REPORT

Conceptual Design of the Wuhan High-speed Railway Station Area

Wuhan, 2011
Acknowledgements

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Background

The High-speed railway construction is booming in China thus bringing new opportunities to cities such as Wuhan. Wuhan is located in the central part of China, about 1000km away from the four regional centers of Beijing, Shanghai, Guangzhou and Chongqing. The establishment of the Beijing-Guangzhou and Shanghai-Wuhan-Chengdu high-speed passenger-dedicated lines expects to develop a transportation ring that centers round Wuhan and leads to Beijing, Shanghai, Guangzhou and Chengdu within 4 hours. The new High-speed railway stations are set to develop into major urban centres within the city.

The YPP workshop is investigating the area around one of such nodes the Wuhan station in the North-East part of the city. The area is adjacent to the large urban lake the Yangchun Lake and is indicated in the Masterplan of Wuhan as Yangchun Lake Urban Sub-center.

The YPPs have worked within five main groups each focusing on different aspects of the area thus complementing the overall Vision.
Let’s meet in Wuhan

Picture yourself in Wuhan 2111…
• a city with valuable resources of abundant clean water
• a city with affordable local food
• a bustling and lively city
• in the heart of China

The Wuhan now is an internationally well known city. It is just 4 hours away from Beijing, Shanghai and Hong Kong.

The Wuhan High-speed Railway station is a gateway to the new urban centre, merging peacefulness and beauty of the Yangchun Lake and the buzz of a meeting place.

The area around Wuhan station is now known nationally and internationally as the Wuhan Meeting Islands.

The Wuhan Meeting Islands is a landmark destination, a place where things happen. It is:
• a meeting hub for tourists to have fun, explore the culture
• a place for friends to come together
• an opportunity for business to work in a creative setting
• a location for families to gather and enjoy
Wuhan 2111

Overview

The vision group was assigned the task of coming up with an overall direction, branding strategy and broad development goals for the Yangchun Lake Subcenter that includes the Wuhan high speed rail station. Planning is participatory in nature and requires buy-in from the government and residents impacted if plans are to be implemented successfully. In addition, policy has to anticipate future needs and address gaps that may emerge or are not currently catered for under formal policy.

It is with this in mind that the group set out to explore a practical vision, branding strategy and well-packaged development goals. The spatial map for the City of Wuhan resembles the image of a butterfly in flight with wings spread. The team adopted the symbol of the butterfly to represent the metamorphosis of Wuhan to a fully fledged global city. These and other deliverables were set against a backdrop that took into account the City if Wuhans strategic location as the central city in the heart of China as well as its revolutionary history and economic position as the agricultural center or “rice-bowl” of the country.

Approach

The introduction of high speed rail as a transportation option will make it possible to get to any of the major cities in China within four hours. As a follow up to the initial visit conducted at the Wuhan High Speed Railway Station, the group continued its investigation by conducting a number of surveys in Wuhan. It was important to gather and collate the views of consumers of plans and policy, namely the residents of Wuhan, in order to come up with a vision that accurately captured their views and took into account their needs and aspirations.
Top among their concerns was traffic congestion and access to opportunities for economic advancement. When asked about use of the High Speed Rail method of transportation, Wuhan residents cited the high cost of travel as an impeding factor when compared to regular rail which they cited as more affordable. In light of this it became clear to the group that it was important to formulate a vision strategy that would both serve as an outreach and informative platform for Wuhan residents and visitors alike.

**Formulating the Vision**

As aforementioned, it was important to package the goals of development in a manner that was accessible and informative to Wuhan residents and visitors. The group also considered the importance of place making as by linking people to the spaces they live, work, play in and visit.

**WUHAN is**

- a city of knowledge & innovation
- a city nestled in water
- a self-sufficient city
- a city of communities

As a precursor to formulating the tagline for the vision the following were identified as thought provoking questions when envisioning Wuhan in 2111, 100 years from 2011.
Recreation and community
What if you could meet your friend in the middle of a lake in Wuhan?

