

Masterplan Wuhan Railway station China

Client:

Chinese Ministry of Railways

Scope of services:

Architectural design scheme

Urban master planning

Executed under name:

DHV Shanghai

Location:

Shanghai, China

Period of assignment:

2004



Situation

In China the most common way of travelling is by train, therefore the Chinese Ministry of Railways increased their investments in rail infrastructure. One of the planned developments is the High Speed Link between Guangzhou in the South with Beijing in the North. The special passenger trains on this line will also stop at Wuhan the most important city in Central China. As it is not possible to adopt these extra trains at the two existing stations, the Ministry of Railways has decided to develop a new railway station in Wuhan. This train station will be a multi modal transportation hub, which combines rail, road and metro. The planned location for this station is currently a rural area at the periphery of the city nearby the beautiful East Lake.

Assignment

The Chinese Ministry of Railways has invited DHV to join the design competition to develop a master plan for the Wuhan Railway Station. This master plan included the following scope of services:

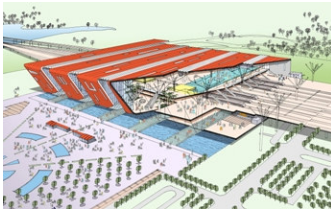
- Architectural Design of the Station Building
- Urban Plan for the surrounding area of 25 hectares
- Landscape Design for the station square
- Logistic analysis of the different modalities



- Technical aspects of the Station Building, like
 - Heating ventilation and air conditioning
 - Electricity supply
 - Sanitation systems
 - Fire safety

The Project

The station will be the biggest in Central China with an estimated 31 million annual passengers in the year 2020. The proposed new railway station will be one of the worlds most advanced, not only technologically, but also in its concern for passengers and operators.



The building shape is an ongoing movement of transparent and massive parts like a corkscrew, which symbolises Speed. This twister provides a single unifying form, which unites the station building visually and geometrically.



The station building is designed for 16 tracks with 9 platforms, which will enter the building at 10 meters above ground level. Above the platforms the waiting lounges are located, combined with several commercial activities. Under the platforms at ground level there are ticket offices, technical installations and central restaurants and shops. The total building has a size 360m x 330m and the highest point is 58m.



At the front side of the station the underground metro station is situated and at the back side the bus terminal. These three modalities combined forms a perfect transfer hub for the passengers. This split up is made to create clear logistic and easy path finding for the traveller.

A new urban plan is developed for this area based on the original proposal from the client. Special attention is paid to the integration of the three lakes by adding an aquatic zone into our plan as well as linking the station with the business district by creating a green avenue into a high density building block.

The design is conducted on the principles of being humanitarian, safe and sustainable. As well as on future growth in capacity, flexibility in use, rational and economic.

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