

Catálogo das Obras da Competição de Arquitectura para Projecto do Circuito Pedonal  
Sem Barreiras do Parque Municipal da Colina de Mong-Há de 2020



2020 澳門建築設計比賽作品集  
望廈山市政公園無障礙步行系統

Collection of Entries from Macao Architectural Concept Design Competition 2020 -  
Barrier-free Walking System for Mong Há Hill Municipal Park



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## 序

望廈山是位於澳門半島北部的一座小山，山上的公園內有多元的公共休憩和市政設施，但因缺乏便捷的交通及步行系統，影響市民上山使用公園設施之意欲。為了提升步行前往望廈山的便利性，市政署與澳門建築師協會合辦「望廈山市政公園無障礙步行系統建築概念設計比賽」，讓本澳的建築設計個人或團隊參與，集思廣益，為重整望廈山增添無障礙步行系統提供設計依據和方向。

市政署擬透過探討重整望廈山的出行路線，形成一條貫通望廈山東面和西面的無障礙通道，提升周邊社區之間的易達性和連貫性，優化社區設施，並為區內注入新元素，讓該區的設施和自然資源得以善用。比賽項目以整體導則性描述、重要節點的景觀處理和功能配置，以及接駁指定地點之無障礙通道的連接方式作設計方案。

舉辦比賽表面是競爭，但更深層次的意義是相互學習和分享經驗，為本澳的建築設計專業人士提供一展示所長的平台，同時希望為社區設施和環境設計注入新元素。衷心感謝各參賽團隊投入大量的時間和精力準備作品；亦衷心感謝十一位勞苦功高的評審委員，百忙中抽空為是次比賽作出專業、公正、嚴謹的評核，在三十九份高水平的參賽作品中，按設計方案的計劃及意念、對問題分析深度及合理回應、前瞻性、可持續性及建造可行性等作出評審，分別評選出五名一等獎及五名優異獎。

優化社區設施是與市民息息相關的民生工作，而隨著澳門社會發展，居民對社區設施和活動空間的需求亦隨之提升，市政署未來將持續優化本澳各區的休閒設施配置，致力打造優質、多元的社區設施和市政休閒空間，構建更宜居的社區環境，提升整體生活質素。

**戴祖義**  
市政署市政管理委員會主席



## Prefácio

A Colina de Mong-Há é um pequeno morro localizado no Norte da Península de Macau, no cimo do qual existe um parque equipado com diversas instalações de lazer e de serviços municipais destinadas ao uso público. No entanto, a falta de conveniência na utilização de transportes públicos e de sistema pedonal afecta a apetência dos cidadãos pela subida à colina usando as instalações do parque. Assim, a melhoria da acessibilidade pedonal da Colina de Mong-Há motivou o Instituto para os Assuntos Municipais (IAM) a organizar, em conjunto com a Associação dos Arquitectos de Macau, a Competição de Arquitectura para Projecto do Circuito Pedonal Sem Barreiras do Parque Municipal da Colina de Mong-Há, permitindo a participação de indivíduos ou equipas de desenho da arquitectura, no sentido de proporcionar fundamentos e orientações para o reordenamento da Colina de Mong-Há com a adição do sistema pedonal sem barreiras.

O IAM pretende, através do estudo do reordenamento do percurso pedonal daquele sítio, criar uma passagem sem barreiras, que permita comunicar o lado leste e o lado oeste da Colina de Mong-Há, com vista a aumentar a acessibilidade e conectividade entre os bairros periféricos, optimizando as instalações dos bairros e imprimindo novos elementos nos mesmos, para além de fazer bom uso das instalações e recursos naturais existentes nesses bairros. A competição incide sobre o projecto de desenho que compreende a descrição geral dos princípios orientadores, o tratamento paisagístico e a distribuição de função dos nós importantes, assim como o modo de ligação da passagem sem barreiras que dá acesso aos locais indicados.

À competição ora organizada e caracterizada pela concorrência, está subjacente um significado ainda mais profundo, que é a aprendizagem mútua e a partilha de experiências. Trata-se de uma plataforma em que os profissionais de desenho arquitectónico locais mostram os seus talentos e através da qual pretendemos imprimir novos elementos nas instalações comunitárias e no desenho do ambiente. A todas as equipas participantes expressamos os nossos sinceros agradecimentos pela grande aposta no tempo e energia para preparar os seus trabalhos. Também aos 11 membros que integram o júri, as mais sinceras palavras de agradecimento pela sua disponibilidade, apesar dos seus muitos afazeres, para fazer avaliação dos 39 trabalhos de alta qualidade com profissionalismo, equidade e rigor, consoante o plano e a ideia do projecto de desenho, a profundidade de análise e razoabilidade da resposta aos problemas, a visão prospectiva, a sustentabilidade e a viabilidade de construção. Destes trabalhos, conseguiram seleccionar, respectivamente, cinco para prémio de primeira classe e cinco para distinção de mérito.

A optimização das instalações comunitárias tem uma relação íntima com a vida quotidiana da população. À medida que a sociedade de Macau vive um desenvolvimento, a procura dos cidadãos pelas instalações comunitárias e pelos espaços de actividade também se torna maior. No futuro, o IAM prosseguirá com a optimização da disposição das instalações de lazer em diversas zonas municipais, trabalhando por criar instalações comunitárias caracterizadas pela qualidade e diversidade e espaços de lazer, em prol de criar um ambiente mais agradável para se viver e de elevar a qualidade de vida em geral.

### **José Maria da Fonseca Tavares**

O Presidente do Conselho de Administração para os Assuntos Municipais do Instituto para os Assuntos Municipais

## Preface

*Mong Há Hill is a small hill located in the northern part of the Macao Peninsula. The park on the hill is equipped with diversified public leisure and municipal facilities. However, the absence of convenient transport and walking systems reduces residents' desire to go up the hill and use the park facilities. To make it more convenient to walk to the Mong Há Hill, the Municipal Affairs Bureau (IAM) and the Architects Association of Macau have co-organised the "Architectural Concept Design Competition - Barrier-free Walking System for Mong Há Hill Municipal Park" that received participation of local architectural design individuals or teams. Through collecting widespread opinions, the competition harvests the design basis and direction for adding a barrier-free walking system during the restructuring of the Mong Há Hill.*

*IAM plans to reorganise the passages on the Mong Há Hill and form an east-west barrier-free route on the hill to improve the accessibility and connectivity between the surrounding neighbourhoods, optimise the community facilities and inject new elements into the area to promote better use of its facilities and natural resources. The design proposals of the competition entries are composed of overall guiding descriptions, landscaping and functional configuration of crucial points and methods of connecting designated places along the barrier-free route.*

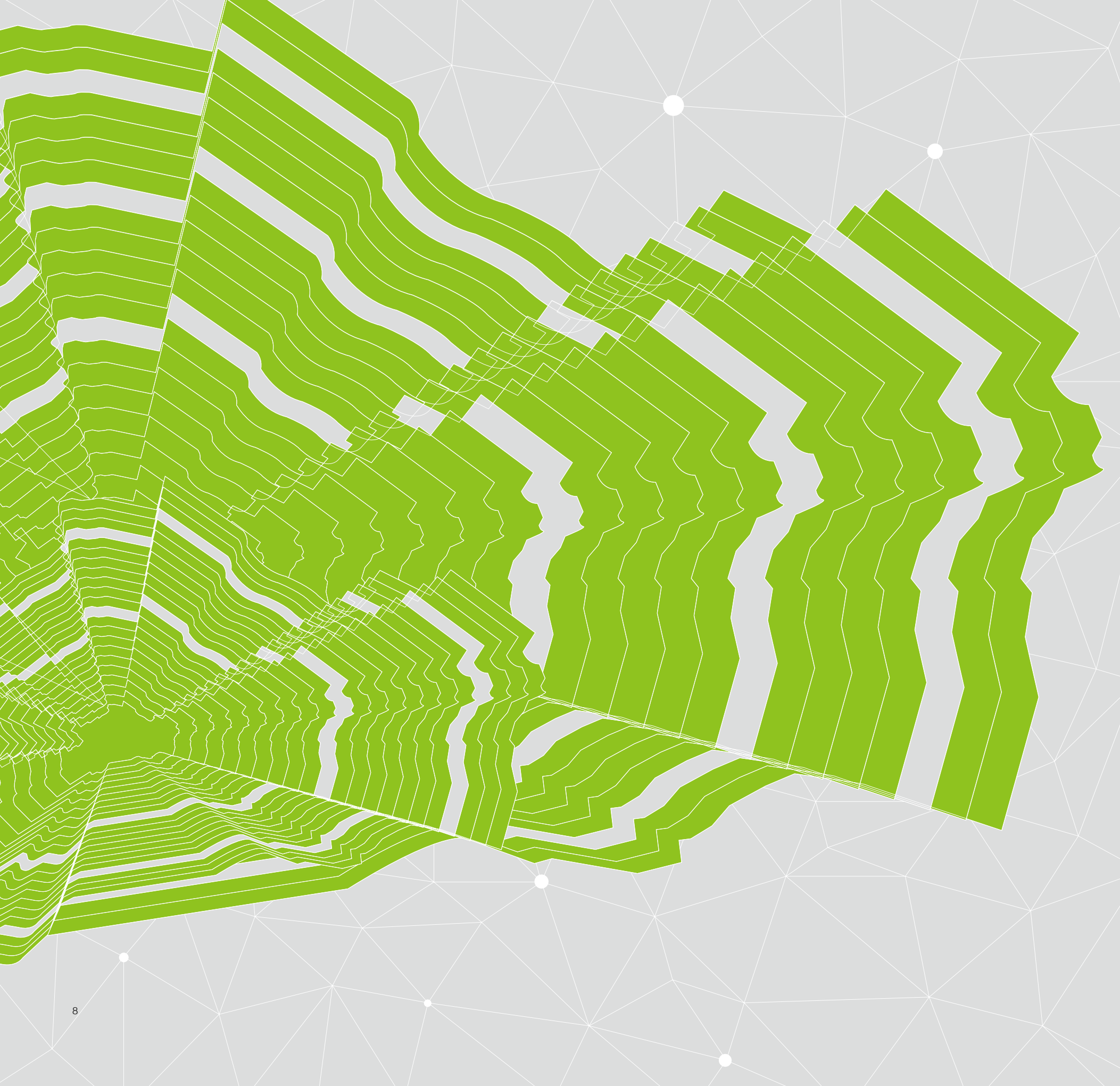
*This is a competition at face value, but it has a deeper purpose of providing a platform for mutual learning and experience sharing among local architectural design professionals who bring their skills into full play, as well as hoping to add new elements to the community facilities and environmental design. My sincere gratitude goes to each of the participating teams for investing lots of time and efforts in preparing the entries, and the eleven jury panel members for their sterling contribution and hard work as they took time out of their busy schedule to conduct professional, impartial and strict evaluation for the competition so that five Awards Winners and five Honorable Mentions were selected from thirty nine high-quality entries based on the planning and ideas incorporated in the design proposals, their depth of problem analysis and reasonable response, farsightedness, sustainability and construction feasibility.*

*Optimisation of community facilities is highly relevant to residents' livelihood. Along with Macao's social development, the public's demand for community facilities and activity spaces increases. Looking forward, IAM will continue to optimise the configuration of leisure facilities in various districts across Macao so as to build high-quality and diversified community facilities and municipal leisure spaces for more liveable neighbourhood environment and better living quality as a whole.*

### **José Maria da Fonseca Tavares**

Chairman of Administration Committee on Municipal Affairs  
Municipal Affairs Bureau





## 序

望廈山市政公園無障礙步行系統建築概念設計比賽，是繼 2011 年“新港務局大樓建築設計及周邊空間優化規劃比賽”後又一個獲獎作品可以實施興建的建築設計比賽。本會自 2013 年起與多個組織聯合舉辦建築設計競賽，當中包括 2013 的“西望洋聖堂和主教私邸周邊空間優化設計比賽”，2015 年“優化南、西灣湖沿岸和周邊空間建築設計比賽”，2017 年“年青建築師眼中的理想公共房屋”建築設計比賽及 2019 年“十月初五日街區及周邊空間活化再利用概念設計比賽”。今年，本會有幸獲市政署大力支持，聯合舉辦“望廈山市政公園無障礙步行系統建築概念設計比賽”，為本澳建築設計界提供了一個難能可貴的機會，讓本地建築師可以一展所長，實現理想。本次比賽反應十分踴躍，共三十九組參賽者集合了本澳老、中、青三代建築師。各參賽作品均表現出極高的水平，競爭激烈，令人鼓舞。

澳門具有豐富的歷史建築文化氛圍，本次比賽的場地望廈山市政公園及周邊的區域位處澳門望廈山，正是本澳其中一個重要的歷史街區。山上市政公園的設施已十分老舊，不能滿足市民及社會發展的需要，特別是無障礙步行環境的構建方面較為迫切。另外，公園及周邊環境亦需要及時更新改善。同時，望廈山的兩側是人口稠密的筷子基區及黑沙環區，如何通過無障礙步行系統串聯兩個區域，並讓市民可以更方便利用望廈山市政公園的設施是優化計劃的重點。為此本會及市政署希望通過聯合舉辦公開徵集活動尋找出合適方案，為市民提供美好的生活休憩空間。

本次比賽包含了城市設計、景觀優化、文物及環境保護、可持續發展等重要元素。通過本次比賽，本會希望從多方面推動構建澳門的建築多元文化，提升業界專業水平，建設更宜居澳門。

