



SKYRING FOOTBRIDGE

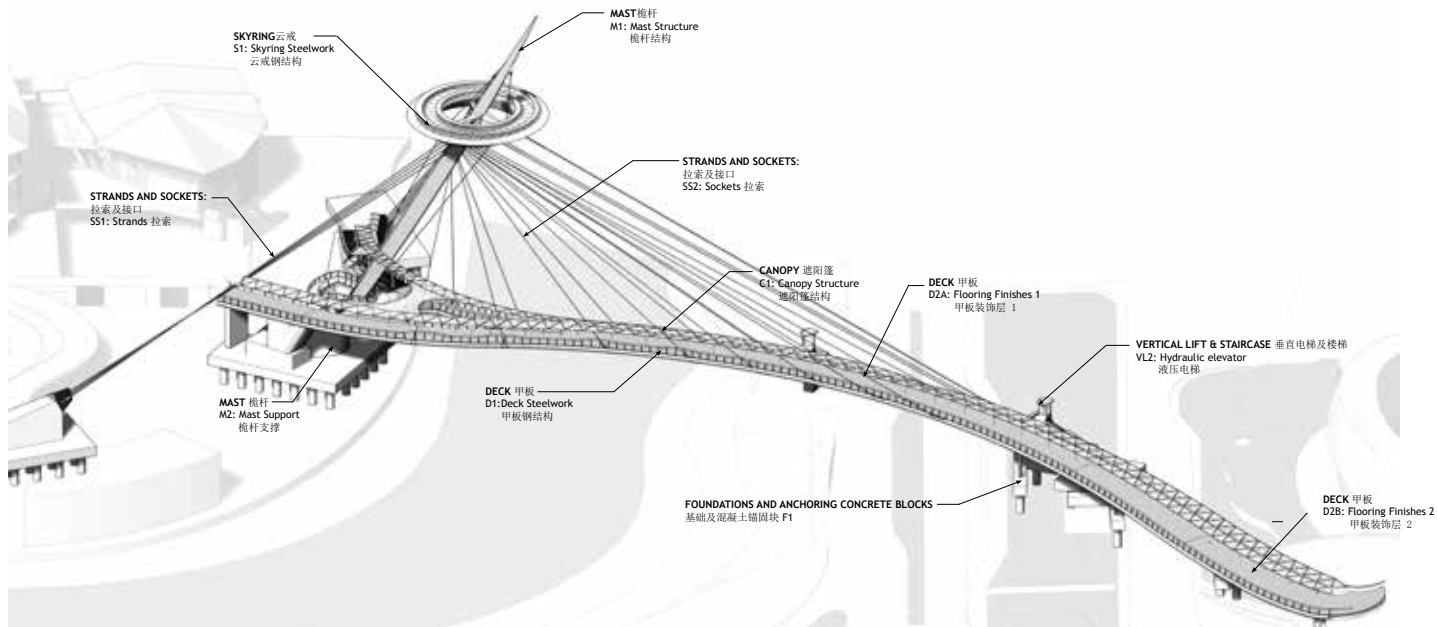
Sanya, China

HDA

HUGH DUTTON ASSOCIÉS



Image HDA©



Axonometric view of bridge 3d model \ Image HDA©

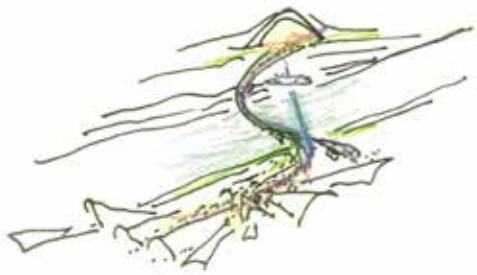
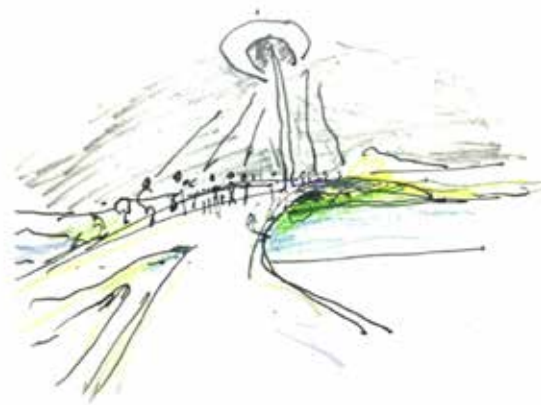
CONTEXT

The new Island shopping area is as much a tourist destination, a 'Brand New Experiential Holiday Hub', as it is a commercial experience. Visiting it should be a family event, a leisure experience attracting people to the island.