Waterways and Lakes
What if you could walk on water in Wuhan?

Environmental Protection
What if saving the planet was fun in Wuhan?
Traffic and Navigating the City
What if all the cars on the road disappeared in Wuhan?

**what if...**

**all the cars on the road disappeared?**

Linking People to Place
The team considered the factors that go into creating livable cities that people want to visit, live in and do business in. Wuhan as a transportation hub will draw 94,000,000 people annually who will arrive and transit through the city via high-speed rail. Cities that draw and retain people and resources are cities that stir the innate curiosity that we have to explore and continue to discover places.

**people are born to be curious...**

94 million curious people will arrive in Wuhan by high-speed railway in the future to

**find**  **understand**  **learn**  **explore**  **see**

**hear**  **search**  **taste**  **talk**  **know**
Branding and Packaging the Vision
During the brainstorm, team members took inventory of the uniquely placed qualities of the City of Wuhan and possible ways to leverage existing and future opportunities to achieve all three areas of sustainability and livability namely environment, equity and economy. The following areas were explored as crucial subject areas during the vision formulation process.

Culture: History and Future
2011 was a significant and symbolic year for Wuhan. The year marked a period of 100 years since the revolutionary war that set the tone for China’s development policy and philosophy for the better part of the 20th century and into the 21st century. In light of that, 2011 is a symbolic benchmark for setting the pace and determining the development priorities in the coming 100 years.

Knowledge and Innovation
Where Wuhan was revolutionary in 1911, it is currently evolving as a contemporary and cosmopolitan city that is an important incubator for ideas given the plethora of top notch universities and research centers located in the city. Leveraging the existence of the education facilities and retaining the human capital concentrated in the city beyond the learning period was identified as an important pillar for economic growth and development.

Environmental Sustainability
Wuhan is nestled in water with a network of lakes and rivers located throughout the city. As such, it was important to include in the vision an acknowledgement that stressed the importance of protecting and maintaining the ecosystem as the city evolves and grows. Wuhan residents interviewed mentioned the importance of the rivers as lake systems as recreational areas that provide the opportunity for activities such as fishing.
Economic Growth and Development

Developing a diversified economy that leverages Wuhan’s importance as an agricultural center, locus for innovation, position as a transportation hub and emerging business heavyweight was identified as one of the goals of development. Not only does diversity in the availability and range of economic opportunities ensure sustainability, it also addresses equity and sees to it that residents and business interests have ample opportunity to contribute to and invest in the city’s economy.

Ultimately, the goal of development in the Yangchun Lake Subcenter is ideally to transform it into a space and place that leverages the numbers passing through and into Wuhan by sparking and maintaining their curiosity about the city.
1. The aim of this work

This think-tank aims to:
- Analyse the interactions between the study area and the new high-speed train station;
- Propose some keys for the interpretation of the new dynamics that are occurring in the area after the installation of the train station
- Propose basic ideas and solutions for a future Master Plan of the area.

2. Characterization of the area

A SWOT analysis carried out on the area underlined its peculiar characters as well as the stakeholders to be involved in the future master plan process. The analysis is mainly on spatial considerations and assumptions.

Strengths:
- The high-speed rail station can be the junction between the global market and the local dimension of the City of Wuhan;
- The local community in the area can benefit from the presence of a public transport hub;
- The City of Wuhan can benefit of the presence of an international transport hub located next to the city centre;
- The train station area can become a marketing symbol for the city.

**Weaknesses:**
- The area is not connected with the city;
- The pedestrian accessibility to the area is very limited due to a car oriented design of the area;

**Opportunities**
- The existence, in the city, of other two train stations with different functions (local and regional connections);
- The connection of the high speed train station with the city through the subway;
- The existence of one international airport and of another one planned to be connected with the train station;
- The presence of 2 subway station in the area;
- The presence of lakes and rivers in the area;
- The proximity to the industrial area.

