



「都市微森林」先導項目“Urban Mini-forest”Pilot Project

政府在規劃新發展區時，除了照顧市民的住屋和就業需要，亦致力建設可持續的低碳社區，提供優質、宜居和舒適的生活環境。為應對氣候變化，土木工程拓展署與香港園境師學會合作，在粉嶺北新發展區推行先導計劃，於梧桐河畔設立「都市微森林」，透過高密度種植原生苗木，可在石屎森林中進一步引入本地生態，豐富市區的生物多樣性，同時增加綠化覆蓋率，紓緩熱島效應。

作為香港首個工務工程下的「都市微森林」先導項目，本計劃成功展示以嶄新技术推行環保工作，為日後的城市規劃起了示範作用。

The Government has considered multiple factors while formulating a New Development Area (NDA). Alongside the provision of housing and job opportunities, it also strives to develop a sustainable low-carbon community, which creates a high-quality, pleasant, and comfortable living environment. To cope with climate change, the Civil Engineering and Development Department (CEDD) and the Hong Kong Institute of Landscape Architects (HKILA) jointly initiated a pilot project in the Fanling North NDA to establish an “Urban mini-forest” near Ng Tung River. Native saplings are planted densely to add greens among concrete jungles. This hopes to enrich the city's biodiversity, and to alleviate the heat island effect.

This pilot project is the first local public work project to introduce the “mini-forest” concept, setting an example on how new environment-preserving innovation can be integrated into urban planning.

「微森林」特色 Features of Mini-forests

- 樹木生長速度 Tree Growth**
0.8-1米/年
0.8-1m/year
- 種植密度 Density of Plants**
3-5棵/平方米
3-5 no./m²
- CO₂ 碳封存 Carbon sequestration**
相比一般都市園境規劃，碳封存成效高出10倍
Sequester over 10 times more carbon than in usual urban landscape

「微森林」的益處 Benefits of Mini-forests

- 相比傳統森林，它可**
Compared to the traditional forests, it can
- 10倍 生長速度**
10x Faster
- 佔地少至 25平方米**
in less than 25m²
- 它可以為城市帶來**
It can bring to cities
- 20倍 生物多樣性**
20x Biodiversity
- 5°C**
氣溫較周邊環境低5°C，
有助紓緩城市熱島效應
5°C lower than surrounding air temperature, relieving urban heat island effect

天然樹林的多層結構 Multi-layer Features of Natural Forests

- 大喬木 Canopy Trees (又名“蒼穹樹”)
- 喬木 Trees
- 小喬木 Sub-trees
- 灌木 Shrubs

因時制宜 符合成本效益

計劃選址位於粉嶺北第15區東第一期公營房屋用地以北，佔地100平方米，該處日後將成為綠色公共空間的一部份。由於香港地少人多，土木工程拓展署為善用珍貴的土地資源，參考日本著名植物學家宮脇昭 (Akira Miyawaki) 的植林方法，在面積較小的土地空間上，以多樣化的本土品種高密度植林，加強城市綠化，平衡社區發展。

隨著社會對環境保育日益重視，土木工程拓展署的規劃方針亦與時並進。署方在「古洞北及粉嶺北新發展區」項目推行前期基建工程時，亦同步展開了園境規劃下的種植項目。

本港部份外來先鋒樹種具排他性，不但會阻礙其他植物生長，致樹林物種較少，更會不利於為本地野生小動物，如青蛙和蜘蛛等提供食物和棲息地。為加強自然保育效果，工程團隊遂採用厚殼桂、翻白葉樹和楊梅等共25個原生樹種，並模仿天然樹林的多層結構，於「微森林」內以隨機形式栽種了400棵樹苗。由於樹林結構多元化，涵蓋灌木至大喬木，加上本土植物生命週期可長達80至90年，有助形成平衡、穩定和豐富的微生態，提升生物多樣性。

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工程園境團隊由選址、與香港園境師學會協商定場地設計標準、敲定技術細節，到正式種植樹苗，僅需時八個月。

