

A tale of 3 places –
An Update/Review of Contemporary
Construction Practice in
Hong Kong, China and UK
Part 1a, Guangzhou

Speaker: Raymond Wong Wai-man
City University of HK
31 May 2018

Raymond Wong has been studying the construction practices of Hong Kong and China for more than 20 years. Last summer, he has been to UK for a few weeks to continue his field studies with a focus on urban development and various construction project cases.

After his returning from the trip, he thinks of a new seminar title to share with his professional fellows. He will summarize and make a presentation to illustrate the contemporary construction practice in these 3 places that he is quite familiar, in particular Hong Kong and China. In this talk he will highlight the common practice as well as the differences in the use of construction techniques and work set-up when handling construction projects especially for those with a **relatively large-scale and complex** nature.

What is construction? Below is some simplified interpretation from the speaker's perspective:

- The process to construct something no matter they are very big in size or not exactly involving building or civil work nature. (for example to develop a new town or new urban zone)
- The work structure, organization, managerial arrangement and mechanism behind the entire process that make such construction possible.

The speaker, Ir Raymond Wong, is more focused on the construction process of **projects on various nature** as a major part of his professional studies.

Construction can be in various forms. Below is some major categories of construction projects:

- Building construction.
- Civil construction.
- Special construction/structure/facilities
- Urban/city developments

Speaking in a professional way , either building or civil construction can be sub-divided into some very different sub-categories, such as:

Building work – building of very large size/super-highrise, building constructed in RC/structural steel/precast, building with extremely challenging structure elements, buildings in extremely complicated forms/shape/spatial layout.

Civil work – transportation facilities, underground construction, tunneling, slope work, reclamation, marine work, port and airport development, bridge construction,

What is construction practice? Below is some simplified interpretation from the speaker's prospective:

- Construction planning to make the site work be able to carry out in an efficient and cost-effective way. (construction program, method statement)
- Setting up of the site in order to perform all the construction work. (site layout planning in various stages)
- Provide the facilities that make construction works be workable. (equipment and other logistics set-up, safety provisions, all the required temporary works)

Part 1

Contemporary Construction Practice in HK

To be continued in the latter session due to prioritizing overseas' practices

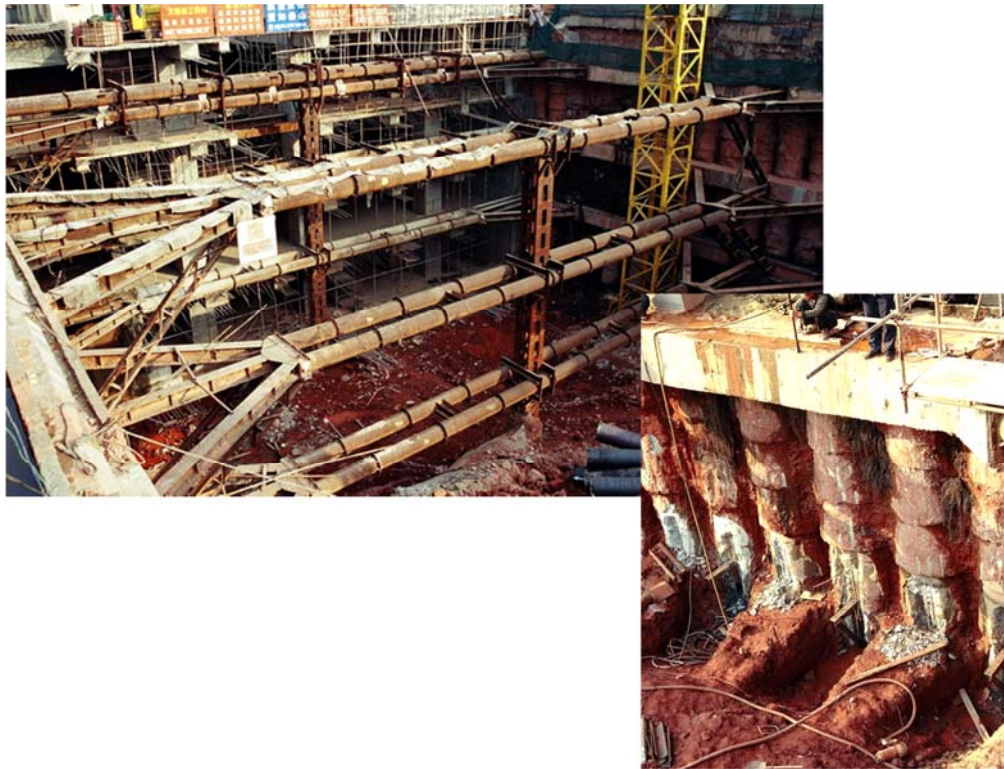
Part 2

Contemporary Construction
Practice in China

China construction practices,
the old days and the old way,
about 15 to 20 years ago