CONCEPT

The inclined pylon and the floating ring create a strong silhouette, an iconic symbol. Instantly recognizable, it attracts people to River Island from afar and places the new experience at the heart of the landscape, helping to develop it as a successful commercial and family destination.

We strive for an elegant form. The strong silhouette of the pylon suspends a delicate array of cables which carry the pathway across the river to the island. Elegance comes from efficient structural design, and together the pylon, cables and suspended pathway converge in a structural design that is both efficient and elegant.

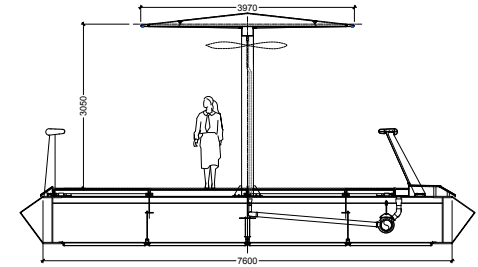


Concept sketches

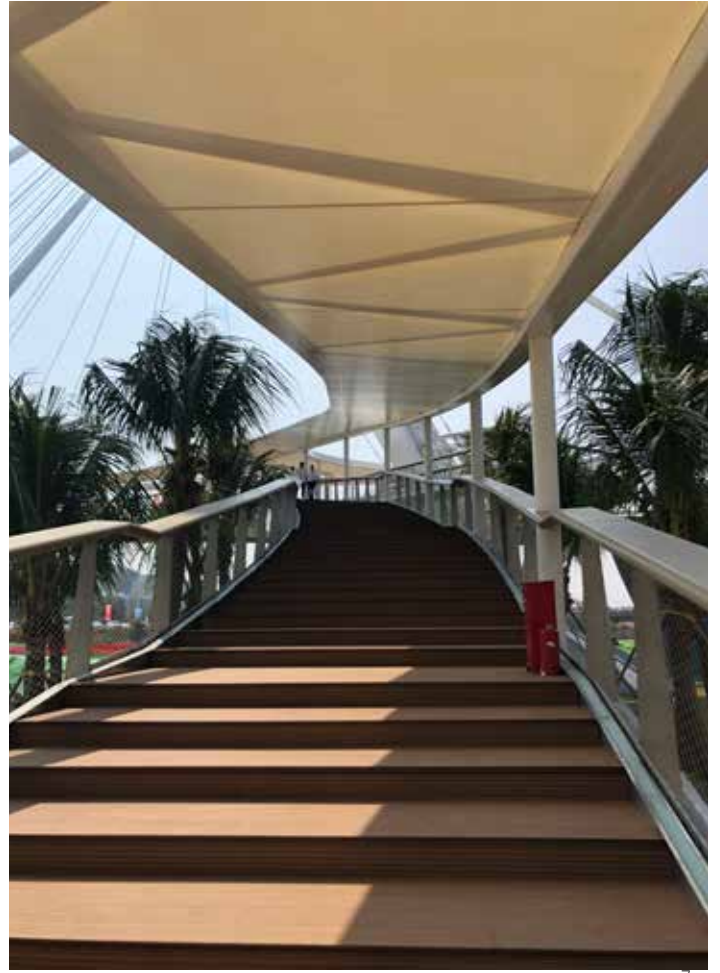
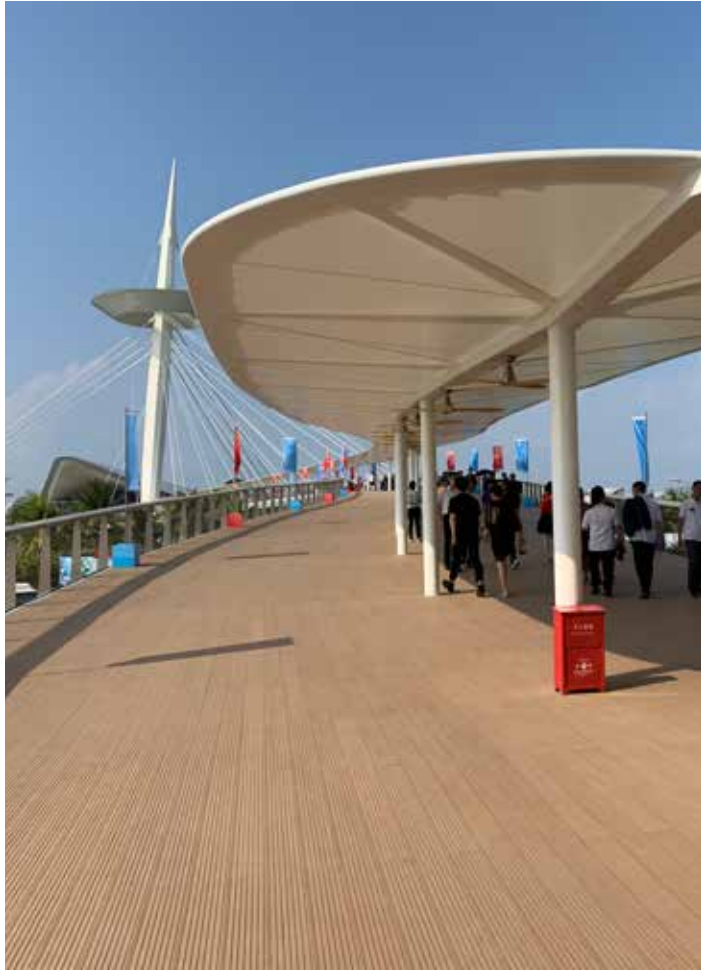
THE PATHWAY