建築師的天職是為人類構建美好的生活空間，包括城市、建築、景觀以至家具。除了功能性外，建築美學同時是人類的寶貴財富。建築藝術氛圍為城市、街區注入活力與個性，作為一個與眾不同的世遺城市，我們必須有自己的建築師及保持澳門的建築文化特色。為推動本澳建築師的成長，公平競圖是其中的一個重要手段，只有創設公平開放的競爭環境，並通過不斷的實踐與交流，才可提升本澳建築設計水平，並形成屬於澳門的建築文化。

最後，我祝願各參賽建築師再接再厲，為澳門的建設盡一分力。並再次感謝市政署的支持以及組委會、評審團及各工作人員的努力與支持，使本次競賽得以成功舉辦。

梁頌衍  
澳門建築師協會  
會員大會主席



## Prefácio

A Competição de Arquitectura para Projecto do Circuito Pedonal Sem Barreiras do Parque Municipal da Colina de Mong-Há é, a seguir ao Concurso Público para o Projecto de Concepção Arquitectónica do Novo Edifício da Capitania dos Portos e Optimização da Zona Envolvente que teve lugar em 2011, outro concurso de arquitectura em que as obras premiadas são realizáveis. Desde 2003, a Associação dos Arquitectos de Macau organiza, em conjunto com várias organizações, concursos de projecto de concepção arquitectónica, de entre eles se destacando o “Concurso de Design para a Optimização do Ambiente Envolvente à Capela da Nossa Senhora da Penha”, em 2013, o “Concurso de Concepção Arquitectónica da Optimização da Zona Envolvente dos Lagos Nam Van e Sai Van”, em 2015, o “Concurso de Concepção Arquitectónica da Habitação Pública Ideal nos Olhos dos Jovens Arquitectos” e o “Concurso do Desenho Conceptual da Revitalização e Reaproveitamento do Bairro da Rua de Cinco de Outubro”. Este ano, o forte apoio que o Instituto para os Assuntos Municipais dispensa, através da sua coorganização da Competição de Arquitectura para Projecto do Circuito Pedonal Sem Barreiras do Parque Municipal da Colina de Mong-Há, proporciona ao sector da arquitectura, nomeadamente aos arquitectos locais, uma oportunidade excelente e valiosa, quer para mostrar o seu talento quer para realizar o seu ideal. A reacção a este concurso é muito positiva, uma vez que conta com a participação de 36 equipas que reúnem arquitectos locais de grupos etários jovens, de meia-idade e idosos. Todas as obras participantes apresentam qualidade de nível extremamente elevado, resultando daí uma concorrência intensa, o que é estimulante.

Macau possui uma rica atmosfera de cultura de construções históricas. O Parque Municipal da Colina de Mong Há e a sua envolvente localizam-se exactamente numa das zonas históricas mais importantes de Macau – a Colina de Mong Há. As instalações que existem no Parque Municipal estão muito velhas, sendo incapazes de satisfazer as necessidades dos cidadãos e do desenvolvimento social, especialmente no que se refere à construção do ambiente pedonal sem barreiras, que é relativamente premente. Acresce ainda que o parque propriamente dito e o ambiente da sua envolvente carecem também de renovação e melhoria atempada. Entretanto, a Colina de Mong Há é ladeada pelo Bairro do Fai Chi Kei e pelo Bairro

da Areia Preta, com densa população. O ponto principal do projecto de optimização reside na forma como ligar em série as duas zonas através do sistema pedonal sem barreiras e permitir aos cidadãos utilizar, com maior comodidade, as instalações do Parque Municipal da Colina de Mong Há. Para isto, a Associação dos Arquitectos de Macau e o Instituto para os Assuntos Municipais esperam poder procurar uma solução adequada, por meio da recolha pública, proporcionando um lindo espaço de lazer para os cidadãos.

A competição ora apresentada cobre elementos importantes, como o traçado urbano, a optimização paisagística, a preservação do património cultural e do ambiente, e o desenvolvimento sustentável. Com esta competição, pretendemos promover, sob várias vertentes, a construção da cultura de Macau que assenta na diversidade arquitectónica e elevar o nível profissional do sector, fazendo com que Macau seja uma cidade agradável para viver.

Criar um espaço de vida maravilhoso para a humanidade, incluindo cidade, construção, paisagem e mobiliário urbano, é a vocação do arquitecto. A par da funcionalidade, a estética da arquitectura é também um tesouro precioso da humanidade. A atmosfera de arte arquitectónica imprime vitalidade e personalidade à cidade e aos bairros. Sendo uma cidade classificada como Património Cultural Mundial e revestida de singularidade, devemos ter os nossos próprios arquitectos e manter as características culturais da arquitectura de Macau. Na perspectiva de impulsionar o crescimento dos arquitectos locais, a competição leal entre desenhos constitui um dos instrumentos importantes. Só se pode elevar o nível do desenho arquitectónico de Macau e configurar uma cultura arquitectónica que pertence a Macau com a criação de um ambiente de competição leal e aberta e mediante prática e troca de experiência incessantes.

Por último, desejamos a todos os arquitectos participantes na competição que redobrem esforços, dando o seu contributo para a construção de Macau. Mais uma vez, os nossos agradecimentos ao IAM, pelo apoio dispensado, e à Comissão Organizadora, Júri e diversos trabalhadores, pelo esforço e apoio prestado em prol do sucesso da competição.

**Leong Chong In**  
Associação dos Arquitectos de Macau  
Presidente da Assembleia Geral

## Preface

*“Architectural Concept Design Competition - Barrier-free Walking System for Mong Há Hill Municipal Park” is an architectural design competition in which the winning entry can be realized and constructed, following “Competition for the Architectural Design of the New Maritime Administration Building and the Optimization Plan for its Surrounding Areas” in 2011. Since 2013, the Architects Association of Macau (AAM) has jointly organized competitions for architectural designs with many organizations, including “Competition for Architectural Design for Optimization of Surrounding Areas of Chapel of Our Lady of Penha and Bishop’s Palace” in 2013, “Competition for Architectural Design -Waterside & Surrounding Enhancement of Lake Nam Van & Lake Sai Van” in 2015, “Architectural Design Competition for Young Architects - Ideal Public Housing in the Eyes of Young Architects” in 2017 and “Rua de Cinco de Outubro Neighborhood Revitalization and Redevelopment Concept Design Competition” in 2019. This year, AAM was honored to receive tremendous support from Municipal Affairs Bureau (IAM) in jointly organizing “Architectural Concept Design Competition - Barrier-free Walking System for Mong Há Hill Municipal Park”. This competition provided a rare and precious opportunity for local architects to utilize their talents and achieve their dreams. The competition received enthusiastic response and a total of 39 entrants participated, incorporating local architects of all ages. All entries were of extremely high quality. Competition was fierce and the results were encouraging.*

*Macau is a city with a rich cultural atmosphere of historic architecture. The location of this competition, Mong Há Hill Municipal Park and its surrounding areas are located in Mong Há Hill in Macao, which is one of the city's important historic areas. The Municipal Park on the hill is very old and could no longer satisfy the needs of residents and social development. Thus, the design and construction of a barrier-free walking environment is especially pressing. Furthermore, the park and its surrounding environment are also in need of timely refurbishment and improvement. Meanwhile, the district of Fai Chi Kei and the district of Areia Preta, two densely populated districts, are on the two sides of Mong Há Hill. Connecting these two districts with a barrier-free walking system while facilitating residents’ use of the facilities of Mong Há Hill Municipal Park is an important point in the optimization project. For this purpose, AAM and IAM hoped that they can find a suitable proposal through this open call for entries to provide a better living and leisure space for residents.*

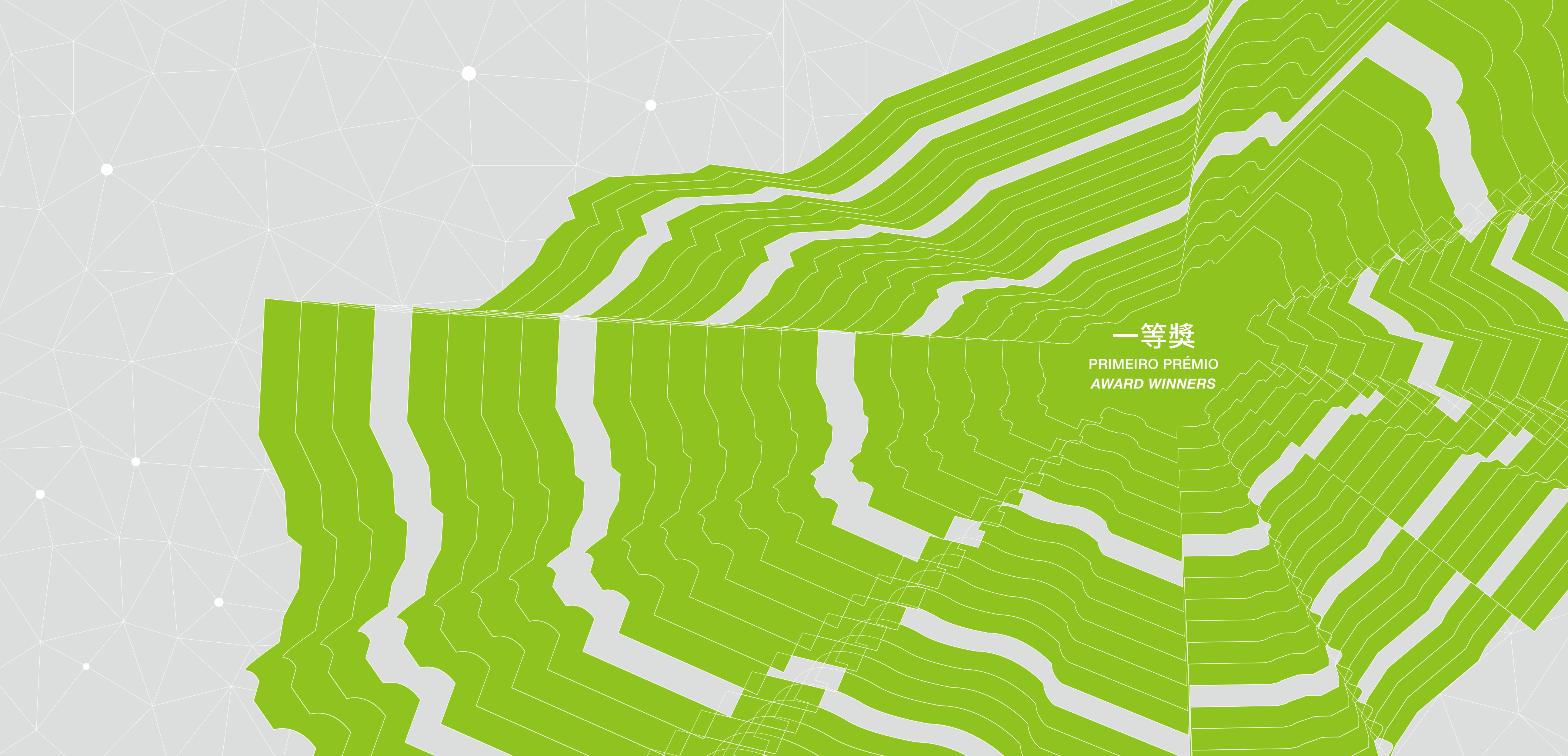
*This competition incorporated important elements such as urban planning, landscape optimization, conservation of historic buildings and environment, sustainable development, etc. Through this competition, AAM hoped to promote the design and construction of a diverse culture in Macao’s architecture, elevate the professionalism of the industry and build a more livable Macao.*

*The mission of an architect is to design and build good living space for humankind, including cities, architecture, landscape, and even furniture. In addition to functionality, the aesthetics of architecture is also a valuable asset of humankind. Architectural art injects liveliness and character into cities and streets. As a unique world heritage city, Macao must have its own architects and preserve the cultural characteristics of its architecture. To promote the growth of local architects, fair competition is one of the important means. Only through the creation of a fair and open environment for competition and through consistent practice and exchange of ideas would Macao’s quality of architectural design be enhanced and an architectural culture belonging to Macao be formed.*

*Lastly, I hope that all participating architects will continue to contribute to the building of Macao. I would like to thank IAM for their support, and the organizing committee, the jury panel and staff for their efforts and support, which contributed to the successful organization of this competition.*

**Leong Chong In**  
President of Members’ Assembly  
Architects Association of Macau





一等獎

PRIMEIRO PRÉMIO  
AWARD WINNERS



# Ricardo Santos Meireles

Ricardo Filipe dos Santos Meireles  
 Nuno Miguel da Mota Veiga Carvalho Alves / 上官人  
 Bruno Manuel Escada Pinheiro Malês



Rather than proposing a radical approach or introducing contrasting elements, our approach was to map and study the existing structure of the area and its different parts added along the years. The existing site condition is somehow disconnected, in lack of a narrative that would make them work together as a whole.

The proposed West-East pathway between Fai-Chi-Kei and Hac-Sa-Wan was developed beyond

a merely barrier-free connection between zone A and D. Our solution provides a sequence of spaces and experiences along that path, where different elements of the public park are “sewn” together.

In an urban context like Macau where density is a pervasive issue, the notion of overlapping naturally becomes a key concept to urban development. Finding ways to activate certain parts of the city, such as Mong Ha, by transforming the area from a barrier

to an interface was our goal.

Shelter, as well as contact with nature, are the basic necessities felt by the community in an environment as densified as Macau. This proposal was therefore born from the aforementioned premises, plus the desire of providing visitors with more diverse physical and visual experiences that would enrich & enhance their journeys along this new barrier-free walking system.

## MONG HA MUNICIPAL PARK BARRIER-FREE WALKING SYSTEM

### Architectural Concept Design Competition Master Plan

The main challenge and purpose of this competition was to provide a barrier-free access to Mong Ha Public Garden and at the same time a more direct West-East connection between Fai Chi Kei and Hac Sa Wan areas of the city.

