

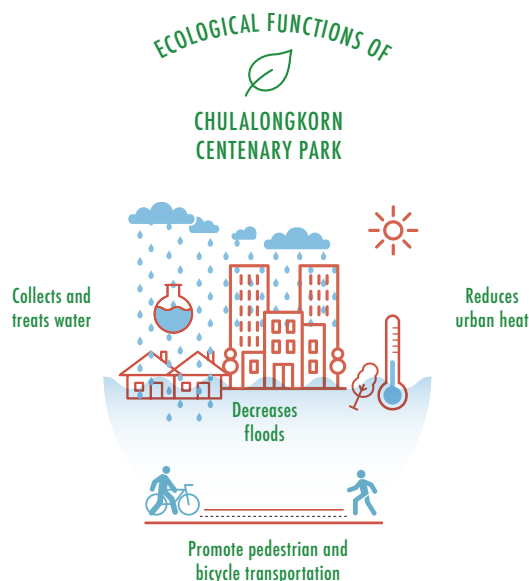
The Chulalongkorn Centenary Park

Text by Kotchakorn Voraakhom
Images by LANDPROCESS

Project Credits

Project The Chulalongkorn Centenary Park and Avenue **Location** Chulalongkorn 5 Road, Bangkok Thailand **Developer** Property Management Office of Chulalongkorn University **Completion Date** 26 March 2017 **Landscape Architect** LANDPROCESS **Architect** N7A Architects **M&E Engineer** EEC Engineering Network **Structural Engineer** Civil and Structural Engineers Co., Ltd. **Quantity Surveyors** VORTECH ARCHITEK CO., LTD. **Main Contractor** Syntec Construction Public Co., Ltd. **Site Area** 30 Rai (48,000 sqm) and 1.3 km. length





Chulalongkorn Centenary Park is the first critical piece of green infrastructure for the city of Bangkok, designed to mitigate detrimental ecological issues and add much-needed outdoor public space to the grey city. The Chulalongkorn Centenary Park is designed to face future uncertainties of climate change. Bangkok is a climate-vulnerable city with little green space, and this park, which contains the largest green roof in Thailand, is an invaluable addition to the ecological landscape. The park addresses major environmental issues facing Bangkok as a rapidly-developed, hard-paved city: water management and the urban heat island effect. The design and environmental effects of the park reach beyond its boundaries into the surrounding neighbourhood: a pedestrian- and bicycle-friendly road extends beyond the park in both directions, linking major roadways directly to the park's walkways, and water from neighbouring areas is treated by the park's filtration system. Located on a large university campus in central Bangkok, close to residential, entertainment and major retail facilities, the Centenary Park is a showcase for the ecological and social impacts of landscape architecture in dense urban areas.

The Newest Ecological Urban Park of Bangkok Chulalongkorn Centenary Park

"What will Bangkok be like in the next 100 years from now? How can the green public spaces in the heart of Bangkok contribute toward the vision of the city of water and address the environmental challenges we are confronting? How can green city