Guangzhou

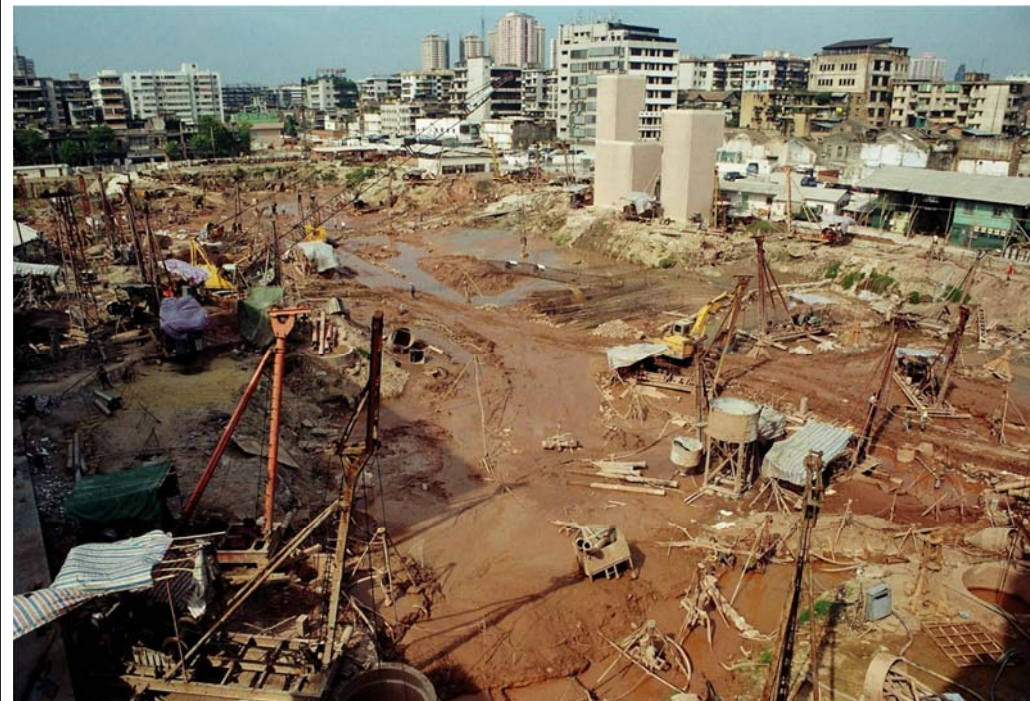






Property development for the GZ Metro Line 1 in Huangsha Station

Some old ways for
foundation works





Caterpillar machine







Some old ways for works in public spaces







Works along the road-side





Road Works



Some images reflect the harsh
and difficult livelihood of
construction workers



Site is quite a
dangerous place,
working at height is
only part of it.



Join hands can give strength



Site delivery team





Good partner working on top as a support to excavation inside a caisson shaft



Site is quite a dirty place



Circus show inside construction site.
Let's go mountaineering



Juvenile workers



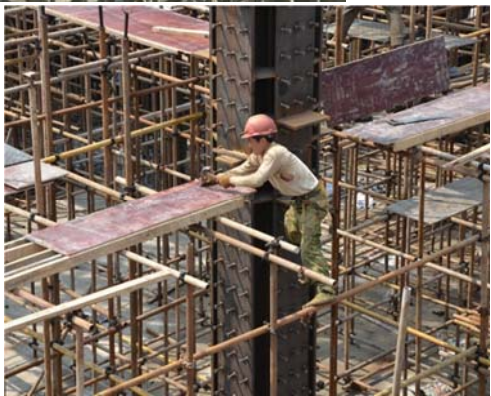


Guy, be very very careful !



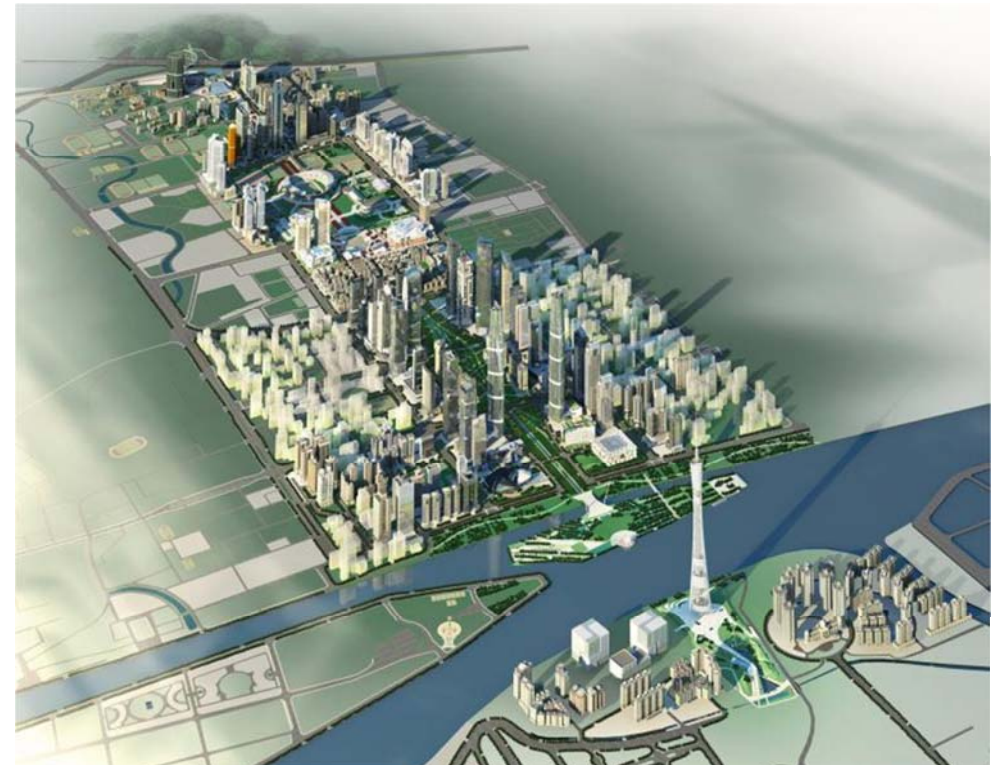
Enter into the battle field - Access to work

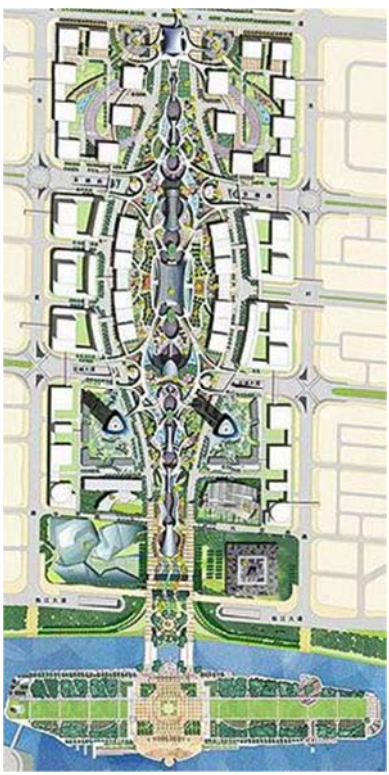






Case Reference
Development of Guangzhou new city Axis







The story started from the construction of the Guangzhou East Station in early 1990s'



