公園微氣候與區域配置
Micro-climates And Park Layout

根據微型氣候 決定區域配置

根據不同的微型氣候，決定各功能區域的配置，

如兒童遊戲區安排在空氣最純淨的位置，

反之園區戶外較不舒適的區域，則規劃為公有建築物區域。

Park functions designed on the basis of micro-climates

Park functions designed on the basis of micro-climates.For example, the childrens' area is designed to be located in the area which offers the highest air quality. By contrast, areas that are unsuitable for outdoor activities have been reserved for the placement of public and civic buildings.

涼爽區 COOLING ZONE

設在最不熱的區域，供民眾享受珍珠奶茶、無線網路。

Visitors can take a break and enjoy a cup of bubble tea and Wi-Fi access in the coolest area.

暖和區 WARMING ZONE

臺中城市文化館、臺灣塔、臺中電影城。

Taichung Historical Museum, Taiwan Tower and Taichung Media Village.

濕氣區 HUMID ZONE

睡蓮池、蘭花園。

Lotus Pool and Orchid Garden.

乾爽區 EXERCISE AREA

籃球、棒球、網球場。

Basketball, Baseball and Tennis.

清新區 OUTDOOR AREA

戶外演奏會、兒童遊戲區。

Outdoor Performance and Childrens' Entertainment Area.

多功能區 MULTIFUNCTION AREA

交流廣場、休閒廣場、舞蹈俱樂部

Social Interaction Plaza, Recreation Plaza and Dancing Club.

設 計 團 隊
Team Members

Catherine Mosbach (French)

Philippe Rahm Architects (French)

劉培森建築師事務所

(Ricky Liu & Associates Architects+Planners)

設計師簡介 Introduction

Catherine Mosbach / 景觀建築師 Landscape Architect

Catherine為法國知名景觀設計師，著名作品為波爾多植物園及法國羅浮宮Lens美術館公園。

Gateway Park is another well-known project in which Liu has collaborated with respected French landscape architect Catherine Moshach. Her works include the Botanical Garden of Bordeaux (Jardin botanique de Bordeaux) and Louvre Lens (Paris, France).

Philippe Rahm / 建築師 Architect

知名瑞士籍建築師，作品強調建築與生態氣候的相輔相成，曾於2002年代表瑞士參加第八屆威尼斯雙年展。

The well-known Swiss architect Philippe Rahm represented Switzerland at the 8th International Architecture Exhibition of La Biennale di Venezia in 2002. He is inspired by climate change and merged related elements into his design, as he tried to emphasize the interaction between buildings, climate and ecology.

Ricky Liu 劉培森 / 建築師 Architect

曾獲得第十屆中華民國傑出建築師獎，並於2009～2011續三年獲得國家卓越建設獎，代表作品為臺中新市政大樓。

Ricky Liu received an award at the 10th R.O.C. National Outstanding Architect Award in 2008. He also won the National Outstanding Building Award for three successive years, from 2009 to 2011. One of his best-known designs is Taichung City Hall.

臺中中央公園
Taichung Gateway Park

2.59座大安森林公園

2.59 times the size of Taipei's Da An Forest Park....

Reducing 112 metric tons of carbon emissions per year....

吸收112公噸CO_2/年

67.34公頃都市肺葉　蜿蜒貫穿水滴經貿生態園區

This central green space covers 67.34 hectares of the Taichung Gateway Park City.

臺中市政府建設局
Construction Bureau of Taichung City Government

中華民國 101年 1月

設計構想 Design Concept

臺中綠肺 坐落水滴

「中央公園」位於臺中市西屯區的「水滴經貿園區」內，運用樹林、草地、水池及造型奇特的建築等裝置，發揮調節的功能，可緩和炎熱日照、吸收空氣落塵，改善溫度及空氣品質。

許多人在夏天會選擇出國或到山上避暑，但未來的中央公園利用能微調整空氣中溫度、濕度、汙染的偵測機，讓到公園散步的人，就像到了另一個緯度旅行一樣。

Taichung City's lungs, located in its Shuinan Gateway

Gateway Park will be located in Taichung Gateway Park City in Xitun district. The park aims to improve the environment through the use of sensors that will help to filter air and regulate the temperature, as well as humidity levels. Thus, visitors will be able to enjoy a natural experience while walking here.
Important elements such as a trees, lawns, pools and interesting buildings are all intended to serve a functional purpose. For example, plants can help reduce temperatures and offer people cooler air during the summer. Trees are the best means of filtering air pollutants. Gateway Park will be a functional park, providing people with an ecologically-friendly environment that mimics nature. Visitors will be able to relax and experience the natural surroundings that the park provides.