署方與業界攜手努力下，項目得以順利推展，並於2025年2月14日舉行種植活動以標誌「微森林」正式建立。工程團隊邀請土木工程拓展署長方學誠太平紳士和香港園境師學會會長陳元敬先生等嘉賓，身體力行栽種樹苗。是次經驗不但標誌着署方綠化工程的一個重要里程碑，更可推動都市微森林成為未來基建計劃的永續發展目標。土木工程拓展署未來將繼續努力推展保育工作，建設生態平衡的理想社區。

Timely and Cost Effective

The mini-forest is located at the north to the public housing site in Fanling North Area 15 East (Phase 1) with a site area of 100 square meters. Keeping in mind to establish a green public open space for the local residents, the project team optimizes the use of our city's precious land resources by adopting the **afforestation method initiated by the celebrated Japanese botanist, Akira Miyawaki**. By planting a high density of diverse native species in a relatively small land space, it enhances urban greening and balances the development of the community.

Alongside the growing emphasis on environmental conservation in our society, CEDD's planning principles have also evolved. During the advanced infrastructure works for the KTN and FLN NDA project, the CEDD simultaneously implemented the planting projects within the landscape architectural plan.

With the concerted efforts of CEDD and the industry, the pilot scheme has been launched smoothly and a planting event was held on 14 February 2025 to mark the project's formation. The project team invited special guests including Michael Fong, JP, the Director of CEDD, and Mr. Paul Chan, the President of HKILA to plant saplings of the “mini-forest”. The successful implementation not only marks an important milestone in CEDD's greening works, but also advocates for urban mini-forest as a goal for sustainable development in upcoming infrastructure works. CEDD will continue its efforts in promoting conservation and building an environmentally sustainable community.

觀看活動花絮短片:
View event highlight video:

古洞北 | 粉嶺北新發展區
Kwai Chung North | Fanling North New Development Area

北區醫院慈善信託基金慈善步行2025

工程團隊作為服務北區的一份子，於2025年1月12日參加了「北區醫院慈善信託基金慈善步行2025」籌款活動。一眾義工與市民並肩同行約4公里，為活動籌得港幣140萬元。

是次活動籌得的款項，將用於支持北區醫院的智慧醫院項目，優化醫療設施，造福病友，建構健康和諧社區。同時藉此感謝北區醫院醫護團隊多年盡心盡力守護北區，傳承關愛精神。



The North District Hospital Charitable Foundation Charity Walk 2025

As part of the community, the project team participated in "The North District Hospital Charitable Foundation Charity Walk 2025" fundraising event on 12 January 2025. Our volunteers walked alongside the public for about 4 km and raised \$1.4 million in donations for the event.

The funds raised will mainly be used to support the North District Hospital's smart hospital project to optimize medical facilities for the benefit of patients and build a healthy and harmonious community. The team also expressed gratitude to the medical team of North District Hospital for their years of dedication to safeguarding the community and carrying forward the spirit of caring.

新春書法工作坊

工程團隊為粉嶺公立學校舉辦「新春書法工作坊」，學習中國傳統文化，亦為社區送上真誠的新年祝福。

活動於粉嶺北社區聯絡中心進行，當日工程團隊先向學生提供導賞，簡介古洞北及粉嶺北新發展區（第一階段）工程內容，讓他們了解社區最新發展。其後由書法導師指導學生用毛筆寫揮春及製作賀年掛飾，學生皆樂在其中，透過書法傳遞滿滿的心意。



Lunar New Year Chinese Calligraphy Workshop

The project team held a Lunar New Year Chinese calligraphy workshop for students from Fanling Public School to learn traditional Chinese culture and send sincere New Year greetings to the community.

The workshop was held at the Fanling North Community Liaison Centre and kicked off with a guided tour of the CLC to introduce the project of Kwu Tung North and Fanling North NDA (Phase I) to let them understand the latest community developments. Afterward, the calligraphy tutor guided the students to write Chinese New Year greetings and make decorations, which was a joyful experience for all the students to express their deepest love through the calligraphy.