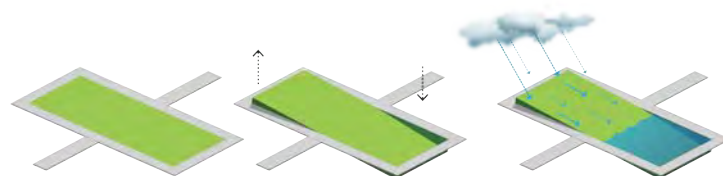
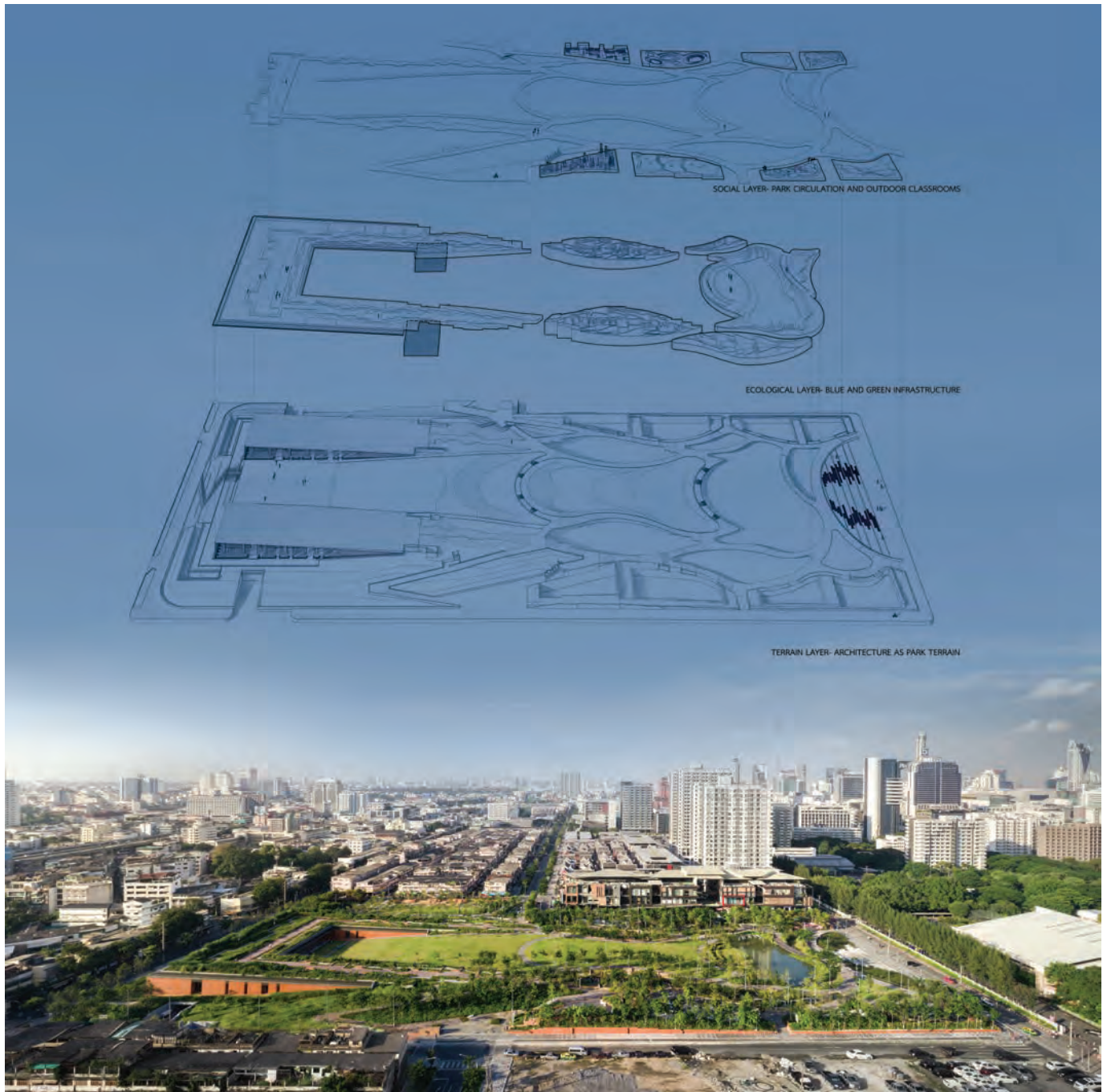
space improve its citizens' quality of life? How will Bangkok change climatically?"

These are the critical questions the team from LANDPROCESS and N7A Architects had before beginning the design process of the Chulalongkorn Centenary Park competition in the year 2012.

