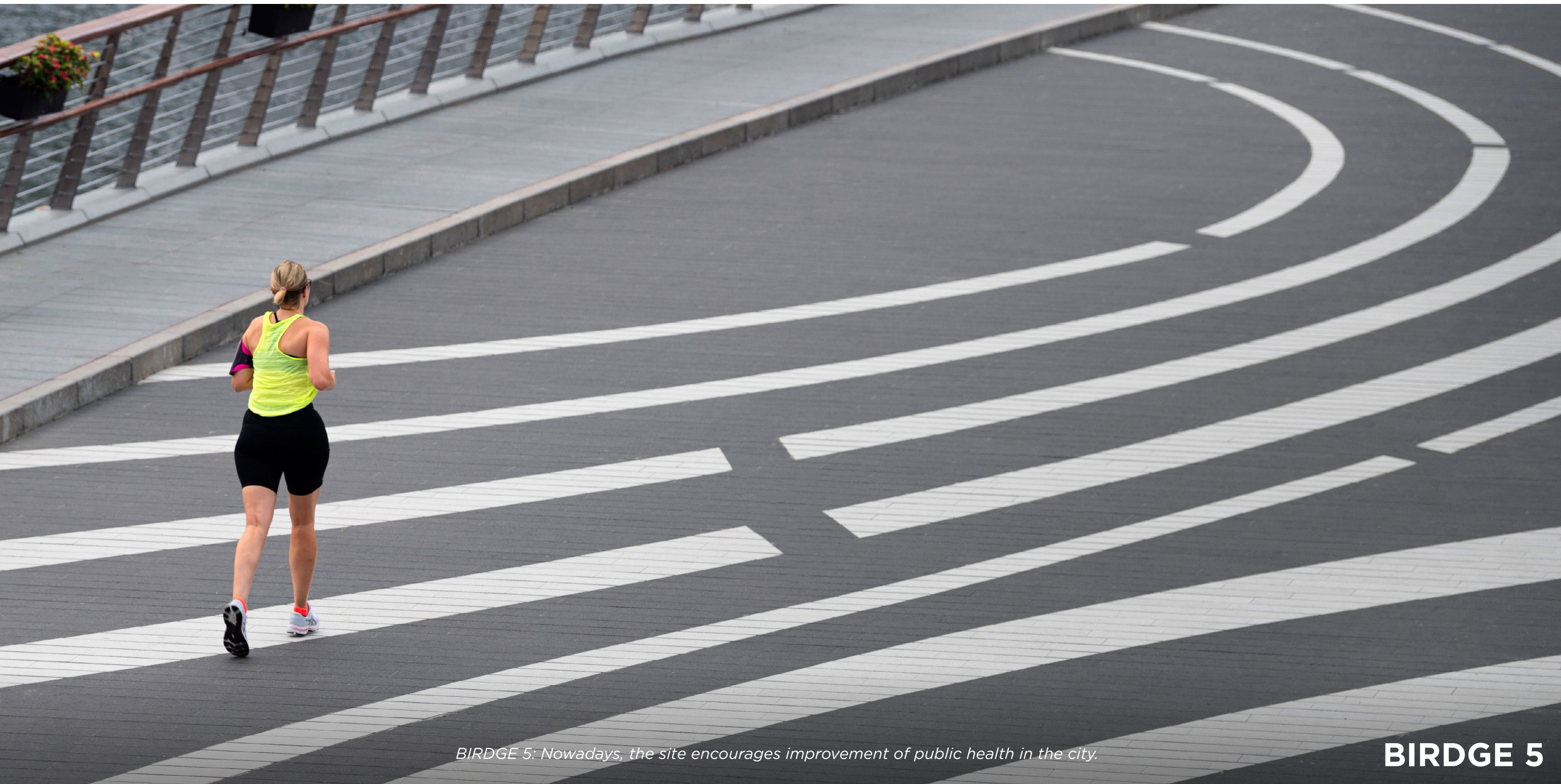




*BIRDGE 5: paving patterns were shaped by lightweight paver and designed to integrate the existing expansion joint.*

**BIRDGE 5**





*BIRDGE 5: Nowadays, the site encourages improvement of public health in the city.*

**BIRDGE 5**



## THE HAIXIN BRIDGE SECTION

The Haixin Bridge section fulfills its role as a connector, linking the pedestrian systems across both banks of the Pearl River as well as Haixinsha and Ersha islands, greatly reducing the daily commute time of people between the north and south banks. Facilities such as seating areas, flowerbeds, and awnings on the bridge have contributed to its transformation into the most famous scenic spot in Guangzhou. Considering the expected increase in pedestrian traffic from the North bank to the South bank upon the completion of the Haixin Bridge, we have integrated a waterfront plaza and rest areas into the southern bank design to effectively address issues related to pedestrian circulation and evacuation.

Since the Pedestrian Promenade was built, the North and South banks of the Pearl River have been thriving due to the increased circulation, bringing a new energy to Guangzhou's CBD.







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