Construction of the GZ East Station (extension in early 2000s



The southern end of the new GZ city axis



GZ new axis as seen in late 1990s & early 2010s



GZ new axis as seen in 2017



GZ new city Axis under construction in late 2000s



GZ new city Axis under construction in late 2000s



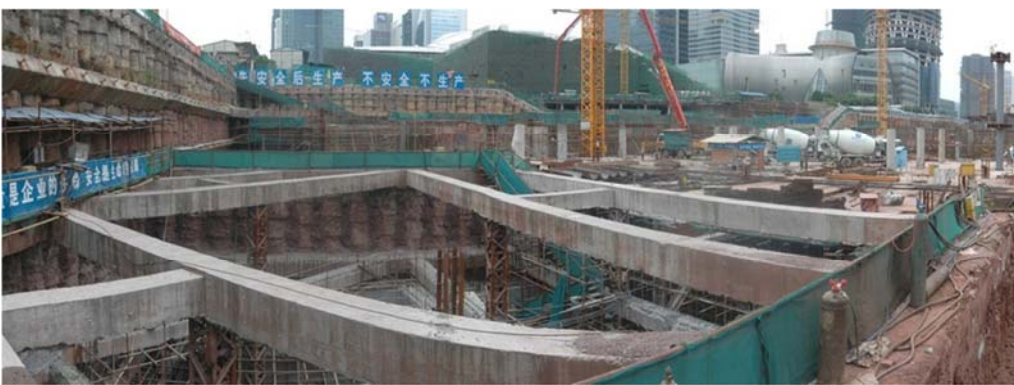
Road & services diversion



GZ APM Line
Auto-People Mover

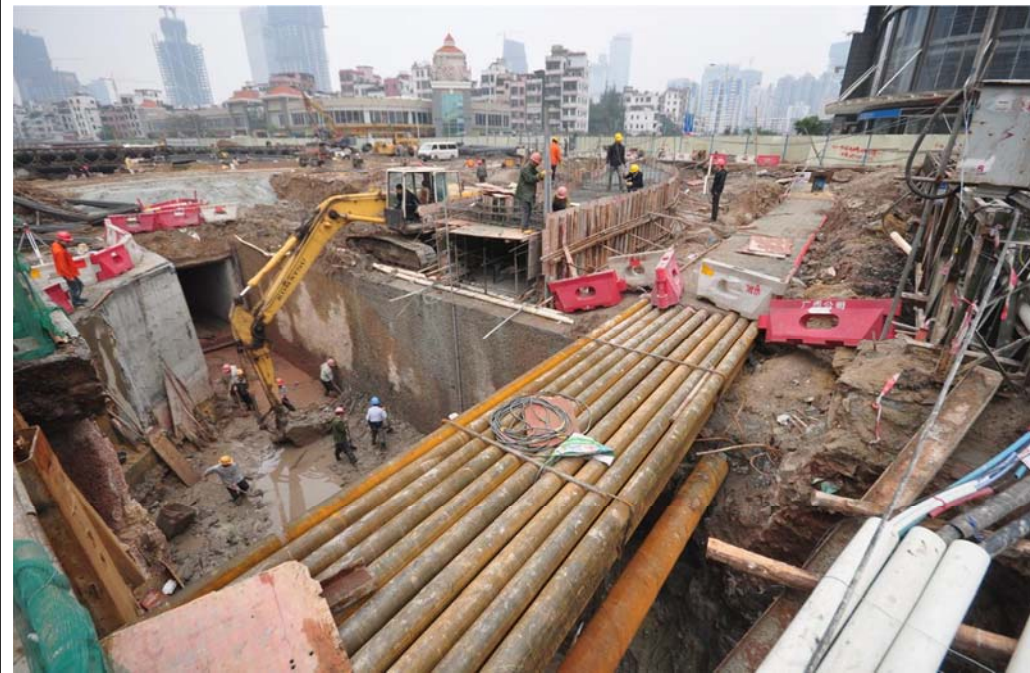






Entrance to the
underground car-port





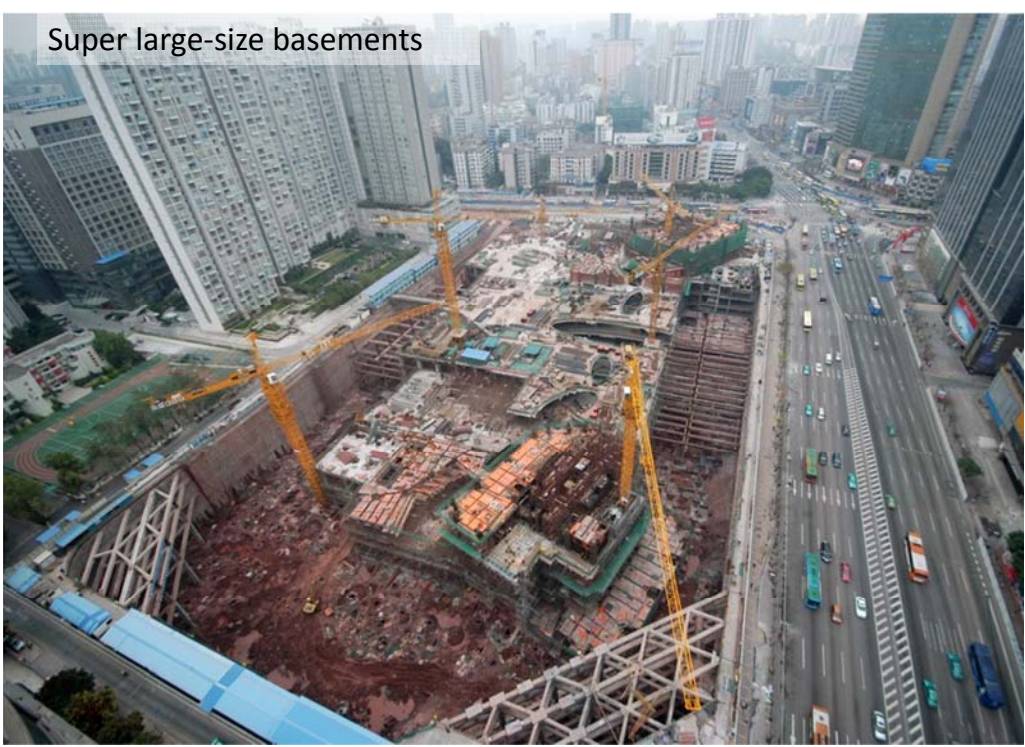
Road and utility diversion



Super large-size basement



Super large-size basement – GZ Taikoo Hui



Super large-size basements





Super large-size
basements





Some iconic commercial developments



Construction of an underground street at Tien Ho (2009)