**Threats:**
- The missing connection between the high-speed-global dimension of the train station and the low-speed-local dimension of the local communities;
- The isolation of the high speed train station area from the rest of the city;

Starting from these assumptions, a “base concept” for the masterplan has been developed.

### 3. The concept

“To design with water a place that is able to connect global-fast and local-slow dimensions”:

- Promoting high accessibility to the area with sustainable and human scale transport modes
- Building a water belt between the station and the city
- Promoting a landmark for the city of Wuhan
- Promoting a function of interconnection and meeting place between the global dimension (international) and the local dimension (the city)

### 4. The Master Plan
As a holistic result of city/transport eco-friendly integration around the new high-speed train station, our masterplan proposal is based on 3 key strategies:

1. **One Water Belt**, three “meeting islands”, shaping the structure of the new subcenter and defining new opportunities of sustainable urban mobility.

2. **3 Islands, 3 Functions**: Every island plays a specific role in the development of a complete metropolitan new sub-center for Wuhan.

3. **Slow Speed Oriented Development**: the right transport mode used at the right place, encouraged by local mobility rules and smart parking management.

**(1) ONE WATER BELT, THREE “MEETING ISLANDS”**

The High-Speed Train Station of Wuhan, defined as a social and economic Hub at local and national level, has to be directly connected to an attractive urban environment that can improve the urban liveability of Wuhan. The water system that surrounds the station is an unmissable opportunity to organize the area and shape it.

Water is the main element of the subcenter and defines its limits and spatial organization.

The Water Belt is designed to become the major link between the station and the city, between the city and the lake, between visitors and Wuhanese people. Defined as a social, environmental and economic link, the Water Belt is not only a blue, but also a green belt, landscaped as an ecological corridor in the city.

This double connected Water Loop is permitting a water transport local system that connects by shuttle the station, the lake and several functions developed in and around the 3 Islands. The water shuttle aims to become a strong landmark of Wuhan in terms of sustainable mobility, attractive both for tourists and inhabitants.

Ten water shuttle stations should be designed in and along the three islands to show the importance of water in the city. The stations would provide multimodality between shuttle and bicycle, bus, subway, train and car.
(2) 3 ISLANDS, 3 FUNCTIONS

The new subcenter of Wuhan is itself polycentric. The three islands are also the three functional components of the area.

- The (central) “Meeting Island” is designed as a low carbon core in front of the station, and is dedicated to slow mobility and quality of life.

- The “City Interface Area” (second island) plays the role of connection between the subcenter and the rest of the urban area. The northern part of the island is becoming a congress area, directly connected by water to the station.

- The Expo Area (third island) is integrating the lands behind the station and is conciliating heavy industry and urban landscape.
(3) SLOW SPEED ORIENTED DEVELOPMENT

Additionally to the “high speed” character of the train station, the slow speed mobility is encouraged in the area around the station as a component of urban liveability.

The configuration of islands and the metro system are two factors that will be exploited to implement and manage slow speed mobility inside the area, related to built density.

➔ Low carbon mobility around metro stations

At metropolitan scale, the subcenter is designed as a TOD (Transit Oriented Development) core that encourages the accessibility by public transport. Additionally to this vision, some high-level comfort for pedestrians and bicycles should be implemented downstream and upstream the use of subway.

One “3 minutes walking radius” is defined around each station as an intensive perimeter combining services, commercial functions and high density.
One “5 minutes walking radius” is defined as a compact urban neighbourhood that conciliates metropolitan and local scales.

→ “The right mode in the right place”: Using the configuration of islands and multimodality to integrate low carbon mobility in the city

To encourage the use of bike inside this subcentral area, several “Park+Bike” facilities are implemented at the crossroads between the outside roads and the water belt. In this way, the “Interface Island” allows cars only for local residents and is mostly dedicated to bicycle and water.