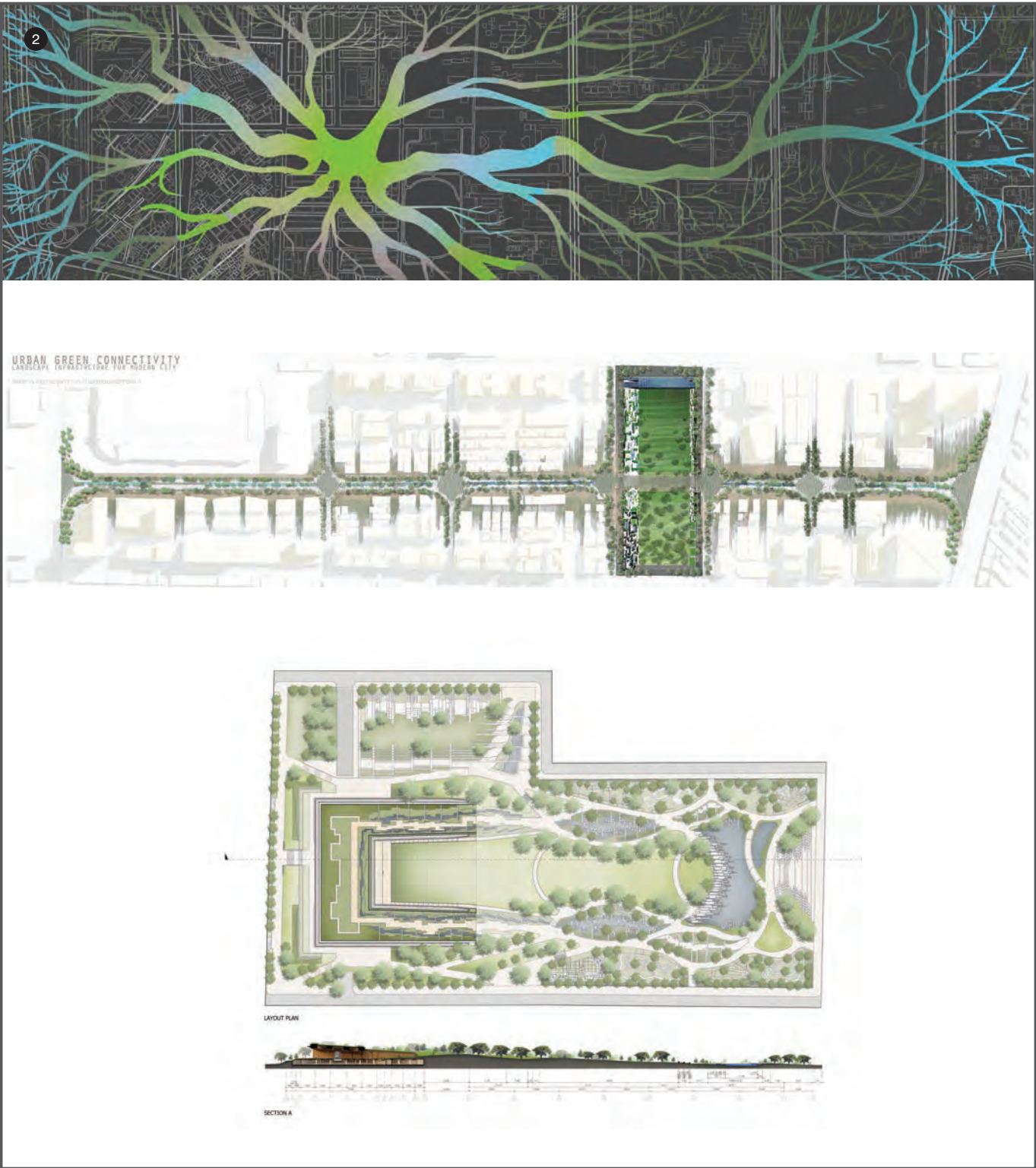
Bangkok City: from Grey to Green

The city of Bangkok has rapidly developed over the past 50 years and now faces critical issues in city resilience due to the threats of climate change. Agricultural land which once absorbed seasonal flooding and cycles of monsoon rain have now been paved over in the name of urban development. As the city of water, the used-to-be porous landscape of Bangkok is now replaced by disproportionate amount of construction with minimal green spaces. In recent years, Bangkok has experienced increased flooding and rising temperatures, and struggles with water management. This reduction in the amount of permeable surfaces in the urbanscape compounds these climate resilience issues. Bangkok is a city of low altitude, threatened by rising sea level, storm surge, and heavy seasonal and monsoon rain. The city is frequently inundated with severe flooding during the rainy season. The problem is slow and silent. Bangkok is sinking. The Centenary Park is a critical piece of green infrastructure for the city of Bangkok, designed to mitigate detrimental ecological issues and add the much-needed outdoor public space to the grey city. The establishment of this park shifts the direction away from finance and commerce, towards better quality of life. The initiative optimizes the massive

1. The architecture as park terrain is one of the main concepts to create the park's inclined topography.



Proposed Overall Layout and Circulation Diagram.