Mong Ha Hill is an important reference in Macau, both as an old neighborhood with unfortunately very little reminiscences apart from the sacred places located around the Ni-Ling Fong Mau, on the North and Kun Iam Temple on the South with small altars on the hill as well as on the East side.

New small structures inspired in the size and shape of the existing casemates may be added wherever needed to make that network more readable and workable.

Water is a fundamental element in nature that should be more visible and more integrated in Mong Ha Public Garden. Another proposal is to develop a water feature that will provide a more lively and natural flow of water, not just merely a water pond or reflective pool. A water feature consisting of both water ponds and gentle cascades that will enrich the experience of the user by adding sound and movement through that flow of water and more closely reproducing the feeling of being close to nature.

Another crucial concept to this proposal is “shelter”. Shelter is a natural human need. The sense of protection. Protection from the sun, the heat, the rain or the wind according to the season and hour of the day. The central underground plaza was born from this concept of shelter and as a result of trying to reduce the sharp difference in height between the lower (Zone A and B) and the upper (Zone D) levels.

Overlapping has the quality of adding layers horizontally or vertically, generating new perspectives over the same area, narrowing or widening views and providing alternative routes and speeds along the same path.

**Zone A - Proposed Program:**

- FLYOVER EXTENSION TO MAIN ENTRANCE AND MAIN LIFT (2 LEVELS)
- SERVICE BUILDING 4 STORES
- OFFICES
- PUBLIC TOILETS
- CAFÉ/RESTROOM
- WORKSHOP ROOMS FOR CREATIVE ARTS (SIMILAR TO AVA MACAU)
- STORES
- ACCESS TO EV FLOUNDER OR BARK LIFT
- PLAZA WITH FOUNTAIN, AMPHITHEATRE AND STAGE (COVERED STANDS LEAVING HILL TOPS) - MULTIPURPOSE USE (UNDERGROUND COVERINGS)
- RELOCATION OF TRAIN STATION (UNDERGROUND COVERINGS)
- CARE OUTDOOR (DOG POUND DEMOLITION)
- KEEP THE DOG GRAVEYARD (ENCLOSED WITH BAMBOO FENCE)
- MAIN LIFT IN STORES BUILDING AND FLOUNDER
- LIFT & STAIRS ACCESSIBLE POINT
- SUPPORT STORAGE BUILDING (2 STORES)
- NEW OR WAREHOUSE CULTURAL COURTYARD

## MONG HA MUNICIPAL PARK BARRIER-FREE WALKING SYSTEM

### Architectural Concept Design Competition Zone A

The intervention at Zone A proposed the demolition of all structures added along the years in and around the On-Warehouse buildings, repair and revert walls, doors, windows and ceilings to the original look as shown in the b/w photo attached to the competition brief.

The On-Warehouse compound perimeter walls are to be repaired as well, in the external triangular area on the SW facing Av. Coronel Minguito the lower the garbage collection point, lower all and fences are to be demolished to give way to a wider sidewalk that will provide a new access to Mong Ha public park along the old wall of the On-Warehouse.

At the South end of the SW external wall and after turning around the corner toward the sidewalk will be located the new main gate. It opens to a courtyard that will welcome the users of the public park.

On the east side will be the back wing of On-Warehouse, in front will be the dog cemetery as a green island at the north side of the courtyard. Along the East side will be built a new building running south to north at the slope of the hill.

The building will host a welcome centre, coffee shop/convenience store, public restrooms as well as offices, multi-purpose rooms, open areas in the middle levels, a rooftop and public lift to provide a direct and barrier free access to the upper level of the hill.

New Main Elevators

In terms of design, the building will be partially open and incorporate a green facade to become less “imposing”. The elevator and staircase will be incorporated in the building and recessed from the facade in order to make it less visible at the lower levels.

The elevator will depart from level 5.0m (courtyard) and serve the 4 floors of the new building, the 4th floor being the rooftop. There will be a new pathway departing from the rooftop connecting directly to the park so the rooftop will become part of the park as a leisure area.

The elevator will then continue until reaching level 32.5m where there will be a pedestrian overpass connecting the top of the elevator to the hill, going through and between the trees.

The overpass will land at a bifurcation where the user will have the option of keep going up the hill through an open path or keep going straight through an underground pass that will connect to a partially underground plaza at level 34m that will be created at Zone B under the existing circular shaped roundabout in front of #7.



**MONG HA MUNICIPAL PARK**  
BARRIER-FREE WALKING SYSTEM

Architectural Concept Design Competition

**Zone B**



The underground plaza will have a similar dimension of the existing one (30m diameter), with an 11m diameter opening in the middle (where currently there's a fountain) that will provide natural light and air to the lower area.  
This area will serve as an interface as well as a shelter when the weather becomes unstable. The rain will fall through that opening to the lower level into a reflecting pool located in the center.

Around the underground plaza there will be a new public restroom as well as a service/commercial area with vending machines and a couple of shops.

The underground plaza will be open to the NE, overlooking the park and the pre-existing set of stairs going down in the NE direction.



The existing set of stairs will be transformed into a water feature that will connect the upper pond to the circular reflecting pool at the underground plaza flowing down to a circular pond located at level 21m and further down to level 23m where another circular pond will collect all the water that will be pumped up to the upper pond. That will keep a steady supply of water providing a refreshing natural and pleasant feel of flowing water that was missing in this park.

This water feature system will keep the footprint of the set of stairs preserving the memory of that previous intervention.

The underground plaza will be connected to the upper level roundabout through a staircase and through a sloped pathway continuing westward to zone C.

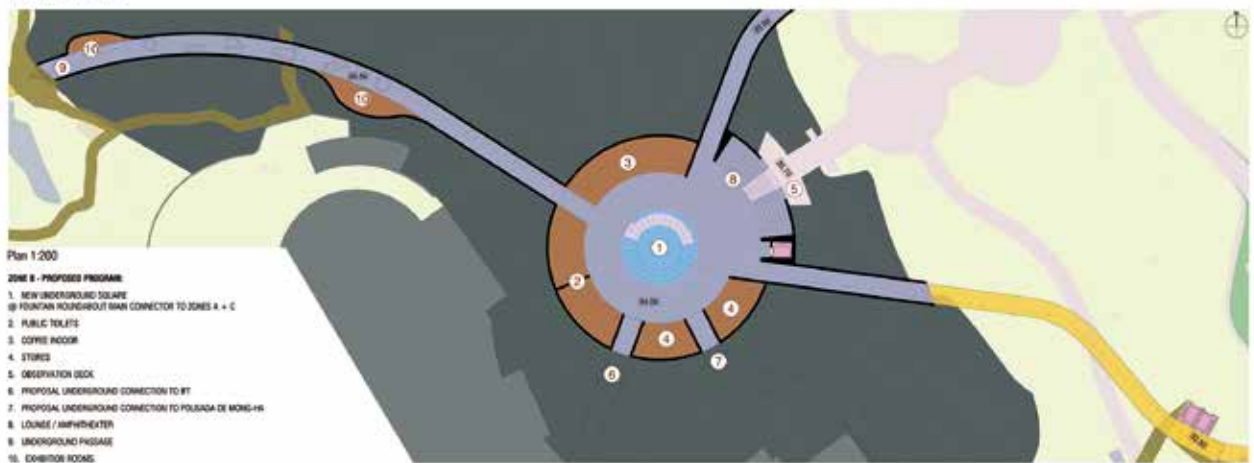
Due to the level difference between B and C another elevator will be added in between these areas to make the connection better ties.

The connection to C area will run along the contour of the hill trying to reduce as much as possible the extension of the overpass connecting to new building at Zone C.

3/4



Section/Elevation 1:200



- Plan 1:200
- ZONE B - PROPOSED PROGRAM**
- 1. NEW UNDERGROUND SQUARE
  - 2. PUBLIC TOILETS
  - 3. COFFEE INDOOR
  - 4. STAIRS
  - 5. OBSERVATION DECK
  - 6. PROPOSAL UNDERGROUND CONNECTION TO RT
  - 7. PROPOSAL UNDERGROUND CONNECTION TO PASEADA DE MONG HA
  - 8. LOUNGE / AMPHITHEATER
  - 9. UNDERGROUND PLAZA
  - 10. EXHIBITION ROOMS

**MONG HA MUNICIPAL PARK**  
BARRIER-FREE WALKING SYSTEM

Architectural Concept Design Competition

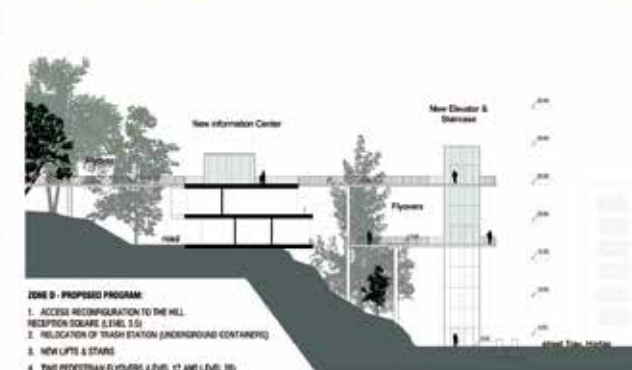
**Zone C + D**



Since the existing building doesn't suit the program anymore it will be demolished to give way to a new one that will be erected with a more open relation with the environment.  
The overpass coming from Zone B will land at the rooftop of the building where there will be a lift connection to the lower levels.  
The rooftop will also work as an extension of the overpass providing a rest and leisure area similar to the rooftop of the new building in Zone A.



Roof Plan LEVEL 25 1:200



Section/Elevation 1:200

- ZONE C - PROPOSED PROGRAM**
- 1. ACCESS RECONFIGURATION TO THE HILL RECEPTION SQUARE & LEVEL 3.5
  - 2. RELOCATION OF TRASH STATION UNDERGROUND CONTAINER
  - 3. NEW LIFTS & STAIRS
  - 4. NEW PEDESTRIAN FLYING LEVEL 17 AND LEVEL 20



Plan 17 LEVEL 21 1:200

Plan GF LEVEL 17 1:200

Room	Area (m <sup>2</sup> )	Total
Office	10.00	100.00
Reception	10.00	
Waiting Room	10.00	
Information	10.00	
Storage	10.00	
Public Toilet	10.00	
Staircase	10.00	
Elevator	10.00	
Other	10.00	
Roof	10.00	
17	10.00	100.00
20	10.00	
17	10.00	100.00
20	10.00	
17	10.00	100.00
20	10.00	



4/4



# 施冠雄



施冠雄  
黃美玲  
林見龍  
梁文傑

沒有最好的設計，只有最合適的設計。  
最合適於客戶、最合適當地環境、最合適當刻時期的設計。

我們從整個城市佈局開始分析並發挖基地原有特色。

設計上懷著謙虛、尊重週邊建築及山體的態度去規劃新建建築的形態及上下山交通方式，並且考慮場所的動態發展而制定對應的人流動線規劃方案。

建造可行性方面，除了選用成熟建築技術及減少山體開挖之外，亦考慮市民大眾的觀感而去控制建築高度、交通形式等規劃設計。



## 2 望廈山市政公園無障礙步行系統-建築概念設計比賽

Architectural Concept Design Competition - Barrier-free Walking System for Mong Ha Hill Municipal Park





### 3 望廈山市政公園無障礙步行系統-建築概念設計比賽 Architectural Concept Design Competition - Barrier-free Walking System for Mong Ha Hill Municipal Park



**合意圖則**  
1樓：展覽廳、植物科普基地及資訊中心大樓  
2樓：展覽廳、植物科普基地及資訊中心大樓  
3樓：展覽廳、植物科普基地及資訊中心大樓  
4樓：展覽廳、植物科普基地及資訊中心大樓  
5樓：展覽廳、植物科普基地及資訊中心大樓

**● 市政有線綜合行人動線規劃**  
 ● 登山步線  
 ● 到訪大樓人士動線  
 ● 後勤辦公動線

**● 建築技術**  
 ● 電鍍鋁板  
 ● 層頂花園平台  
 ● 可持續發展的環保建築  
 ● 膠木複合材料  
 ● 垂直玻璃幕牆  
 ● 雨水匯集

**● 建築形體分析**  
 ● 建築體積  
 ● 自然風扇  
 ● 山景景觀  
 ● 遮陽效果  
 ● 轉角山景

**● 市政有線綜合行人動線規劃**  
 ● 登山步線  
 ● 到訪大樓人士動線  
 ● 後勤辦公動線

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 ● 垂直玻璃幕牆  
 ● 雨水匯集

**● 建築形體分析**  
 ● 建築體積  
 ● 自然風扇  
 ● 山景景觀  
 ● 遮陽效果  
 ● 轉角山景

### 4 望廈山市政公園無障礙步行系統-建築概念設計比賽 Architectural Concept Design Competition - Barrier-free Walking System for Mong Ha Hill Municipal Park