Location for future SHK Parc Central



Parc Central

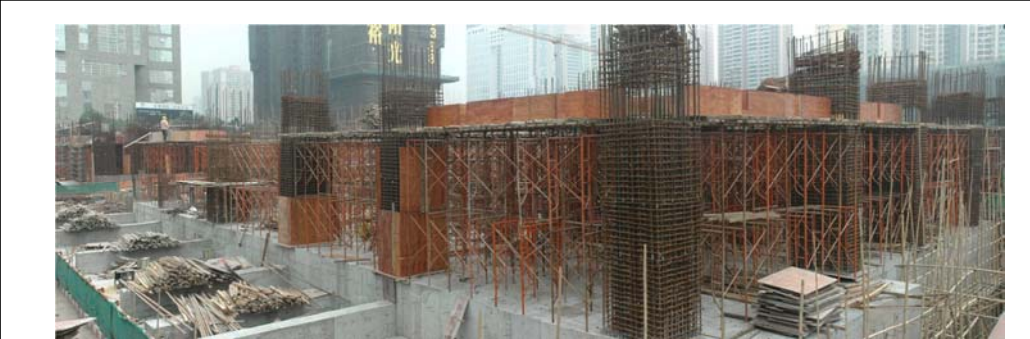
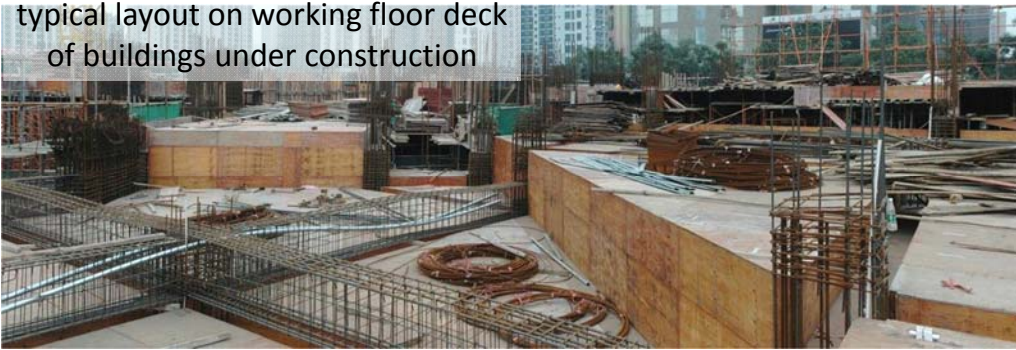


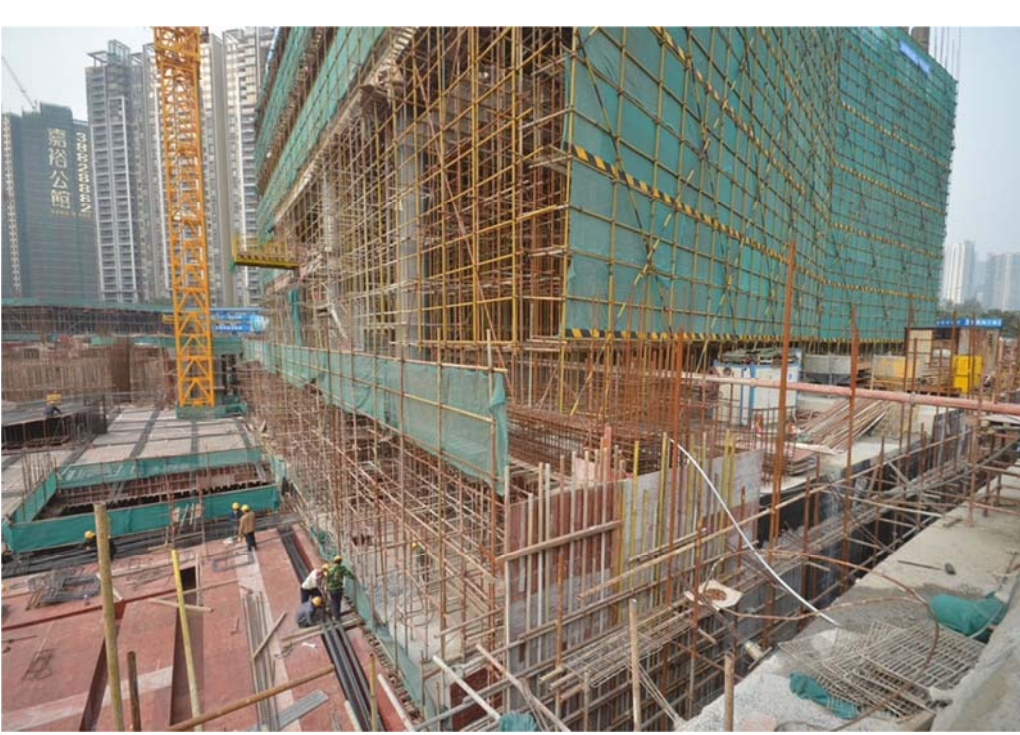
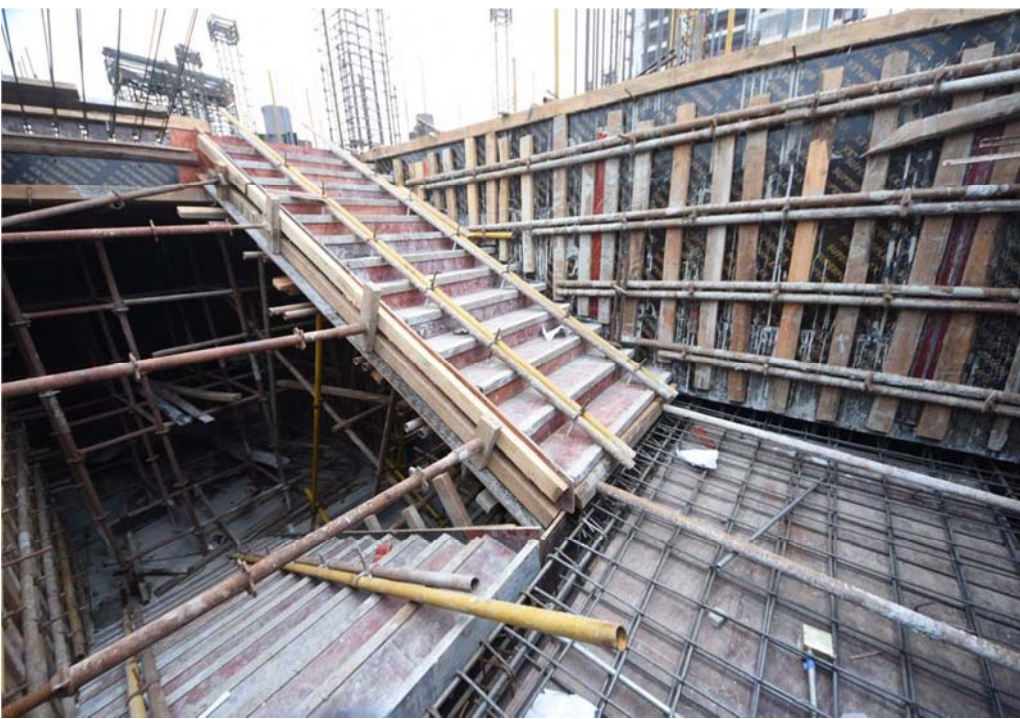
Parc Central