土地結構 Structure

自然調節 因地制宜

公園內地形多元，來到這裡就像被大自然包圍，高低起伏的多樣地貌可發揮緩和交通車流的功能，讓動植物可自然生長，亦可讓徒步的遊客通行無阻，中央公園的設計上考量土壤中的隙縫與孔洞，做為園內不同功能區域配置的參考。公園內的山坡盆地地形，由土壤充分吸收水分，收集雨水，有助於緩和雨水流失。

Natural adjustments to local conditions

Gateway Park offers some functions that can provide people with a natural setting and ambiance when they visit. For example, its diverse terrain creates a more natural ambiance, and decreases vehicle speeds, thus allowing visitors a safe, relaxing walking experience. The basin area collects rain and this stored water helps prevent the soil from becoming too compacted. As all of the gaps and holes filter rain water, it keeps the soil moist. In such ways, the park provides a suitable place for human, animals and plants.

設計方法 Design Method

氣候偵測機 把環境變舒適

氣候偵測機是中央公園的重點項目，同時也是打造公園多元面貌的關鍵，三大功能分別為熱度調節、濕度調節、汙染調節，讓您在中央公園也能把南投埔里的涼爽、花蓮瑞穗的純淨，通通帶回家。

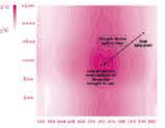
Weather-sensing system can improve the environment

This equipment is also a crucial part of a plan to improve the climate and environment. For example, it serves in three key functions, including adjusting humidity, pollution and warming. This means that people can savor fresh air, like they might if they were living in Puli, and enjoy a pristine setting like that found in Hualien.

熱度 調節 Hot Shift

以臺中11月午後的涼爽氣溫為終年理想目標，利用能降低溫度的氣候偵測機，讓7月午後的35度高溫，也能回到21度的舒適範圍。

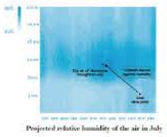
Ninety percent of polluted air can be absorbed by the plants in the park. The remaining 10 percent can be filtered by the weather-sensing system.


Projected heat conditions in July

濕度 調節 Moisture Shift

以11月臺中最不潮濕的月份做為標準，也因應園區內高低窪區域的不同濕度加裝氣候偵測機，及設置能發揮調節功能的建築物。

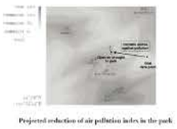
The installation of the weather-sensing system is due to the changes in humidity at different locations within the park. November is the most suitable month for living in Taichung due to the pleasantly-temperate climate at this time of the year. Therefore, the machines will standardize the climate to around this level. Moreover, a number of sustainable buildings will be constructed throughout the park.


Projected relative humidity of the air in July

污染 調節 Pollution Shift

園區內百分之90的汙染，將由廣大的綠色植物吸收，剩下的百分之10，則利用氣候偵測機來吸收、撫平。

Taichung is generally a very warm city, with temperatures reaching 35 degrees or higher in the summer. A key concept in the park's design is to reduce the temperature from 35 to 21 degrees. The weather-sensing system will be the main means applied to achieve this temperature control target. Hopefully, people who live in Taichung will be able to enjoy the pleasantly cool weather of November all year round in the future. That is a constant target for the park.


Projected reduction of air pollution index in the park

環境視覺模擬 Virtual representation

利用噴霧器在空氣中散播著微小水滴，讓四周頓時清涼。
The installation of cold-water mist systems can cool you down in the summer as the micro-mist reduces the air temperature.

一幢用泥土搭築的小屋，也具有吸收空氣中水氣的功能。
Soil is an ideal material for building, due to its natural ability to absorb humidity.

清淨裝置發射與城市噪音相反的音波，將噪音撫平，還原原本的寧靜。
Noise filters can reduce noise generated by traffic and other sources, giving people a quieter ambiance and better quality of life.

把家裡室內的休閒材質應用在室外的長椅上，在白天也能感受夜晚的清涼。
The use of indoor materials for outdoor seating can provide lower temperatures, even in the daytime.

光觸媒的運用，吸收和分解空氣裡有毒的分子，創造純淨的空間。
UV lights are a useful medium for filtering germs and other harmful elements from the air.

除了植物可吸收濕氣外，也加裝空氣除濕機，製造乾爽度。
The installation of dehumidifiers will help the plants reduce humidity.