**● 植物科普基地及資訊中心大樓**  
分層功能平面圖

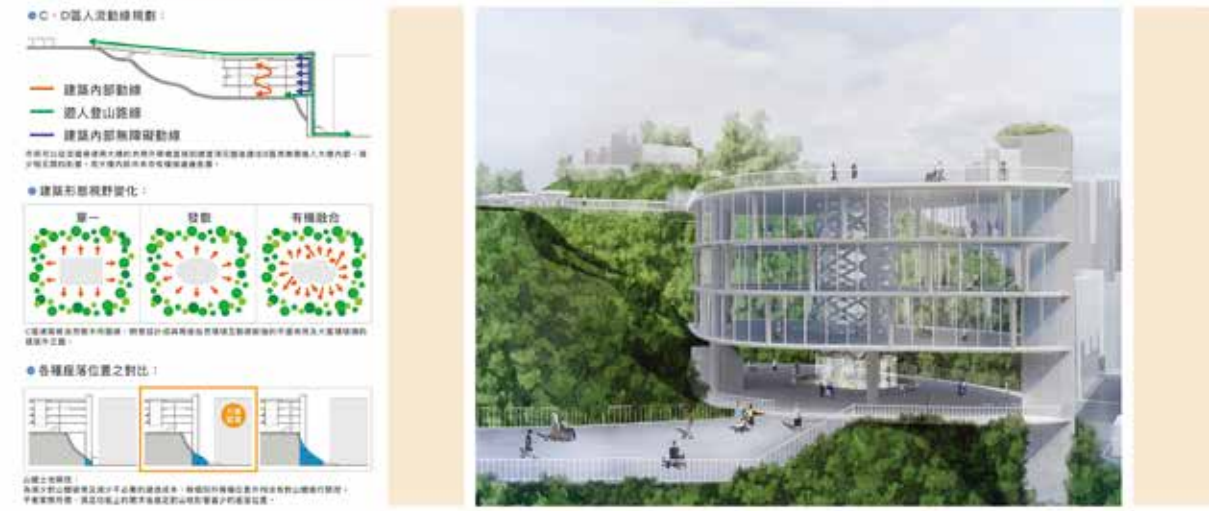
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3樓：展覽廳、植物科普基地及資訊中心大樓  
4樓：展覽廳、植物科普基地及資訊中心大樓  
5樓：展覽廳、植物科普基地及資訊中心大樓

**● C、D區行人動線規劃**  
 ● 建築內部動線  
 ● 遊人登山動線  
 ● 建築內部無障礙動線

**● 建築形體變化**  
 ● 第一  
 ● 雙動  
 ● 有機融合

**● 各種屋層位置之對比**

**● 各種屋層位置之對比**



**● 植物科普基地及資訊中心大樓**  
分層功能平面圖

1樓：展覽廳、植物科普基地及資訊中心大樓  
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3樓：展覽廳、植物科普基地及資訊中心大樓  
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5樓：展覽廳、植物科普基地及資訊中心大樓

**● 建築技術**  
 ● 電鍍鋁板  
 ● 層頂花園平台  
 ● 可持續發展的環保建築  
 ● 膠木複合材料  
 ● 垂直玻璃幕牆  
 ● 雨水匯集

**● 建築形體分析**  
 ● 建築體積  
 ● 自然風扇  
 ● 山景景觀  
 ● 遮陽效果  
 ● 轉角山景

**● 市政有線綜合行人動線規劃**  
 ● 登山步線  
 ● 到訪大樓人士動線  
 ● 後勤辦公動線

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# 鄭劍藝

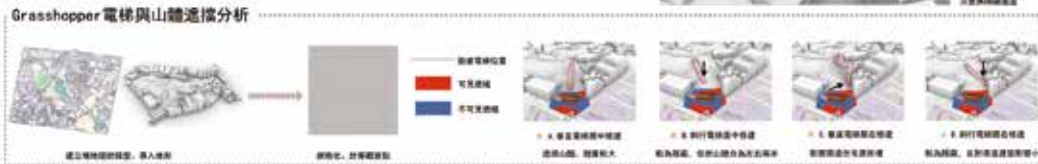


組長：  
鄭劍藝，博士，澳門註冊建築師  
隊員：  
鄭亮、陳以樂、馮晶磊

望廈是澳門北區具有悠久歷史文化的區域。設計概念由場所環境中的鄉土和當代元素出發，融合歷史，打造牛棚文創空間，將蠔殼牆、龐巴爾式鋪地、清水混凝土元素進行有機結合；採用參數化山體景觀視線分析方法，確立無障礙設施和路線的選址和形態，注重望廈山當地的自然景觀保護，並將其融入至無障礙步道中。除了營造一條蓮峰山上連接東西的無障礙步行捷徑，更是一條市民穿越和體驗澳門歷史文化、自然環境、現代城區的時空走廊。

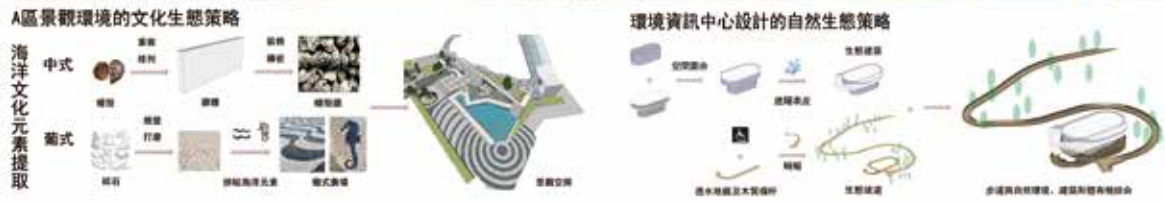
## 望廈蓮徑：鄉土與當代的時空步道 ——澳門望廈山市政公園無障礙步行系統建築概念設計

1

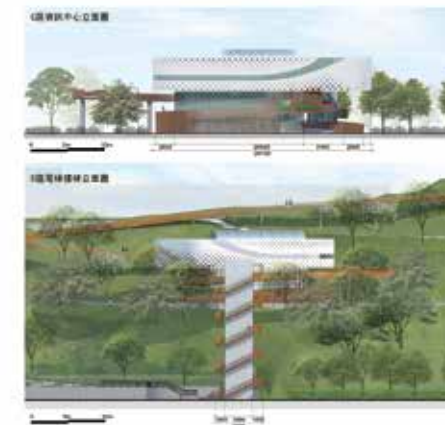
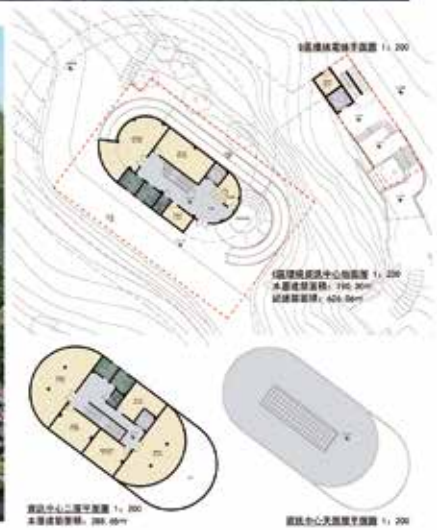
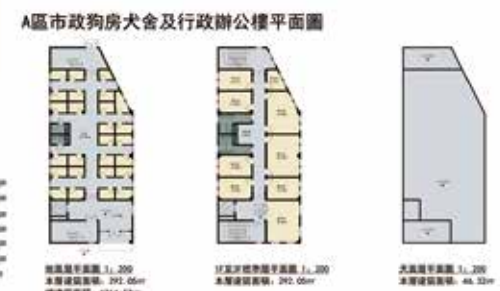
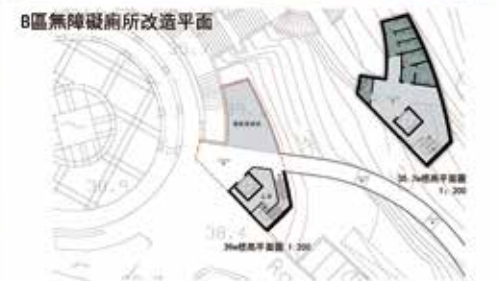


## 望廈蓮徑：鄉土與當代的時空步道 ——澳門望廈山市政公園無障礙步行系統建築概念設計

2









# 張群娣



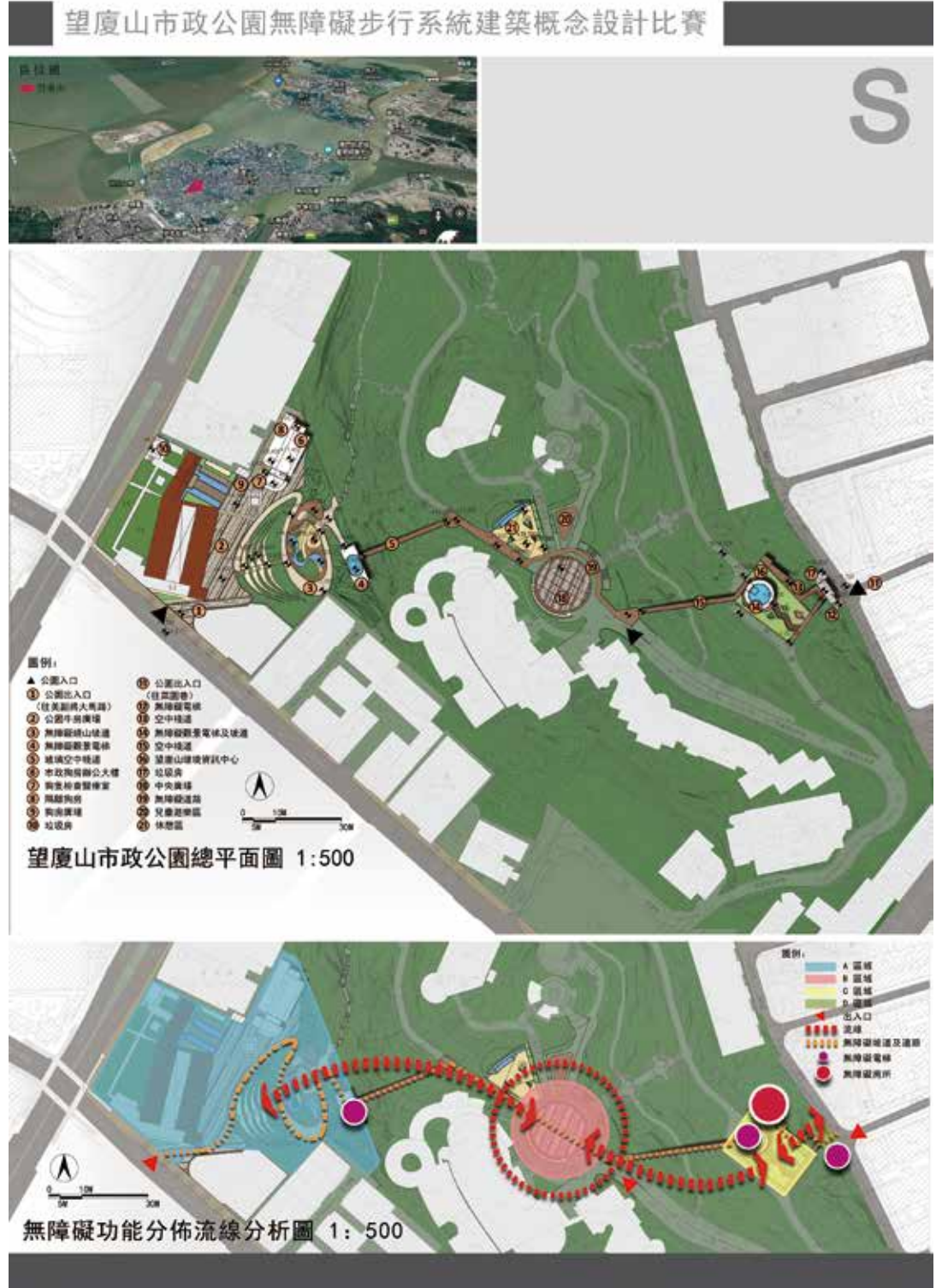
張群娣，澳門註冊建築師

**A 區：**  
無障礙繞山坡道 + 無障礙垂直景觀電梯 + 空中棧道  
概念：“天使、重生”，繞山坡道，觀景遊樂平臺，牛房大型文創活動廣場，狗房搬遷至辦公樓側，優化狗房區環境。

**B 區：**  
無障礙道路  
概念：將無效的空間進行改造利用，釋放出更多可進行活動的空間。

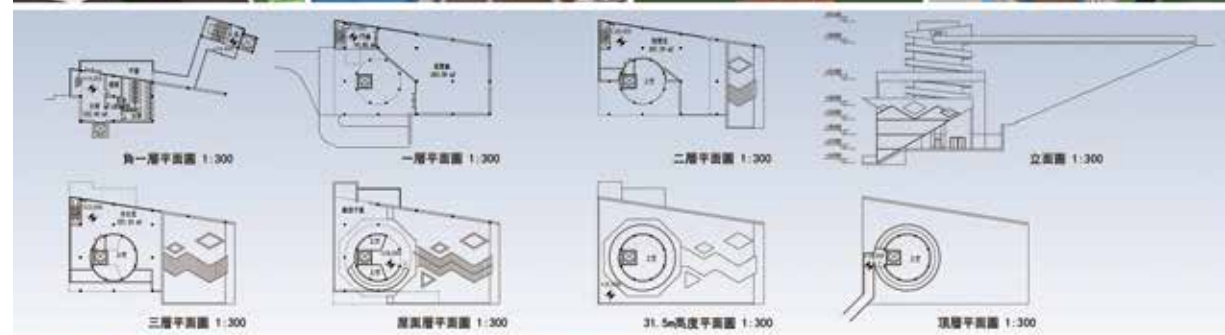
**C 區：**  
無障礙垂直電梯（帶有無障礙坡道）+ 空中棧道 + 無障礙廁所  
概念：綠色生態屋頂，無障礙坡道同時作跑步徑，空中棧道設計穿越叢林。