The application of technology in construction and work set-up for sites

typical layout on working floor deck
of buildings under construction





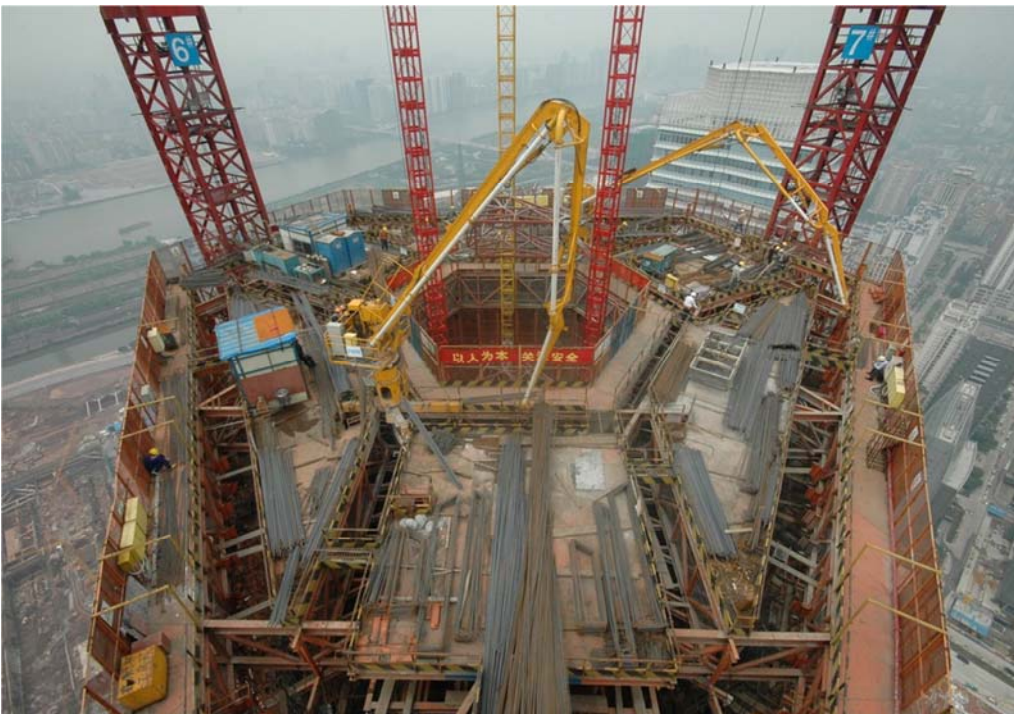
General Work layout for the working floor deck for high-rise buildings



General Work layout for the working floor deck for high-rise buildings (using climb form)