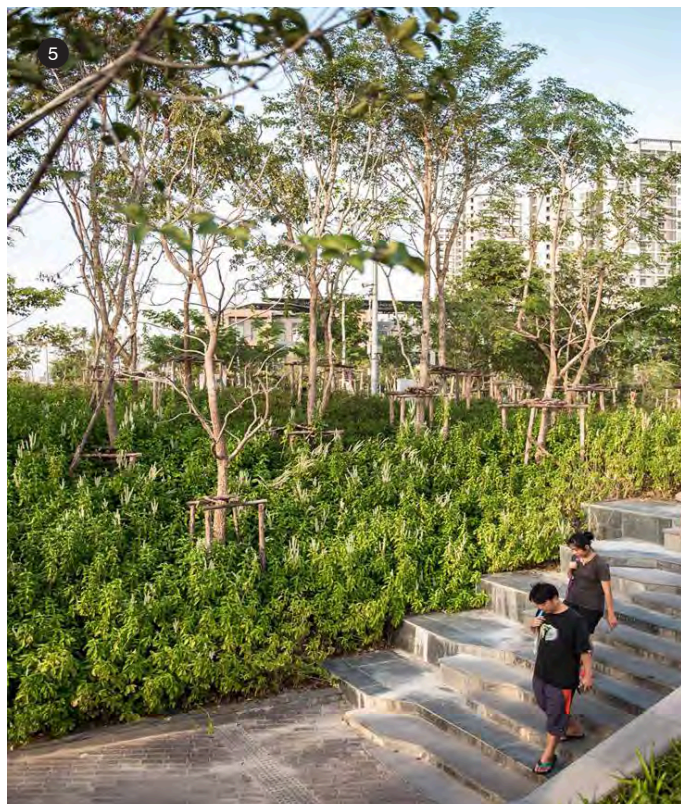
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The design team transformed the concept from merely a park to an important piece of green infrastructure that will critically address the environmental issues facing Bangkok.



3. The view from the biggest green roof in Thailand. This roof offers the new experience of open green space viewing the city skyline from the raised ground.

4. The constructed wetland helps clean the run-off water with the recreation purposed.

5-8. Many recreational purposes are designed with the park envisioned as green and blue infrastructure to the city. The permeable surface of open lawn, the continuing architectural structure as park's terrain for running track and the water bike help clean water by adding oxygen to the retention pond.

plots of land as productive public green space to contribute to the city ecology and serve as a much-needed green oasis for Bangkokians.

Park as Green Infrastructure

The Centenary Park is located on a major university campus in central Bangkok. A century ago, King Chulalongkorn, Rama V, donated the land where the campus sat, and founded the university for the good of society. Today, in celebration of its centenary, the university has planned for part of campus that connects to the main academic core of campus to serve as a public urban park. .

The Chulalongkorn Centennial Park is both a celebration and the university's message of looking forward. The design team transformed the concept from merely a park to an important piece of green infrastructure that will critically address the environmental issues facing Bangkok. It is a project that both honours the laborious past and envisions the Chulalongkorn University's academic role to lead the city planning for resilience in the coming century.

The 30-rai (48,000sqm) park with 1.3 km green avenue is designed with many ecological functions that sustainably collects and treats water, decreases flood risks, reduces the urban heat island, and promotes pedestrian and bicycle transportation. The Centenary Park delivers sustainability back to Bangkok.

Continuing an important “green corridor” from the main academic campus to a commercial area on university-owned land, Centennial Park expands and improves Bangkok's green infrastructure. The park links the city to the campus through this commercial zone. 