**D 區：**無障礙垂直電梯  
概念：雙棧道連接設計。

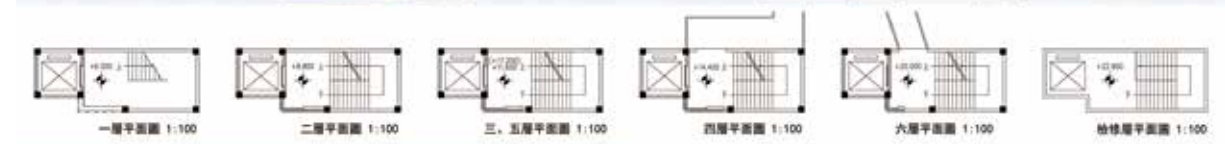
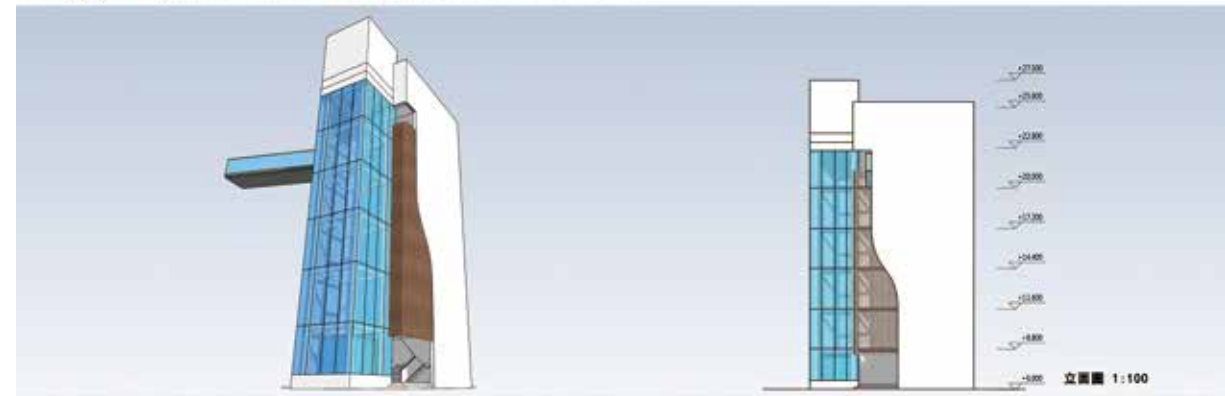
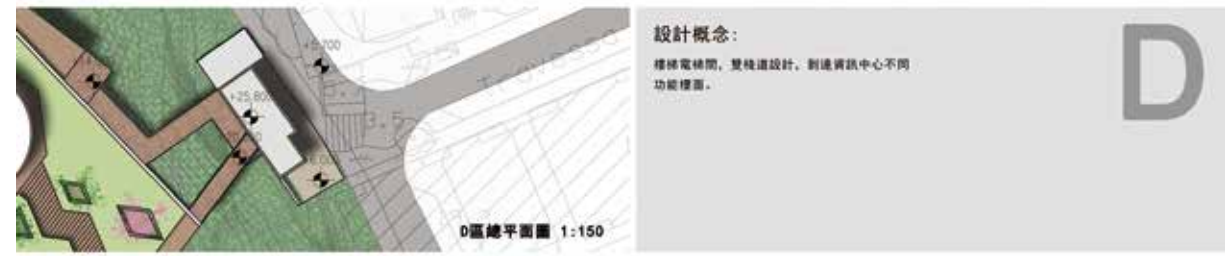




望廈山市政公園無障礙步行系統建築概念設計比賽



望廈山市政公園無障礙步行系統建築概念設計比賽





# Rogério André Santos de Oliveira de Oliveira



Rogério André Santos de Oliveira  
Laura Maria Pérez de Juan

From an urban perspective, Mong Há Hill might be considered, for its topographic characteristics, a natural barrier that divides the cityscape. It exists as a prominent obstacle that segregates the Red Market Area from the Hac Sa Wan Area as it is of difficult access, thus demanding that the general (pedestrian) public circumvent it by going through a longer route.

In order to minimize this impact on the pedestrian flow, this proposal seeks to create a new continuity between both parts of the urban fabric through a system of public spaces and vertical circulation infrastructures integrated with the existing built environment and geography.

There was an emphasis in creating public areas through the requalification of the existing urban spaces (voids) as well as a focus on activating otherwise dead interstitial zones. These spaces were designed with ample and generous circulation routes, seating areas, public Gym equipment and green patches and platforms that mimic the surrounding topography and hint at the possibility of introducing the concept of sponge city.

The proposed buildings seek to minimize their intrusion into the natural environment by adapting to the surrounding features and, where possible, introduce green surfaces throughout the roofs and façades.



## MASTER PLAN

**MOBILITY Public Spaces**  
Begin an urban context. Mong Há Hill might be considered a natural barrier that segregates different areas of the cityscape. It exists as a prominent obstacle that segregates the Red Market Area from the Hac Sa Wan Area as it is of difficult access, thus demanding that the general (pedestrian) public circumvent it by going through a longer route.

## ACCESSIBILITY Pedestrian Routes

In order to minimize this impact on the pedestrian flow, this proposal seeks to create a new continuity between both parts of the urban fabric through a system of public spaces and vertical circulation infrastructures integrated with the existing built environment and geography. The resulting spaces seek to introduce a barrier-free walking system starting from the existing urban context into the hill of Mong Há. There was an effort to introduce and create a complete path system in order to guarantee the complete accessibility into every part of the mountain.

## Green Areas (Vegetation)

The public areas created result from the requalification of existing spaces and focus on activating otherwise dead interstitial zones. These spaces were embedded with ample and generous circulation routes, seating areas, public Gym equipment and green patches and platforms that mimic the surrounding topography and hint at the possibility of introducing the concept of sponge city.

The buildings seek to minimize their intrusion into the natural environment and, where possible, introduce green surfaces throughout the roofs and façades.



RENDERING OF THE PROPOSED BUILDINGS SYSTEM FOR MONG HA HILL MUNICIPAL PARK

## ZONE A

In the zone corresponding with Au Do Riverside Landscape, the mountain is currently gradually disappearing due to a massive construction characterized by a succession of buildings (Municipal Market, Farmer Market, Apartment Buildings, etc.) that tend to avoid the intervention by creating a first plane in front of the Municipal Market complex with a massive green space for the city and designed to introduce a new urban space to this area, allowing the address to gain depth and breathe through the natural greenery. This public space would acquire the capability of absorbing customer traffic and direct it to the second plane, behind the former complex building.

It is important to maintain the place as Au Do Riverside Landscape seeks to enhance accessibility into the surrounding buildings and as such reduce a system of urban.

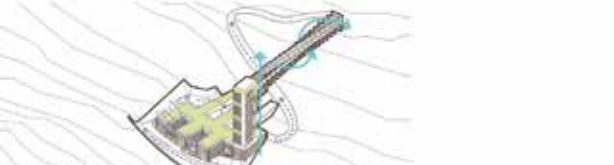
The second plane, more private in nature and for its characteristics, required a distinct approach as it contained a diversity of urban functions as a circulation route, as an entrance point into a new walking route as an escape route for the new Office Building, which being weight between the mountain and the forest. The entrance into the office is done by taking advantage of the walking path as a connecting element between both planes.

Being an interstitial space, it automatically merges between the existing buildings that form it as one area with landscaping, into the mountain topography by simulating its effect on the other. A sequence of paths, terraces and platforms of different scales, direct the public into the proposed features:

- Office Building
- Outdoor Gymnasium
- Walking Path

**Office Building**  
Located at the mountain part of the plan, this building is weight between the forest part and the mountain. The observability of this space helps in the volume's scaling, as well as the pedestrian circulation element.

The building plan is generated by an arch with the center located in the center zone in zone B, to which through rectangles, several units are created. These need to follow being used created to transfer conditions by adding distance to the surrounding forest area that allows more natural air flow to permeate the walking street located in the first and second floor. In the open however, facing the mountain, these voids help create and give continuity to the walking path that



**Walking Path**  
One of the objectives of this project is to allow the mountain to be able to connect with the interior plane, the walking path required considerable length to climb the mountain. As such, it needed to be more and more topography to achieve the required height and connect to the existing path. As a way to create complexity in this path, it was left out of the building, being a platform of its voids and roof.

The significance of the path lies in the fact that it introduces the possibility of viewing the mountain from the Red Market area in this way to the top.

These lower levels have LED lights embedded that would emphasize the volume.

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Simultaneously, the building's green roof serves the purpose of helping mitigate the heating effect of the mountain's slope and as an insulating environmental advantage associated with it (thermal insulation, water retention, etc.)

**Sheltered Space**  
In connection and articulation with the office building, the sheltered space provides vertical access to the central plane at the top of the mountain. This space, normally, is an extension of the office building, using the same vocabulary and seeking to explore the same forms. As such, the horizontal plane provides a shading system which insulates with the green central wall, contribute positively for the structure's environmental benefits.

The subsequent shelter connects to Zone B through a building structure that clearly marks the transition between the lower levels into the top of the mountain and vice versa. This effort is achieved by introducing quadrangular splicing elements that rotate 90 degrees throughout the length of the facade on the green central wall to emphasize the verticality.

These lower levels have LED lights embedded that would emphasize the volume.

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These lower levels have LED lights embedded that would emphasize the volume.

**Walking Path**  
One of the objectives of this project is to allow the mountain to be able to connect with the interior plane, the walking path required considerable length to climb the mountain. As such, it needed to be more and more topography to achieve the required height and connect to the existing path. As a way to create complexity in this path, it was left out of the building, being a platform of its voids and roof.

The significance of the path lies in the fact that it introduces the possibility of viewing the mountain from the Red Market area in this way to the top.

These lower levels have LED lights embedded that would emphasize the volume.

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RENDERING OF THE PROPOSED BUILDINGS SYSTEM FOR MONG HA HILL MUNICIPAL PARK



## ZONE B

Located at the top of the hill, this circular plaza is an existing public space where several functions converge and coexist. It is characterized by a circular plaza between several pedestrian routes as well as a circular entrance point into the hill for pedestrian users entering by car or motorcycle and parking in the adjacent area. Due to its proximity to the ST building, it is an inherent visual feature to be identity.

Keeping with the theme of introducing green surfaces where possible, the proposal seeks to introduce a 'liberal' garden with a small island where a 'vertical' garden will provide the area visual landmark identity of the place, associated with the fountain built from the existing small depression.

The existing circular driveway will host an 80% distribution of the zone and be used to complement the existing flow of pedestrian traffic.



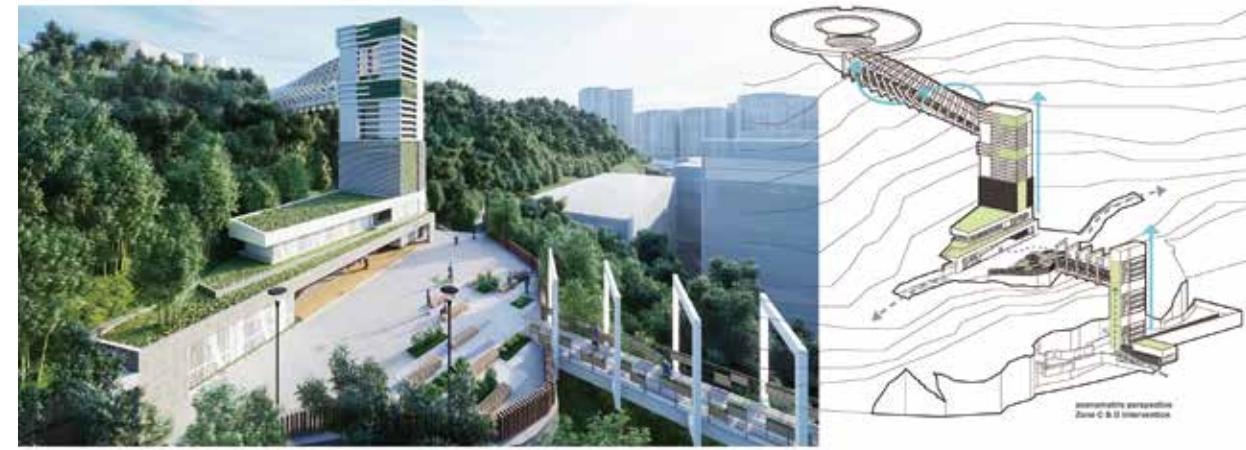
VIEW [DARWIN FREE BUILDING SYSTEM FOR HOME BY JILL MUNICIPAL PLAN]

## ZONE C

The access to this zone is made through a tower that adapts the same 'thick' shape mentioned above.

Subsequently, the proposal considers demolishing the existing Building in order to create an Integrated Sustainability Center. The building shell is moved into the recreation area as this maintains the visual impact and character of the natural environment. The purpose of this relocation is due to open up the public plaza, thus creating a new space for the public. With this, the objective would be to create an agricultural planetarium which would be used to complement the sustainability center in order to generate awareness to the population the matter of urban agricultural practices. Otherwise the frame of the building would not vary greatly from the existing one.

As it was the case of the building in zone A, here too, it has a green roof proposed to serve the same purpose as the office building. Simultaneously the slender tower is also integrated into the building's morphology.



## ZONE D

From Zone C public plaza, the pedestrian users are able to descend into the second slender tower. It was found to be more efficient in terms of circulation flow and circulation to adopt a stepped secondary structure to emphasize the experience of the sustainability building and its place.