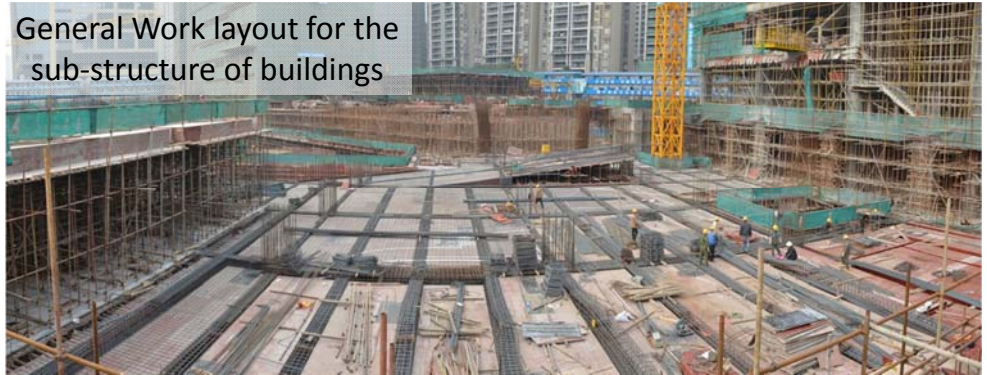


Work set-up on the deck of a working floor using a kind of climb form





General Work layout for the sub-structure of buildings

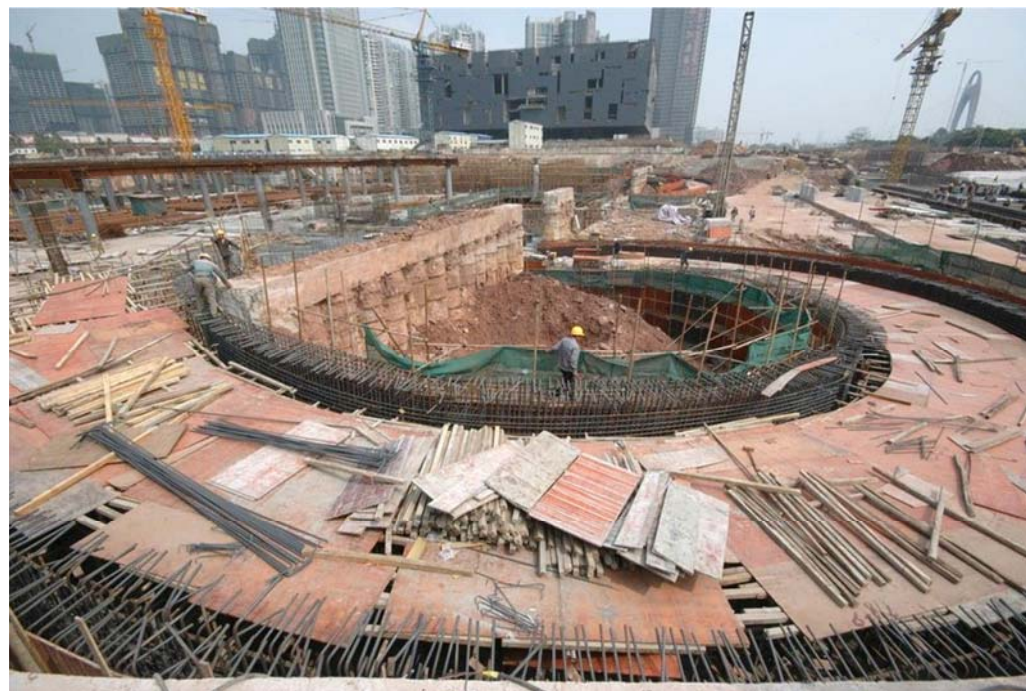




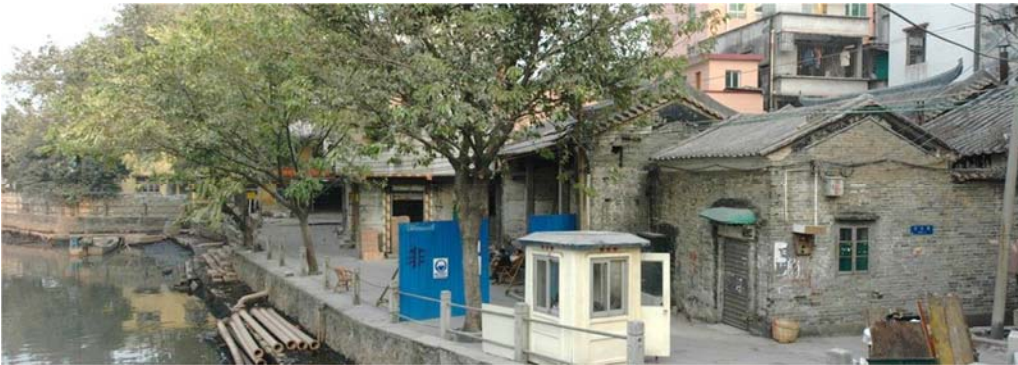
Formwork for ground structures using brick work



Blinding laying used as formwork for basement slab









Redevelopment of villages inside city (the Ledi Project)