捐血救人活動

工程團隊自2023年起恆常聯同香港紅十字會輸血服務中心安排流動捐血車到工地辦公室為團隊提供捐血服務。

今年二月，工程團隊特意安排流動捐血隊到臨粉嶺北社區聯絡中心，向團隊及社區人士提供捐血服務，讓更多人士可一同透過救助生命，為社會出一分力。

Project team members from CEDD, Consultant, and Contractors, as well as community members participated in this meaningful event to give blood and save lives.

Give Blood, Save Lives

The project team has been cooperated with the Hong Kong Red Cross Blood Transfusion Service to provide blood donation service at our site office regularly.

This February, the project team specially arranged the Mobile Collection Team to set up a blood drive at our Fanling North Community Liaison Centre to provide blood donation service to the team and community members, allowing more people to contribute to the society by saving lives.

Project team members from CEDD, Consultant, and Contractors, as well as community members participated in this meaningful event to give blood and save lives.



香港測量師學會工料測量大獎 2024

工程團隊奪得由香港測量師學會工料測量組舉辦的「香港測量師學會工料測量大獎2024」其中兩個獎項，充分肯定其在勇於創新及綠色建築可持續運作方面的傑出成就，以及對本地建築業和社區發展的貢獻。



Autodesk Hong Kong BIM Awards 2024

「粉嶺北新發展區第一階段 - 粉嶺繞道東段 (石湖新村北至龍躍頭)」合約工程獲 Autodesk Hong Kong BIM 頒發榮譽獎，表彰工程團隊在靈活運用BIM 技術上的卓越成就。

工程小知識 Engineering Knowledge

土地測量師

土地測量師是工務工程中不可或缺的角色。古洞北及粉嶺北新發展區項目規模龐大，地理環境複雜，土地測量團隊肩負重任，透過結合空間數據和相關技術，支援土地平整和基礎建設等工作。團隊亦會利用嶄新科技，整合各類測量工作所得的大數據，為未來城市規劃提供技術支援，配合智慧城市發展。

他們的專業工作包括：採集空間數據以提供地貌資料和劃定地界，運用建築信息模擬(BIM)技術協助項目管理，監測受工程影響的建築物沉降情況，並透過數據整合及分析，確保施工符合核准圖則和合約要求等。

查詢詳情，請與古洞北及粉嶺北新發展區辦事處聯絡。
For further information, please contact
the Kwu Tung North and Fanling North New Development Area Office.
古洞北 tel: 3547 1645 email: ktnrp@cedd.gov.hk
粉嶺北 tel: 3547 1648 email: flnrp@cedd.gov.hk

古洞北新發展區第一階段 - 地盤平整和基礎設施工程
Kwu Tung North and Fanling North New Development Areas, Phase 1: Site Formation and Infrastructure Works

合約編號 Contract No.: ND/2019/01

古洞北及粉嶺北新發展區第一階段 - 白石凹交匯處建造工程
Kwu Tung North and Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works



白石凹交匯處建造工程正在進行中。
Construction works at Pak Shek Au

D4路、D5路及相關建造工程正在進行中。
Construction works at Road D4, Road D5 and associated works are in progress.

工程熱線 Enquiry Hotline ☎ 5975 8579

古洞北及粉嶺北新發展區第一階段 - 地盤平整和基礎設施工程
Kwu Tung North and Fanling North New Development Areas, Phase 1: Site Formation and Infrastructure Works

合約編號 Contract No.: ND/2019/03

古洞北及粉嶺北新發展區第一階段 - 塵輿自然生態公園
Kwu Tung North and Fanling North New Development Areas, Phase 1: Site Formation and Infrastructure Works



塵輿自然生態公園內的所有工程已經完成，並已交予漁農自然護理署管理。
All works in the Long Valley Nature Park have been completed and handed over to the Agriculture, Fisheries and Conservation Department for management.

全球首例S960超高強度鋼行人天橋橫跨梧桐河已完成，裝設行車橋體結構工程正在進行中。
Installation of the world's first ultra-high strength S960 steel footbridge spanning across Ng Tung River has completed. Bridge deck construction is in progress.

工程熱線 Enquiry Hotline ☎ 5975 8579

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