The pathway begins with a garden walk, an extension of the landscaped plinth of the existing Duty-Free Centre. Canopy for people to linger and appreciate the view. In the evening, soft lighting creates a fantasy promenade. The shading canopy includes fans in wood to provide a gentle air movement for the users on still days to improve the comfort of the users.

He splits to either side of the inclined pylon, the 'Y' form providing structural stability and giving people the option of heading directly for the Arrival Plaza or descending to the water's edge. The suspension cables split apart as the deck divides, creating a sculptural spatial experience.



Deck Typical Section







THE SKY RING

Arriving on the island, visitors can take a trip 50m up to the Sky Ring observation deck, a discovery sightseeing experience which progressively reveals panoramic views of Haitang bay unfolding before them.

Many cities, big and small, boast a viewing point as a destination, and the Sky ring taps into the immense popularity of attractions like the Shanghai Communications Tower, Pearl of the Orient, the London Eye, the Eiffel tower and Brighton's i-360.

We all have a basic human desire to vanquish heights, to climb mountains
We all love to climb to the top.



Image HDA©

Beam Disp: Mag(T) (mm)

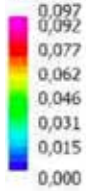
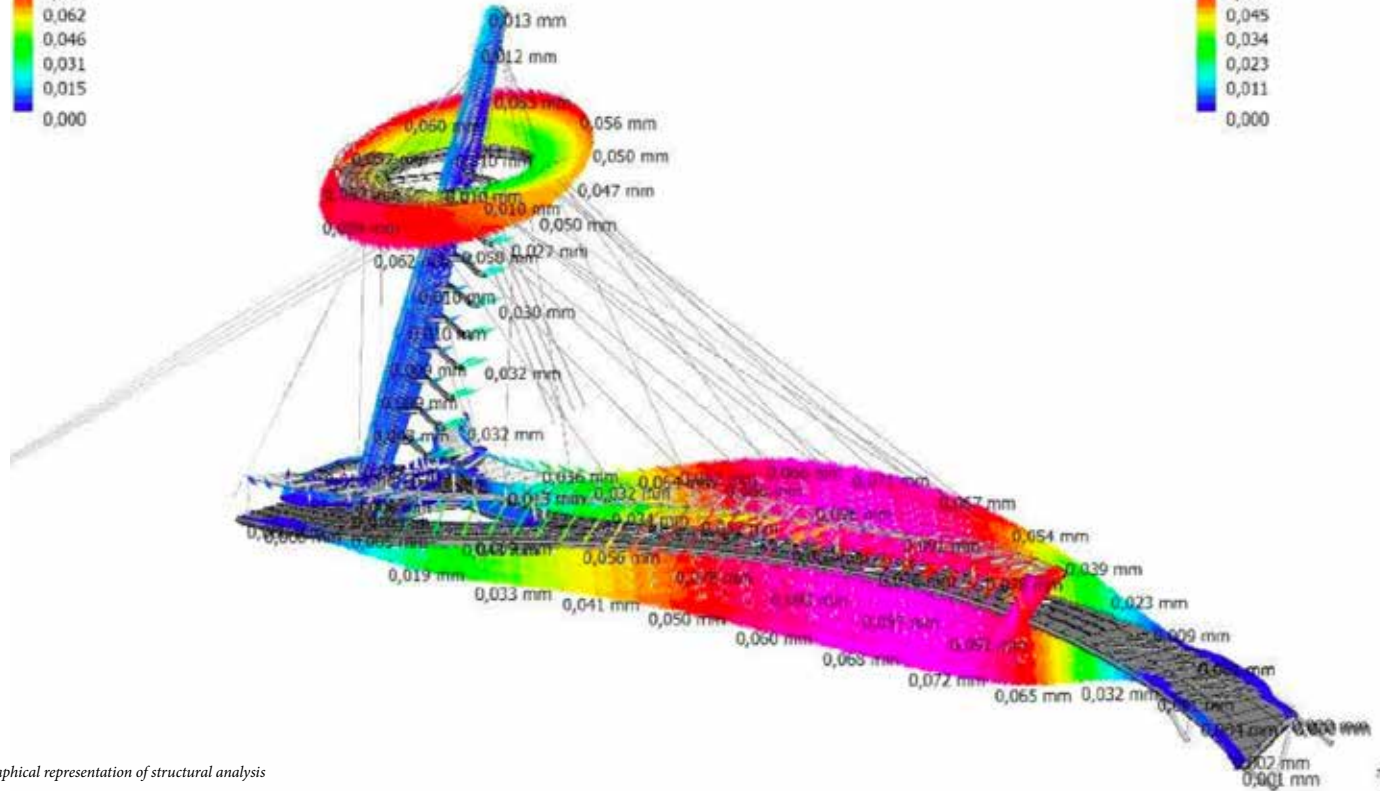
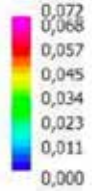
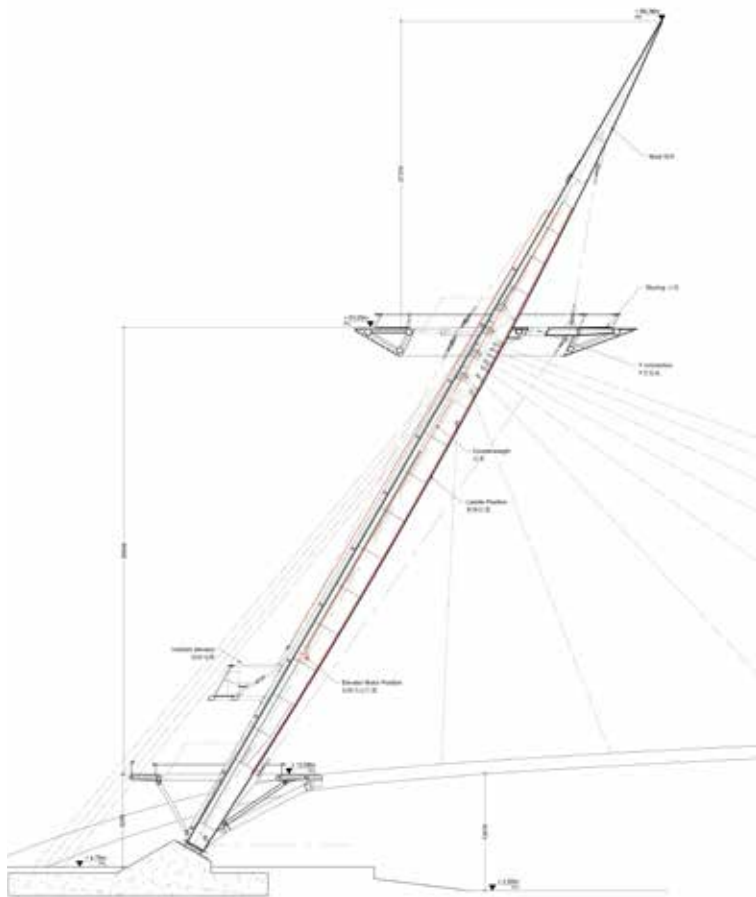