The “Bike Oriented Area” is designed with green lanes that give more space and comfort to bicycles and pedestrians. Nevertheless, residents cars, delivery and emergency vehicles are allowed to ride in this area.

Implemented in the third island (expo island behind the station), the Park+Ride facility is only connected to the highway, and doesn’t impact the neighbourhoods by common side effects.
The central island, in front of the island, is strictly dedicated to zero carbon and slow mobility, with a high level of accessibility to metro and train. This car free island is made by pedestrian paths that link directly the station, the lake and the city. One major low carbon green axis is linking the station gate and the major urban functions of the area. The southern highway is put into underground tunnel to avoid the deep impact on the Lake front in terms of environment and livability.
SLOW SPEED ORIENTED AREA

Car-Bicycle interface
Environmental Considerations

When taking into consideration the impact of a new high speed railway station of these proportions, one of most important things that have to be underlined is the sustainability of the project and its environmental impact. While a truly sustainable city is yet to become reality, it’s important that the transformation towards both a sustainable and low carbon future is a vision strived for and undertaken in a manageable step by step fashion. The development of the new railway station and the land adjacent presents an opportunity for holistic visions that promote both environmentally sensitive and climate smart development, integrated planning and daring strategies to implement them. A flexible and integrated approach to waste, water, energy and mixed land use must be considered as key.

The area like any other of this kind will have to deal with both the current and future climate variability and changes that are expected to intensify over the coming decades. In regards to energy consumption the aim is to producing lower quantities or even zero quantities of CO2 in relation to other developments.

Further, waste is an important aspect that should not be overlooked. If minimisation of the waste generation, composting or recycling isn’t seen as a future solution, the environmental problems of the area could worsen. Furthermore, what we suggested is not only about punctual changes; it is also a matter of behavioral change, a matter of adapting to the development of the area by understanding the concept of sustainable development in terms of a new railway station. Further the preservation and enhance of green spaces also will play vital role in improving drainage and air quality, helping combat the current urban heat island effect felt over Wuhan and improving health.

Environmental problems

Before discussing the new opportunities to enhance the environmental sustainability of the site, it is important to highlight the scientific underpinning and understanding of our proposal. The site is dominated by the newly constructed station and the presence of heavy industry. While the physical location of the heavy industry may not be changed, its adverse affects maybe mitigated. Therefore mitigating pollution in all its forms is the main focus. The presence of heavy industry, heavy traffic adjacent to the railway station, soil contamination as a result of the industrial sloops and the excavations produced during the construction of the station, light pollution, odor pollution and we shouldn’t forget the noise pollution due to the high-speed trains and the cars that will enter the area. The transport and the mobility issue are really easy to adapt by choosing public transport and non-car models in the area.

The water pollution would be also a serious issue, due to the activities that surround the lake, but this problem can be easily solved by harvesting and recycling the water.

The risk of flooding related to the all the aspects mentioned before completes the series of punctual facts that have to be taken into consideration when realizing the planning strategy for the Wuhan railway station. The flood can cover the whole area, having as a main source the lake (East Lake) and also the Yangtze River.

Sustainable Opportunities
After evaluating the risks, the second step is to analyse the balance of needs, both from an economic, social as well as an environmental point of view. There is already an existing heavy industry that would be really expensive and non-profitable to relocate. This can be seen as a major challenge but also as an opportunity. Additionally there is an existing public transport hub that could be integrated in an environmental friendly manner in the area. This integration will help present the area as an educational showcase of best practice environmental sustainability initiatives to the commuters which travel through on their journeys to all corners of China and beyond. Lastly the water bodies (Yangtze River, East Lake, Yang Chung Lake) and the existing free space, that are already there and could sustain the development.

Integrative planning will be adopted by maximising synergies and minimising tradeoffs to ensure development takes place in the public interest and in economically, socially and environmentally sustainable ways. The proposed site will plan for the opportunities of industrial symbiosis, closed waste cycles and water cycles and zero/low carbon development to achieve sustainability and liveability in Wuhan.