VIEW [DARWIN FREE BUILDING SYSTEM FOR HOME BY JILL MUNICIPAL PLAN]





優異獎  
PRÉMIO DE MÉRITO  
HONORABLE MENTIONS



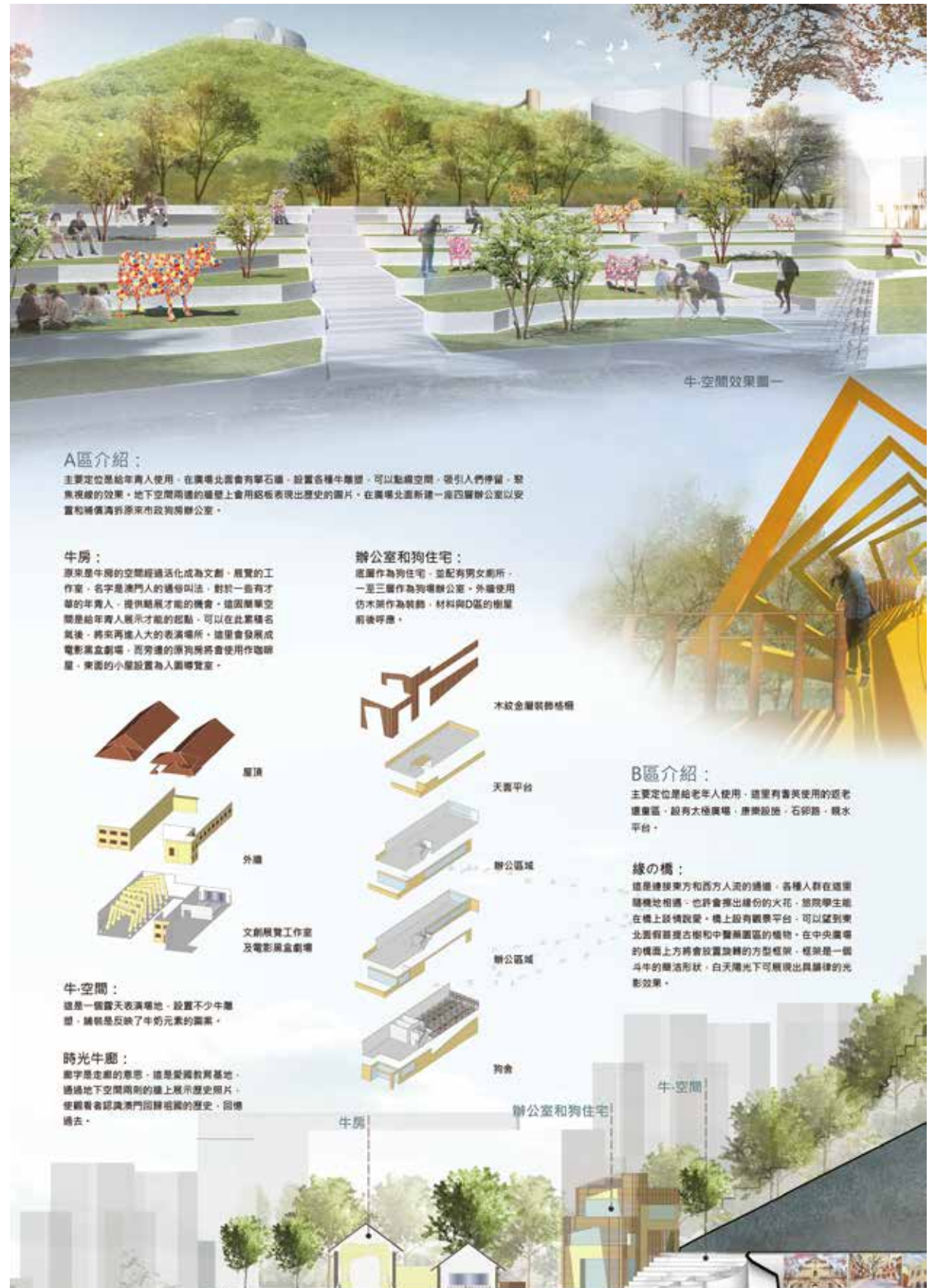
# 黃彩芳



黃彩芳  
蕭紅釵  
嚴漢邦  
梁天豪

我們的主题是牛一·花園，因为牛一是中國人生日的俗稱。每逢想到生日，人人都會充滿美好的回憶，期待通過設計把望廈山打造成澳門一流公園的期盼，改造成為一個地標公園，可以打卡，可以運動，亦可以玩樂。

公園設計對象是附近的居民，服務時間是 24 小時，包括早上和傍晚來晨運的老人家，晚上來散步跑步的年青人，深夜的時候來拍拖的情侶，設計方案在 A 與 D 區之間先後通過隧道—橋樑—隧道的方式串聯起來，營造出一條便捷的步行系統。









# 蔡子鈺

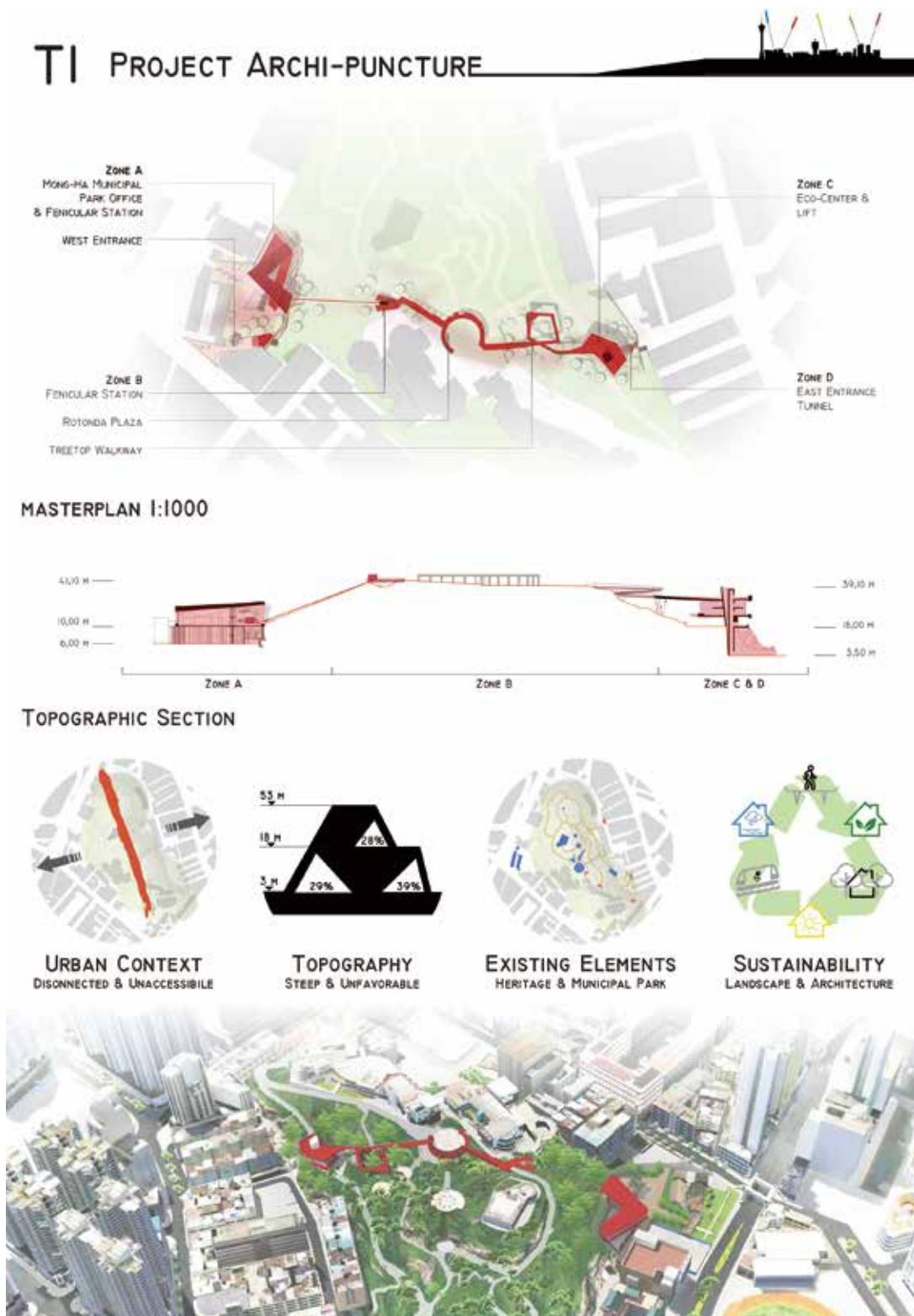


Choi, Chi lok  
 Chan, Kar Man Carmen  
 Sacadura Cabral De Sousa e Alvim, Gonçalo Maria  
 Solski, Tamara Shulamit

“Acupuncture is a complementary medical practice that entails stimulating certain points on the body, most often with a needle penetrating the skin, to alleviate pain, to restore balance in health throughout the entire body, likewise to the symbiotic mechanism between Mong-Ha hill and the adjacent neighbourhoods.”

Through implementing new architectural components that link together the four zones (A to D) over Mong-Ha hill; the route connects the community and to raise historical awareness as well as recreational appreciation. The route begins from Zone-A, the entry point of the Funicular lift station. The courtyard entrance commits to serve the community as an outdoor “chill-out lounge”. The Office Building portrays an ‘embracing gesture’ greeting the arriving passengers, the interlocking forms are designed to invite natural sunlight, whilst the pitch roof is designed to collect rainwater for irrigation. The Funicular lift track has been raised to reduce geotechnical excavation. The funicular lift takes passengers to reach Zone-B, the IFT’s Rotunda Plaza.

The barrier-free footpath design respects the existing architecture and communal memory. At Zone-C the Eco-Center ensures both a barrier-free passage and a panoramic view of the Mong Ha treetops, the design borrows the idea of a camouflage garment, applying similar building materials that blend into the surrounding.