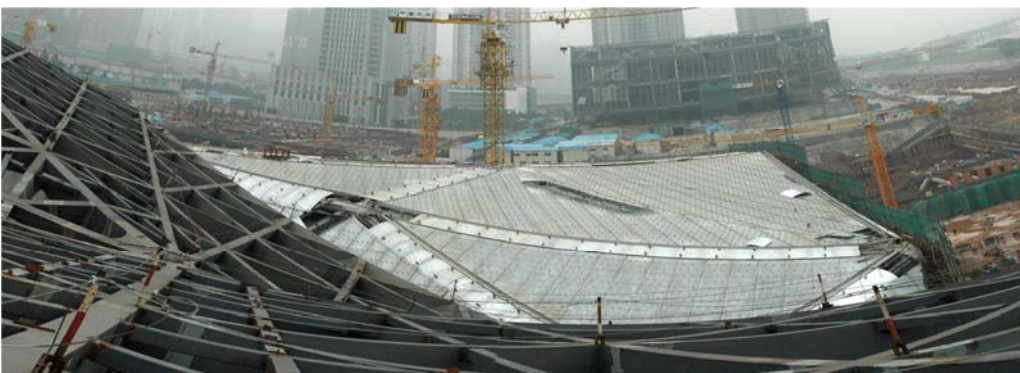






Structural steel construction

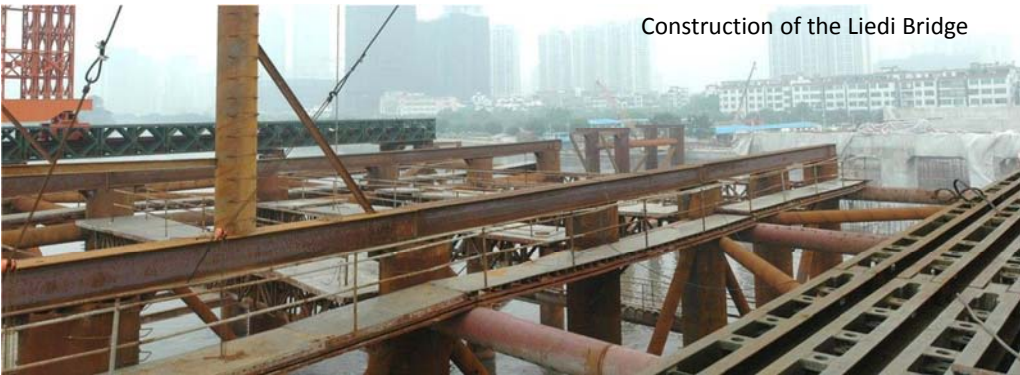








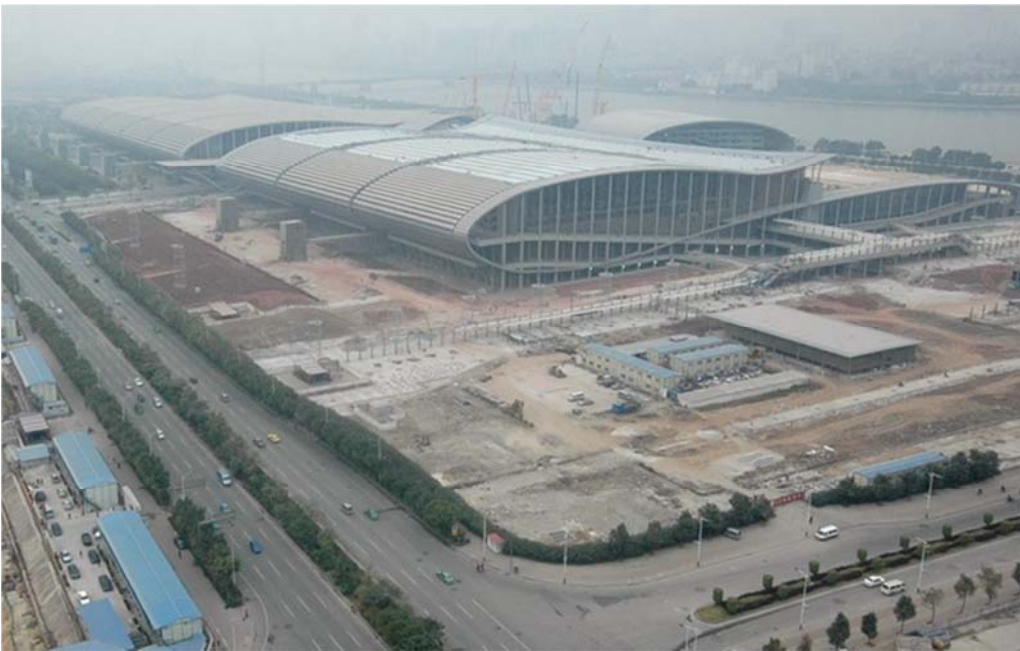
Construction of the Liedi Bridge



New roadway leading to the Liedi Bridge forming a new south-north running truck-road relieving the overall travel of GZ