![Integrative planning in Wuhan](image)

**Figure 1** Integrative planning in Wuhan
Green and Blue Open Spaces and Corridors
Green and water spaces (quality, quantity and accessibility) will be enhanced and promoted. A new path of green and blue corridors will be provided for cyclists, walkers and travellers as a sustainable means of public transport to enjoy the urban greenery and meet people. This will help to improve and enhance the connections of the lakes, rivers and promenade with the existing waterways and the new metro and high-speed train station. Cafes, restaurants, toilet facilities and market stalls will be provided to attract more people to enjoy the urban greenery and meet people from different places anytime.

Some highlights of our plan include:

Ecological Zone – Bamboo Walkway and Forest
Bamboos are one of the fastest growing plants in the world with notable economic and cultural significance in China. It can be used as a food source, sustainable building materials, animal fodder, ornamentation and screening. It will also help to provide local food and employment opportunities to the local people.

Urban Agriculture Orchards
Orchards will produce local fruit or nut by planting trees or shrubs that are grown for commercial production. This will support the local food growing and strengthen the confidence in food safety and security in China where at the same time raise environmental awareness through simple environmental education initiatives. The orchards will also provide significant amenity and economic values to the local people.

**Education Centre**

The Education Centre is an environmental and recreational centre with purpose built facilities. It encourages local people and those from further afield of all ages and abilities, to be involved and enjoy the physical and natural environment and help in maintaining and protecting the local wildlife. It aims to provide a programme of education and leisure based activities. Eco tourism can also be promoted by having guided walks along the riverbeds and lakes, looking at the history and wildlife of Wuhan with programmes of holiday events for children and families, e.g. how to restore the ecological process (hydrology, soil, air and water quality) of Wuhan.

![Environmental education centre](image)

**Figure 4 Environmental education centre**

**Sustainable Buildings (promote sustainable design and energy efficient development)**

- **Green Roofs and Walls**
  
  Green roofs and facades can be introduced to new buildings by covering with vegetation or plants over a waterproofing membrane. It can create a habitat for wildlife, reduce surface runoff by absorbing rainwater, provide sound and energy insulation and lower urban air temperatures to tackle heat island effect and climate change in Wuhan.

- **Rainwater Harvesting**
  
  Rainwater harvesting system can be introduced on top of the roofs of new buildings to accumulate and store rainwater for reuse before it reaches the aquifer to avoid drought in the changing climate. It is ideal to be used for drinking, watering the garden, irrigating the plants and orchard and even feeding the animals or birds.

- **Grey Water Recycling**
Greywater recycling will use the wastewater generated from offices and the residential sector, including bathing, laundry and dishwashing that can be recycled for uses on site for irrigation and constructed wetlands.

- **Sustainable Urban Drainage System (SUDS)**
  SUDS can help to reduce surface water drainage discharge by adopting management practices, management’s control structures and strategies designed to drain surface water efficiently and sustainably. This will help to alleviate the flood risk in Wuhan and enhance water quality for the habitat and wildlife.

- **Car Free Zone**
  The car free zone, it will encourage walking and cycling by supporting community scale infrastructure and services and reduce the need for travel, like promoting home working and teleconferencing.
4. Social and Economic Aspects

Our Approach and concerns

The rapid urbanization of Wuhan has brought several concerns to the city. Some of the concerns related to the urbanization of Wuhan are: the unemployment of the people displaced due to the change of land use in the area, a lack of integration between the different social layers in the city and so on a lack of entrepreneur of the society to start new businesses.

Also, due to the imminent increase in population it’s important to ensure a food source for the future that’s why the food is one of the biggest concerns for the city.

In addition to all of the above there’s fault in the new constructions of a portion of public space, needed as part of an optimal social development of the habitants in the city.