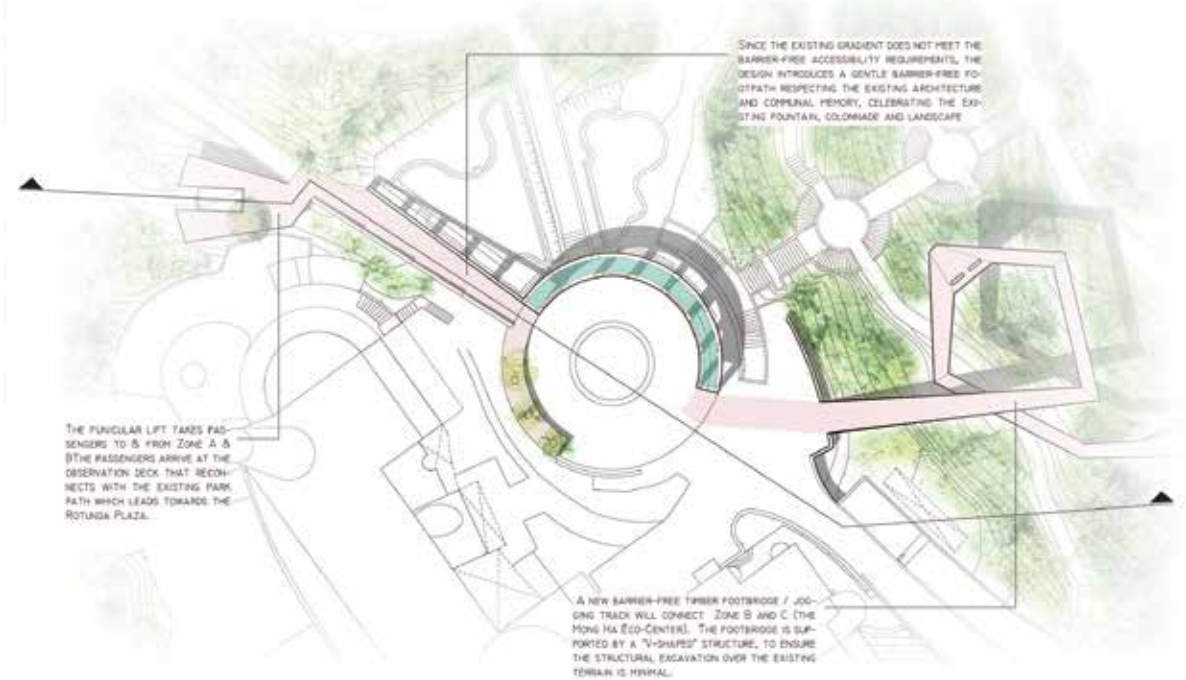


## T2 ZONE A - NEW MUNICIPAL KENNEL OFFICE / FUNICULAR STATION





# T3 ZONE B - ROTONDA PLAZA



MASTERPLAN 1:200



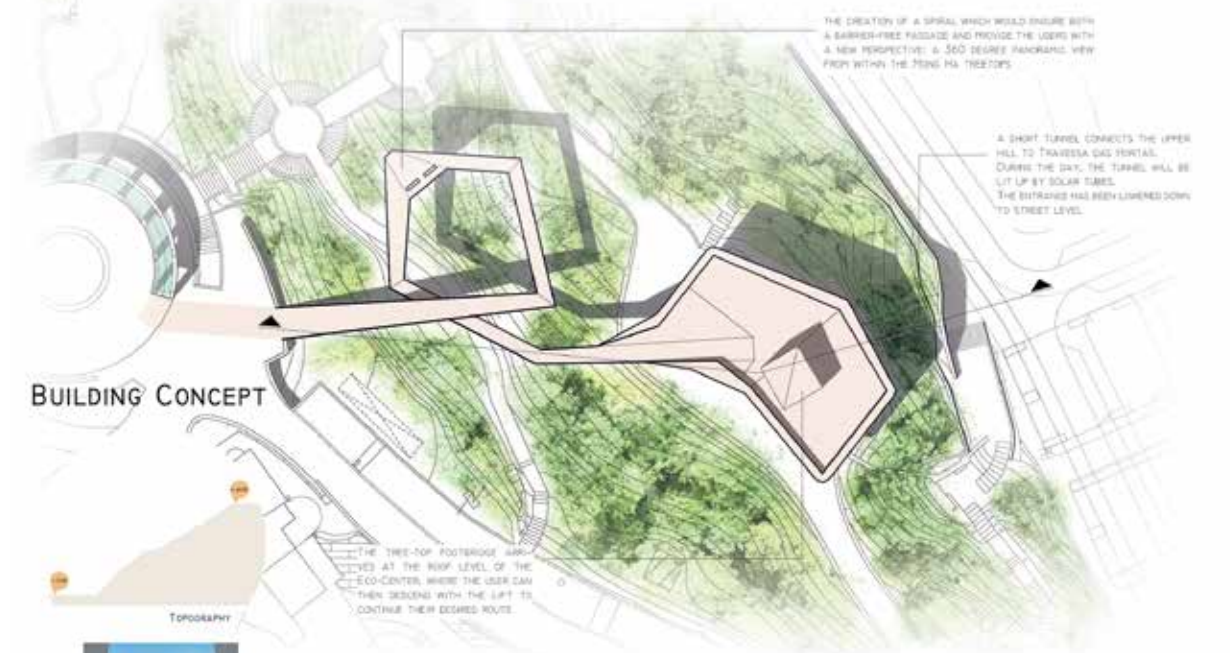
SECTION 1:200



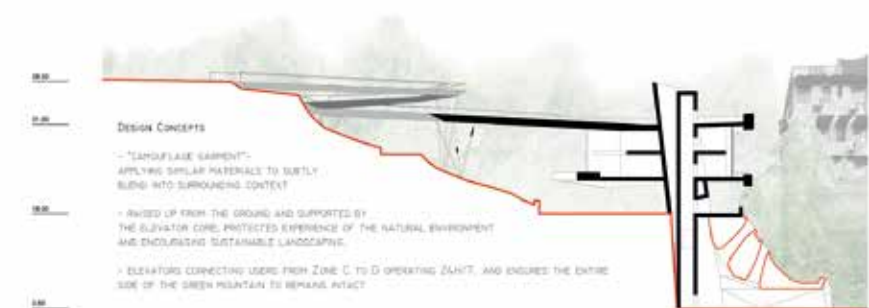
EXISTING CONDITIONS PATHS & FACILITIES    URBAN CONTEXT DISCONNECTED & DEMANDING    BARRIER-FREE TRAM, LIFT & WALKWAYS    NEW PERSPECTIVE PANORAMA 360



# T4 ZONE C/D - ECO-CENTER & EAST TUNNEL



MASTERPLAN 1:200

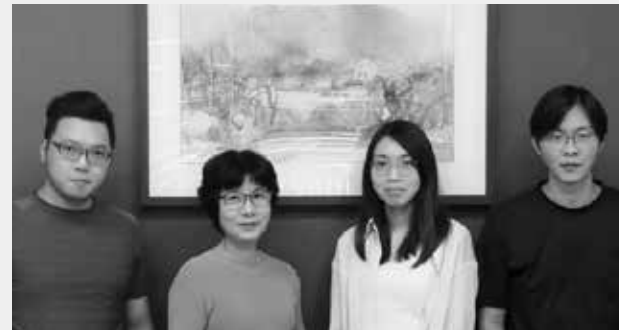


SECTION 1:200





# 張巧娟



張巧娟  
凌于右  
黃寶如  
吳江鵬

生生不息 (Circle of Eco-Life) 在提升兩個目的上：  
生活及生態，共有 6 個面向希望在設計理念中落實：

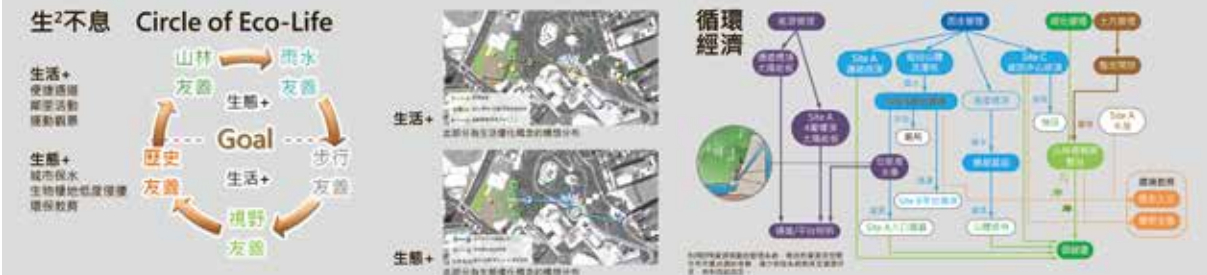
- 生活 +
- 便捷通道
- 鄰里活動
- 運動觀景
- 生態 +
- 城市保水
- 生物棲地低度侵擾
- 環保教育

如此同時，除了保留 3 古樹作為環境教育之用，根據地形及植栽，針對橋體提出：

- 1) 樹林天際線的影響、總體綠化
- 2) 固碳率的計畫

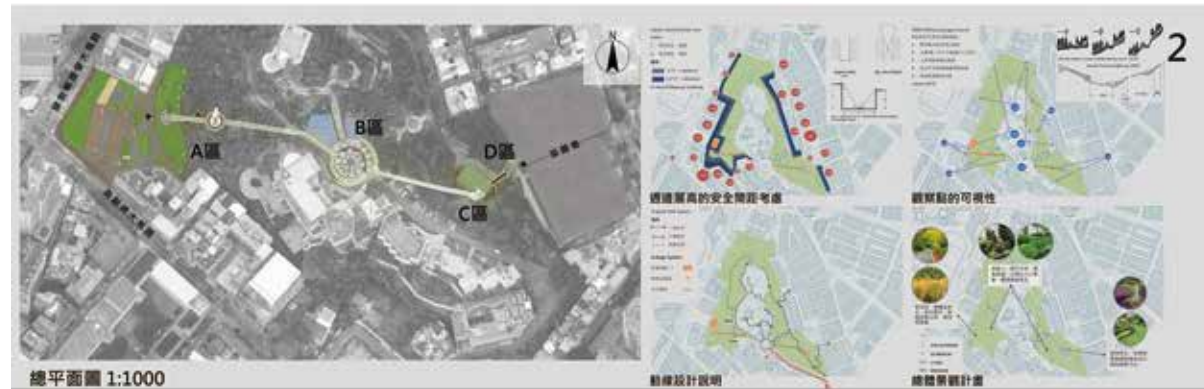
## 望廈山市政公園無障礙步行系統 — 建築概念設計比賽

1



### SITE A

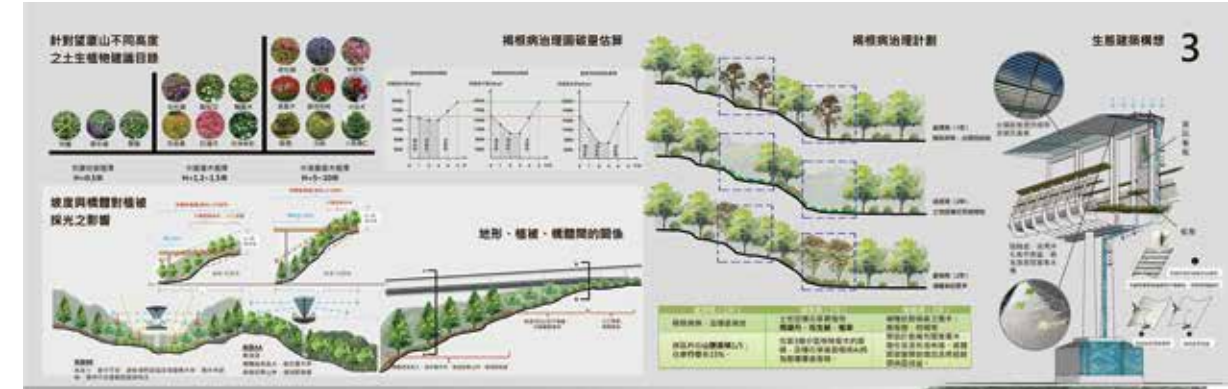
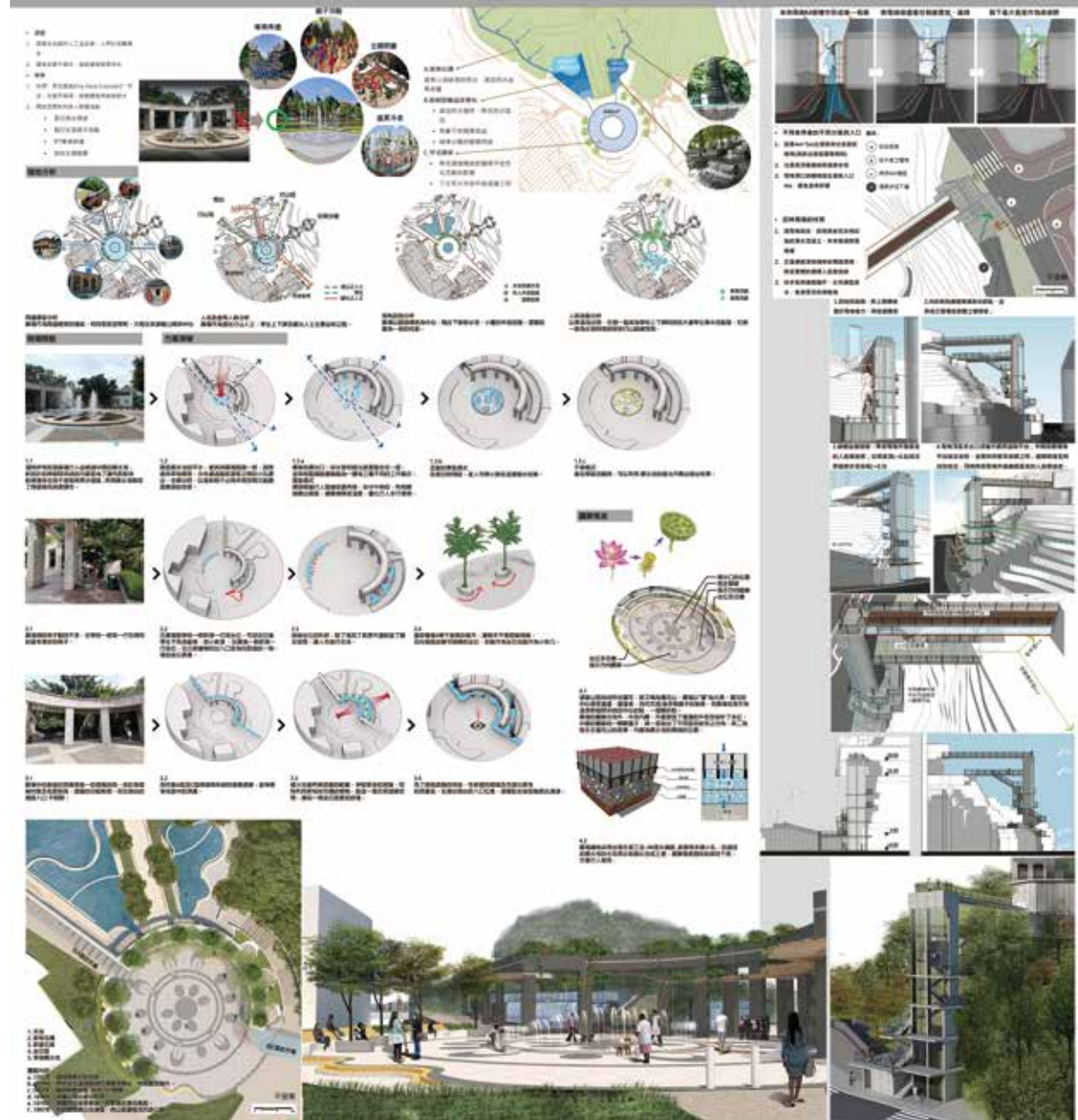