Development of the 16th Asian Athletic Game Centre and the athlete village

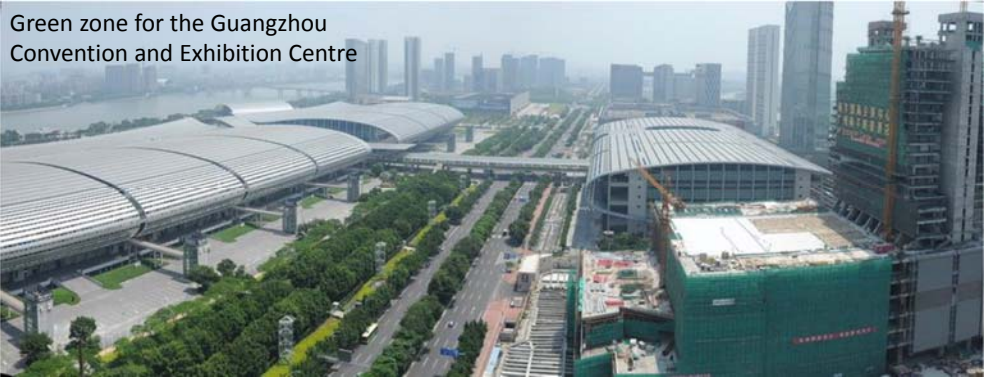




Guangzhou Convention and Exhibition Centre



Green zone for the Guangzhou Convention and Exhibition Centre

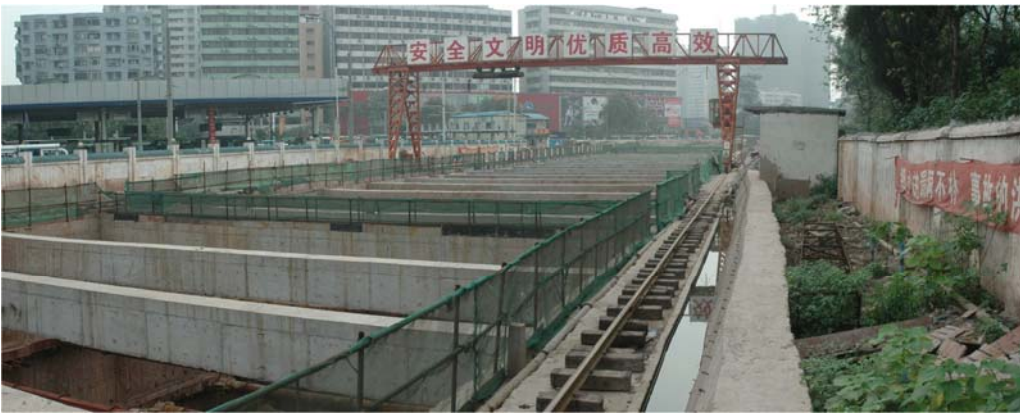




Guangzhou Convention and Exhibition Centre

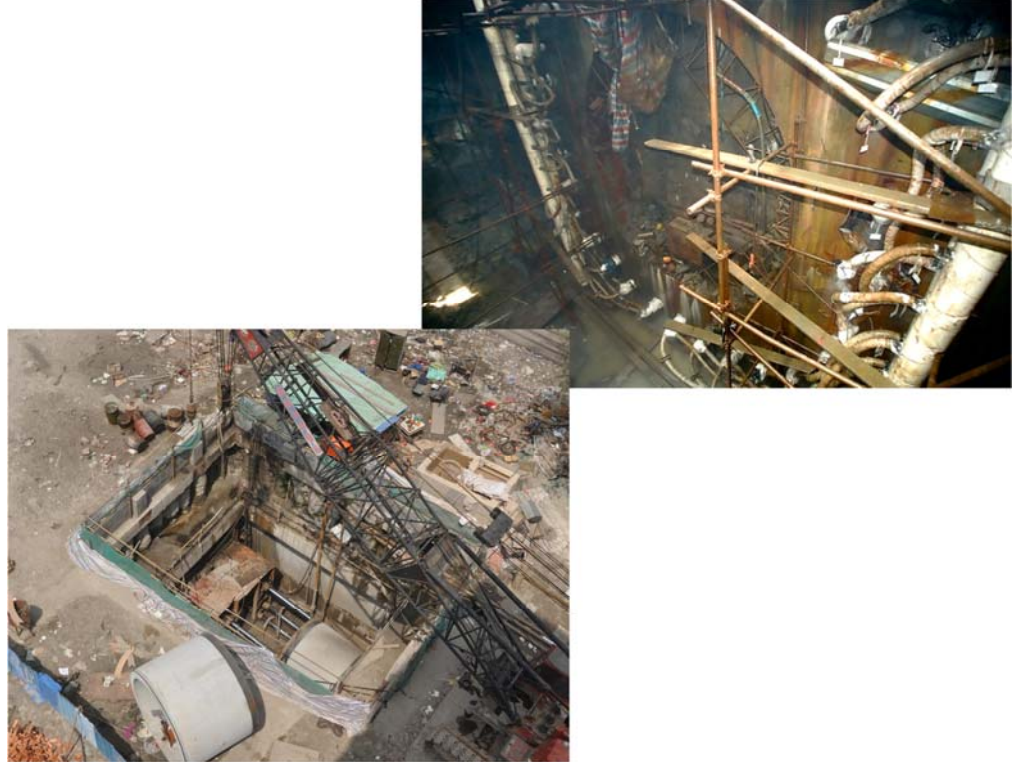
Subway/Metro projects



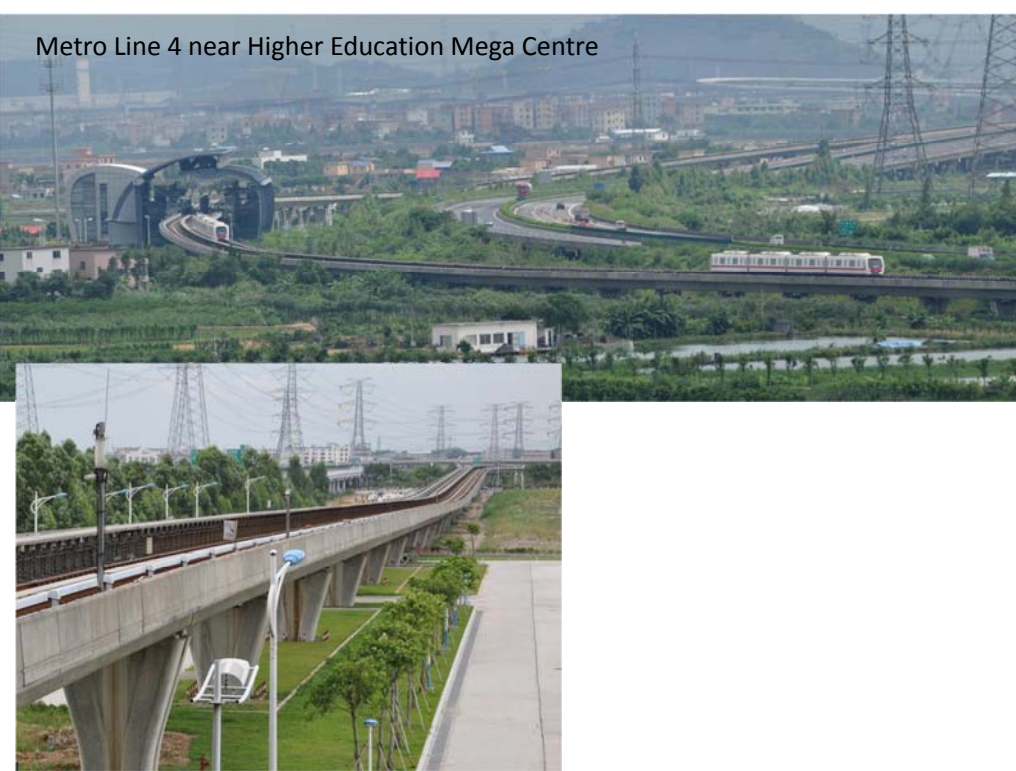








The interchanging station of Metro Line 2 and Line 5 at Haizhu Square



Metro Line 4 near Higher Education Mega Centre



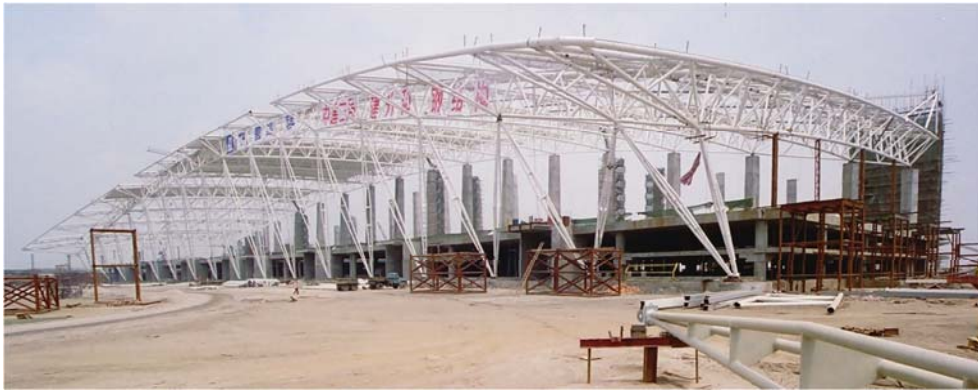
Close-up of the train wagon



The latest Metro Auto Passenger Mover

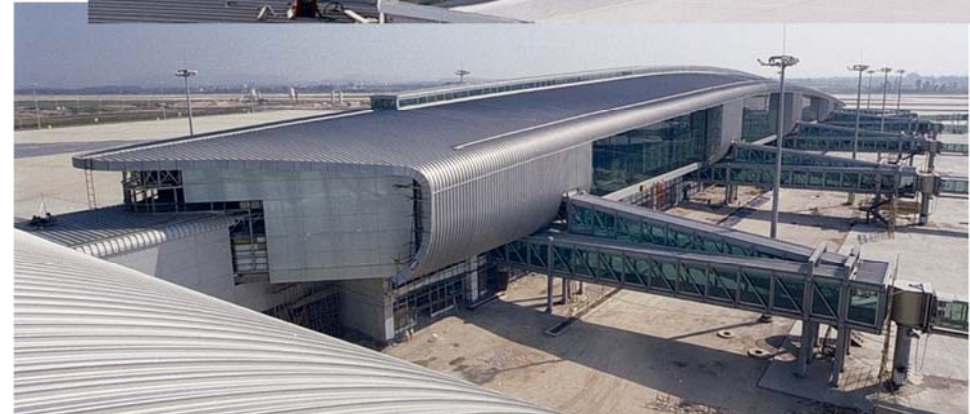


Guangzhou New Airport









Some images record about the Construction of the Shenzhen Metro , Line 1 and 2