Our goal
Because of the changes in the city and the possibility of hosting a large new population it's important to ensure the food and work for the future, being this problem not only for Wuhan or China but also for the entire world.

**Our Goal +**

**Food and Work for the Future**

![Image of vegetables and paper money]

**The big idea**

Taking advantage of the East Lake, the biggest urban lake in China and probably in the world, we have imagine a new opportunity to ensure the food and the work so this way the lake becomes the center point of our main idea.

Starting with the farmers displaced by the changes in the land use of the area that now don’t have land to farm but they still being farmers by profession and to encourage them to take micro loans in order to develop the floating farms, a low tech farm method over the water used in the south of Mexico City and Thailand to grow vegetables and other crops like flowers.

The objective of the floating farms its to retake the farmers ability to harvest and direct it towards a big production scheme and that way ensure the food source for the future and so on this method of harvesting crops can help to clean the water of the lake.

Related to the idea of the floating farms in the lake comes the border development idea focused on the creations of markets for the food and the construction of public squares of different sizes willing to create community within them with the interaction of urban developers, newcomers and actual local residents coming back to the beginning the farmers.
Economic Profits

With the idea of turning Wuhan and the East Lake into a mass food producer for the future or China, and the world the floating farms and the border development concept is an idea that can be used in any other lake of the city.

Also having in mind that thanks to the new Wuhan’s Rail Station many people it’s coming to the city in a inverse direction the food is going from Wuhan to the world.

Thinking in a positive lake development the city it’s able to achieve an economic independence of their citizens by turning them into small entrepreneurs with the farms and also that way dealing with the employment looking forward to make a stronger financial attractiveness of the region.

Another economic profit is the economic integrations by the food production within the farmers, the new inhabitants, the Wuhan citizens and the future passengers of the Wuhan’s rail station.
Social Profits

In addition to the economic profits the social profit of the idea are, the transparency of food production being these a big concern of the origin of the food nowadays in the world, and the ecological awareness of the lake related to fact that the food its being produced within the lake and finally a food insurance for the city.

More social profits of the idea are the integration of the farmers to the economic development of the area being part of a mutual understanding between farmers, citizens and passengers.
The main location of the idea is in the East Lake, being this part of the development in the area around the Rail Station where the intensive floating farming happens but also close to the station a non intensive floating farming as a showcase of what’s being going on in Wuhan’s food production.

How it Works

The floating farm system it’s a low tech concept for harvesting food being the main part of it the bamboo sticks that supports the soil to shelter the crops, also the Periphyton Biofilter is a micro organism in charge of cleaning the water.

Conclusion
The main idea of the social and economic approach is to turn Wuhan into a sustainable food source model that contributes to the quality of life for the whole city and China being a repeatable model useful in other lakes or even countries, also to motivate the entrepreneurship especially within the lake development by looking forward a border development of public spaces of different sizes and concepts.

**Conclusion +**

**SOCIAL & ECONOMIC**

*Wuhan’s Sustainable Food Source Model that Contributes to the Quality of Life*

*Motivate Entrepreneurship Especially within the Lake Development*
5. The Local Scale

Yangchun Lake Subcentre Land Use

The Yangchun Lake development area will be home to a range of activities. With eleven different types of land use, an emphasis on a diversity of activities is well illustrated in the YPP plan. Building on existing strengths, East (Yangchun) Lake will be featured prominently in the new plan. Home to floating farms, bordering a nature conservation area and playing an important role in the human-nature interface areas; the clean lake will play a central role in the new area. As the focal point for visitors, residents and passengers arriving in Wuhan, the new high-speed Wuhan Train Station is another important feature in the development plan. To bolster its central appeal, a convention centre will be located next to the station, ensuring a convenient meeting location for residents, as well as those arriving in this central Chinese city from Beijing, Shanghai, Guanzhou and beyond. To further strengthen its economic appeal, the development area will be home to a state-of-the-art research and development centre that will focus on the development of innovative strategies and technologies to ensure balanced eco-systems. The R&D centre will be closely linked with the lake, other natural areas and the floating farms. The residential and commercial districts in the development area will be all be mixed-use. Certain areas will have an economic oriented focus, with more space for offices and larger commercial operations; however they will also have some space for housing. Other areas will have an emphasis on living spaces and residential amenities, but will also include commercial ventures. The division of space is somewhat flexible and will be decided based on the needs and demands for the development area and Wuhan. Finally, a public space will be open to everyone. The space can be used to celebrate festivals, hold farmers markets, or any other range of activities. It will be representative of the how Wuhan welcomes visitors and residents to this new central hub.