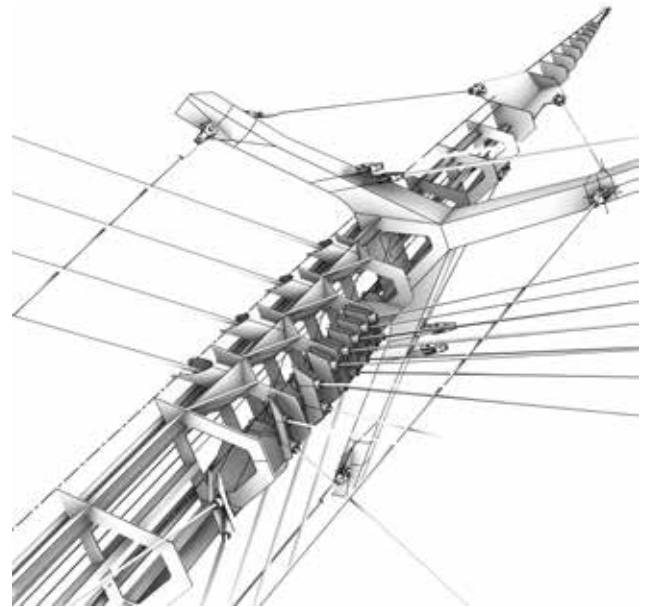
Plate Disp: Mag(T) (mm)



Graphical representation of structural analysis



Mast Section



Detail of Mast

RING OF THE MOON

At night, the suspended ring floats freely in the sky - a luminous circle, a pure form, like an ever-present moon. The iconic symbol that River Island needs.



Concept sketch HDA©





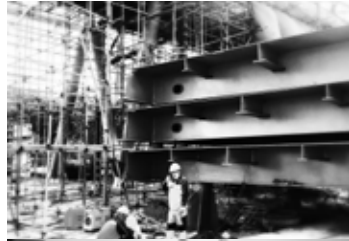
Image HDA©







Image HDA©





SKYRING FOOTBRIDGE

haitang bay footbridge, sanya, PRC 2017-2019

Fondation concrete	8155	m3	Tuned mass Dumper	8	u
Number of piles	81	u	Bridge length	233.4	m
Steel tonage	1103	t	Main span	90.8	m
Mast	331	t	Mast length	84.62	m
Skyring	59	t	Mast Angle	60	°
Deck	713	t	Mast level	74	m
Deck surface	2260	m ²	Skyring diameter	25.23	m
Canopy surface	1275	m ²	Skyring level	57.3	m
Handrail length	700	m			

Client:	China Tourism Group
Architectural and structural design:	Hugh Dutton Associés
Concept engineering:	BucciAndPartners
Lighting Consultant:	Panorama
Wind tunnel study & Dynamic analysis:	Shijiazhuang Tiedao University
Contractors:	China Communications Construction
Steel Manufacturer:	Zhenhua Port Machinery Heavy Industries Co.,Ltd
Cable Manufacturer:	Liuzhou OVM Machinery Co.,Ltd.
Inclind Lift Manufacturer:	Suzhou Rhine Lift manufacture Co.,Ltd



Photograph of construction site



Image HDA ©



Image HDA©