Mixed Use Blocks
A mixed use approach will be applied in the Yangchun Lake subcentre district. The area closest to the station will have a greater emphasis on commercial and hospitality space, while the area further west has a greater focus on residential space. In promoting this mix, the aim is to ensure that local residents and those working in the area can take care of many of their daily activities locally, which will also encourage strong community interaction and institutions. This mix will also promote a diversity of activities within the area.

The commerce oriented district will be made up of office spaces, hotels and shopping space, in addition to some residential space. The residential emphasized districts provide a wide range of housing opportunities, some of which are based on the urban village concept, which is characterized by medium density development. The provision of good public transit and an emphasis on human friendly urban design, particularly pedestrianization and public space are paramount in the development area.

**View Corridors**

Clear view corridors from the Wuhan Train Station exit are seen as an important factor in fostering the area’s appeal with new arrivals, people working in the area and residents. In keeping with the area’s central focus on water, the southern view corridor leads directly to the Yangchun Lake. The western corridor leads into the heart of the new area, straight out of the station. Water is also the dominant focus of the northern corridor, while the eastern corridor leads directly to the conference centre.

**Fostering a Strong Community**
With very limited private car use within the development area, residents who own cars will have the opportunity to park their vehicles in three underground parking garages located on the periphery. To promote local cohesion, community focal points, including gardens, playgrounds and various public spaces will be located above the garages. These focal points are envisioned to serve as meeting points for those living in the area. In doing so, this will increase the strength and number ties between members of the community, with the aim of fostering the societal benefits that are linked with strong communities, including lower crime rates, more care for the community and a greater sense of place. Further, two major walking boulevards will run through the residential emphasized district. These boulevards will also serve as points of congregation for people in the area and will include a range of commercial activities and public spaces. The sidewalks will also be 10 metres wide, encouraging people to congregate along these streets. These efforts will all contribute to a stronger sense of community in the new district.

The Human Scale & Building Typology

The Urban block is one of the most important elements of a city, as it forms the building blocks that are the basis of urban form. A suitable block typology can largely promote the cultural and economic development of a city. In our plan, we place considerable emphasis on the human scale in the district, which leads to the consideration of building typology. Although recently, the city of Wuhan is undergoing a large scale construction, to some extent, it lacks the consideration of a block and its buildings. A block needs to satisfy the requirement for many aspects of urban life, such as traffic, humanity, ecology, management
and so on. Moreover, the plan of the block and its buildings development can have a significant effect on urban sustainable development. So in our local scale, we try to search for the appropriate building typology to promote the human scale for the Yangchun sub center district.

In ancient China, the major means of transport was carriage or merely on foot, which can be clearly identified in famous painting scroll from Song Dynasty "Along the River during the Ching-Ming Festival". A clear picture of flourishing China was displayed: carriages run on the wide street with trees plants alongside, passer-bys walk freely on the road while shops were arranged along the street lanes which surrounded the residential areas. This layout reflects a rich street culture and bustling civil life. From the view of block scale, this kind of typology can satisfy the need of citizens and promote the prosperity of the economy at that time.

Similarly, in modern Singapore, commercial facilities are densely arranged along streets with office buildings and hotels built inside the block. This layout maximizes the commercial profits and ensures the order and integrity of building typology.

Based on the two examples above, we may apply a similar building typology to the layout of Wuhan Yangchun Lake sub center. Commercial buildings could be arranged outside of the block with variety of functions and forms thus give an easy access. If we take a look at the block from the street, we can see the height of the building becomes gradually taller, our daily social and commercial activities are thus facilitated. This building typology, would put the ancient Chinese tradition in harmony with modern metropolitan style showing the new vitality of the area.

As for the commercial business blocks, we suppose the appropriate height and depth of the building outside could be 11 meters and 100 meters respectively with a suitable height of 35 meters for the building inside, which is a rather large scale. As for the new urban village block, the size is somehow smaller. Based on the analysis of building typology, this human scale shows a depth of 50 meters block with inner buildings reaching a height of about 25 meters when the height of building outside is the same. This scale may also help improve this area since no fixed criteria should be used when it comes to the choosing of human scale.
Citizen Engagement

Citizen engagement will play a central role in the development of the Yangchun Lake subcentre. The process will include the active engagement of a range of stakeholders through a variety of communicative avenues, with a particular emphasis on marginalized groups. It will also involve a citywide, targeted consultation with key stakeholders, including children, the elderly, displaced urban village residents, business interests, the rail authority, developers, students and migrant workers as well as other groups whose stake in the development area may be realized during the process. Further, those with interests in the area will have a consultative role and a key role in the decision making process. Displaced urban village residents have a very important place in the planning process. They have been forced to leave homes, some of which have been inhabited by their families for generations. To build there trust and encourage them to remain in the process, they will have the opportunity to move in to homes of similar character in the same area. This will help to ensure a smooth relocation process while also promoting the area’s heritage, and thus its authenticity. Dialogue with residents and concerned stakeholders will continue throughout the development process, encouraging a flexible development strategy that will be strengthened by the incremental development strategy. In undertaking this process of citizen engagement, the aim is to create an area where a wide range of people can feel at home.
Development of the Yangchun Lake subcentre will take place in five stages, each of which will be subdivided into a number of sections. In pursuing an incremental development strategy, the aims are threefold. As development is carried out, certain lessons will be learned. An incremental process helps to foster such lessons and promote their application in later stages of development. Related to this, as technological innovation takes place, new technologies that had not previously existed or were prohibitively expensive can be introduced. In dividing the development into a series of chronological stages, there is also a greater opportunity to ensure the highest quality of construction and a competitive process that encourages developers, architects and engineers to maintain consistently high standards in the development area. This emphasis on quality results from the fact that companies working in the development area will make bids on each stage of the development. In cases where they have been unable to fulfill their obligations in previous stages, it is unlikely that they will be selected again, or in cases where they are selected, a detailed plan as to how they will meet their obligations will be required. Finally, building in a series of stages, with each stage divided into sections, greater architectural variety is encouraged. While a certain level of continuity is expected, having different developers and architects working on the development area will serve to promote a range of visions, something that will help to create a more unique locale.
Let's meet in Wuhan. The Wuhan Meeting Islands is a landmark destination, a place where things happen. It is:
- a meeting hub for tourists to have fun, explore the culture
- a place for friends to come together
- an opportunity for business to work in a creative setting
- a location for families to gather and enjoy

This vision positions Wuhan as a meeting place in the center of China. This is in sharp contrast with the hub function it has at the moment whereby people are encouraged to travel to different parts of the country. We are advertising; let us meet in Wuhan!

Surrounding the station a comfortable and pleasant environment has been created focusing on the further usage of public transport. Slow transport options are available in the vicinity of the station for quick and healthy transport to your immediate destination.

A strong visual link has been made with the Wuhan East Lake as this is the identity of Wuhan and provides the passengers with a sense of belonging/ recognition upon arrival. Several projects are initiated to strengthen this vision and a staged development pattern is proposed to be accommodative to future developments.
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