總平面圖 1:1000

動線設計說明

綠地景觀計畫



總平面圖 1:1000





隊伍 / Obra / Entry no.: BH

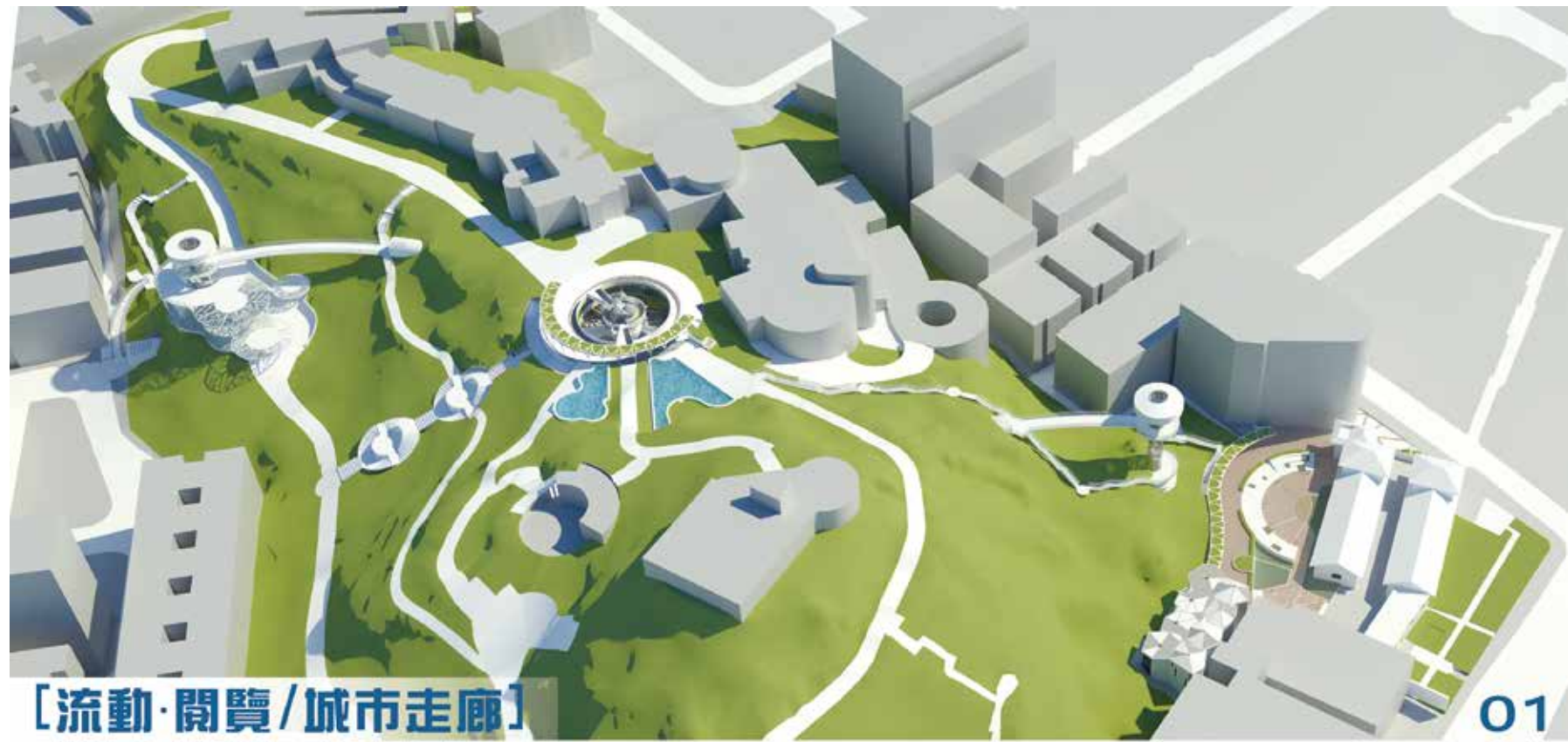
# 李嘉嘉

李嘉嘉  
陳家洛  
李安德  
余思



望廈山又名蓮花山，故將無障礙步行徑命名為望廈蓮花徑。蓮花帶有正直、和善品格，正合無障礙通行設計之意，設計用蓮花圖案貫穿整體規劃。

圍繞「流動·閱覽/城市走廊」主題，繁忙的人們，步履匆匆，從人口密集的筷子基，跨越獨特的望廈山到人口密集的黑沙環，通過展廊式走廊連接兩個都市空間。此旅程有各種植物、歷史建築……而保護自然及珍惜歷史是設計目標，希望人流快捷遊走於不同空間的同時讀懂大自然，也讀懂歷史。



## [流動·閱覽/城市走廊]

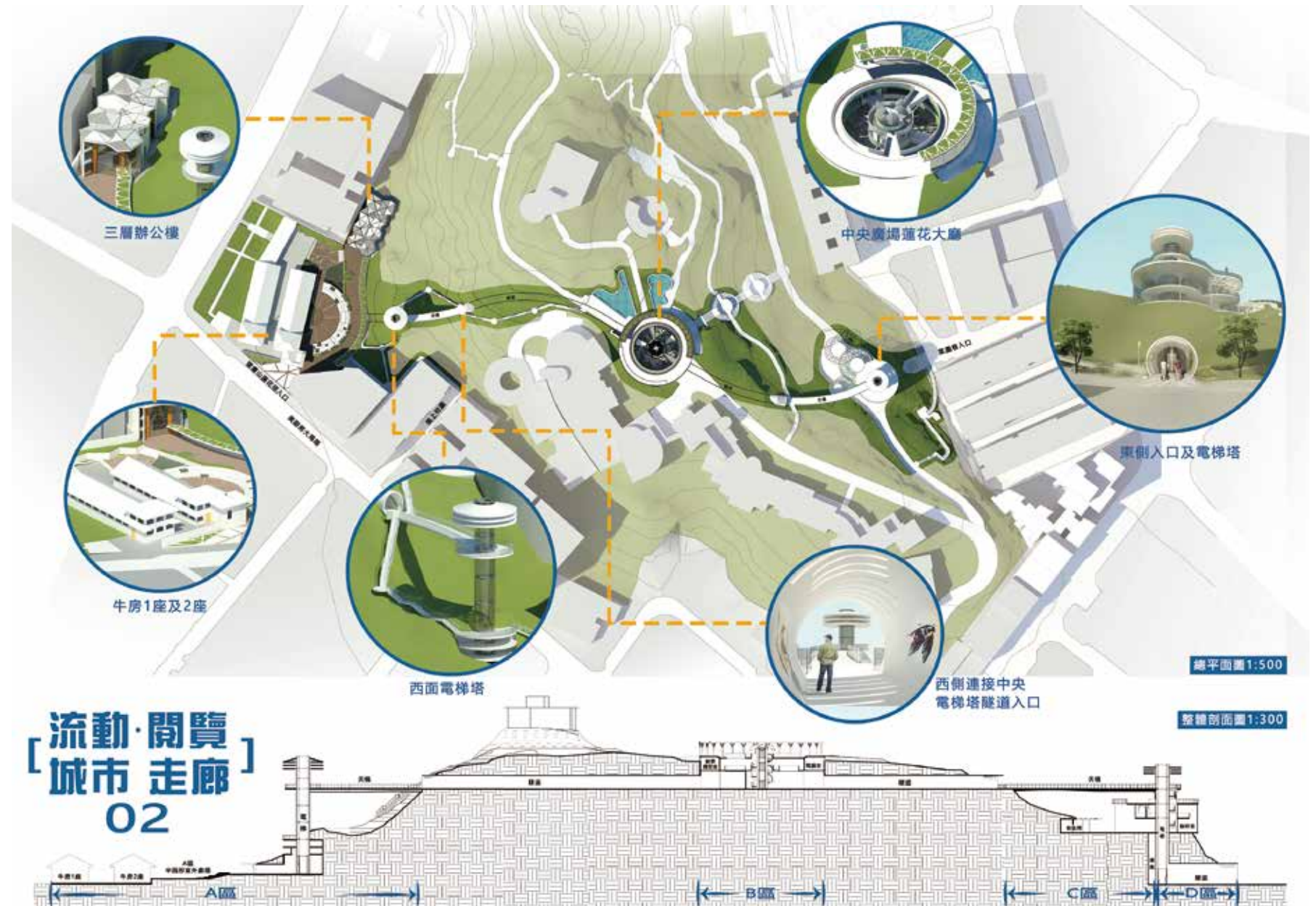
01

### 整體設計概念

由於望廈山又名蓮花山，故將此無障礙步行徑命名為望廈蓮花徑。蓮花帶正直和善品格正合無障礙通行設計之意，用蓮花相關圖案貫穿整體規劃設計。

### 概念構思

圍繞這一主題構思設計的一頁可以看到，繁忙的城市，人們步履匆匆，從一個人口密集的黑沙環到另一座山到另一座山到另一座山到另一座山，通過設計一條獨特特色的走廊連接不同的空間，而這條山并不尋常，它帶著自然的氣息，清新的空氣，歷史的文物，各種植物，牛房，野狗，大地台保護自然及珍惜歷史是設計目標，希望人流快捷遊走於不同空間的同時讀懂大自然，也讀懂歷史。



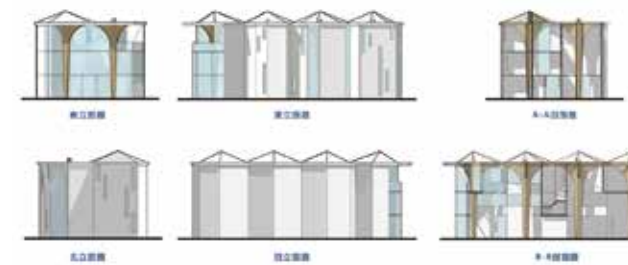


A區-三層辦公樓

平面圖 1:200



立面圖 1:200

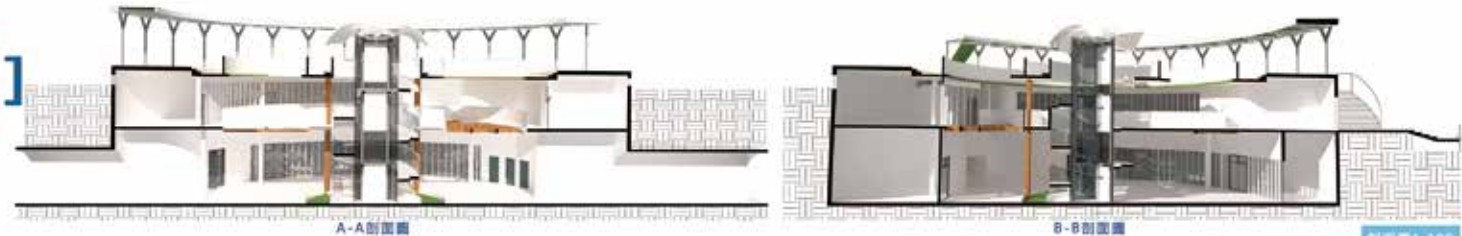


A區-牛房、中央電梯塔

平面圖 1:200



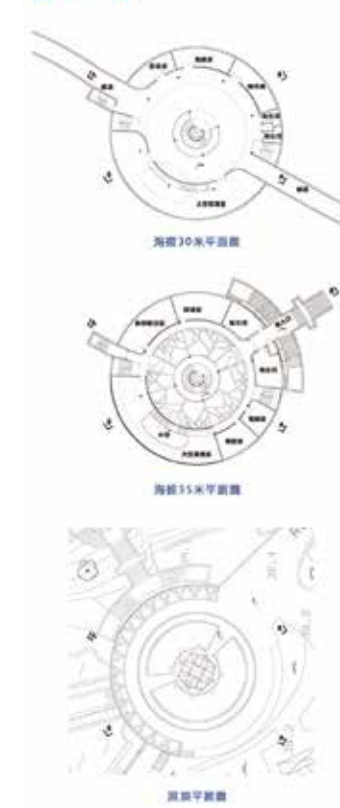
流動·閱覽  
城市走廊  
03



B區-中央廣場蓮花大廳

B區-中央廣場蓮花大廳

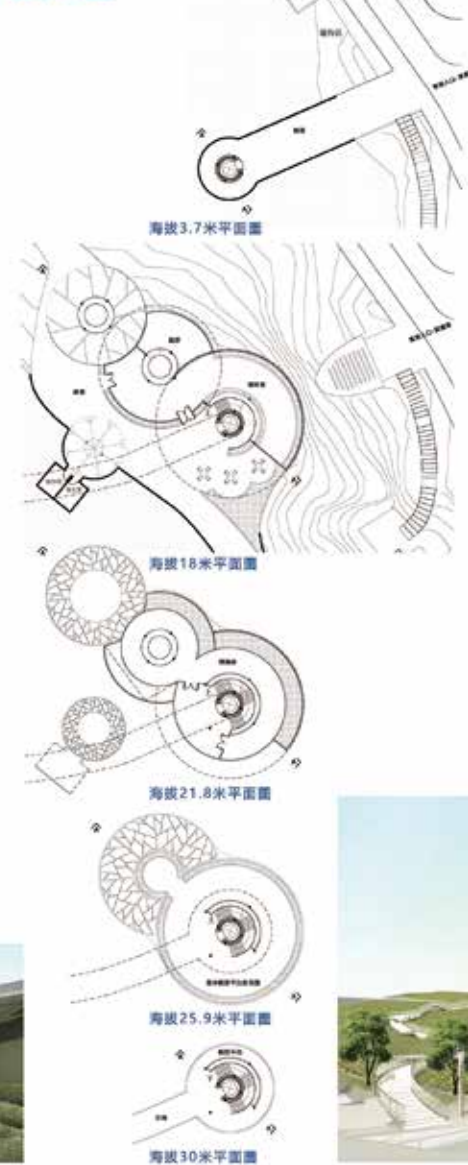
平面圖 1:300



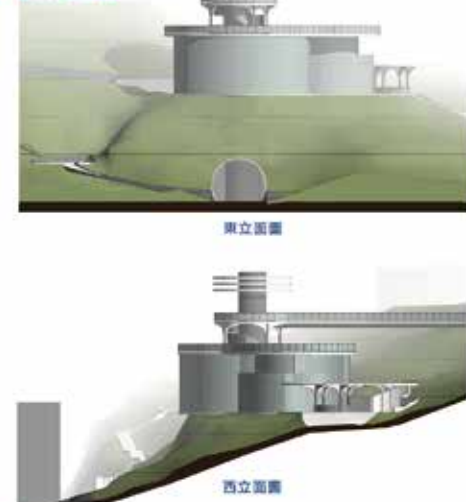
流動·閱覽·城市走廊  
04

C、D區-咖啡茶室、閱讀室、東電梯塔

平面圖 1:200



立面圖 1:200



剖面圖 1:200





隊伍 / Obra / Entry no.: BM

# Mário Filipe Penetra Neves



MÁRIO FILIPE PENETRA NEVES  
LEI IO SENG  
CHEN YI  
WONG WA SENG

The design is to propose solutions that provide easy/convenient means of accessing the Mong Ha Hill and are efficient, barrier-free, sustainable and, simultaneously, enhance the quality of the existing spaces and facilities and help citizens to adopt healthier life style concepts.

To concurrently create a sculptural form, an experience and landmark bold enough to become a destination for local residents and tourists irrelevant of their ages.

To respect the existing landscape, touch the ground lightly, to explore the range of experiences within and around the Mong Ha Hill Municipal Park e.g.:

- Views;
- History and preservation;
- Vegetation/botanic and local green spaces;
- Topography and physical/walking exercise;
- Culture and Education;
- Leisure activities for all ages;
- Macau 2020 into a new phase (Guangdong-Hong Kong-Macau Greater Bay Area).

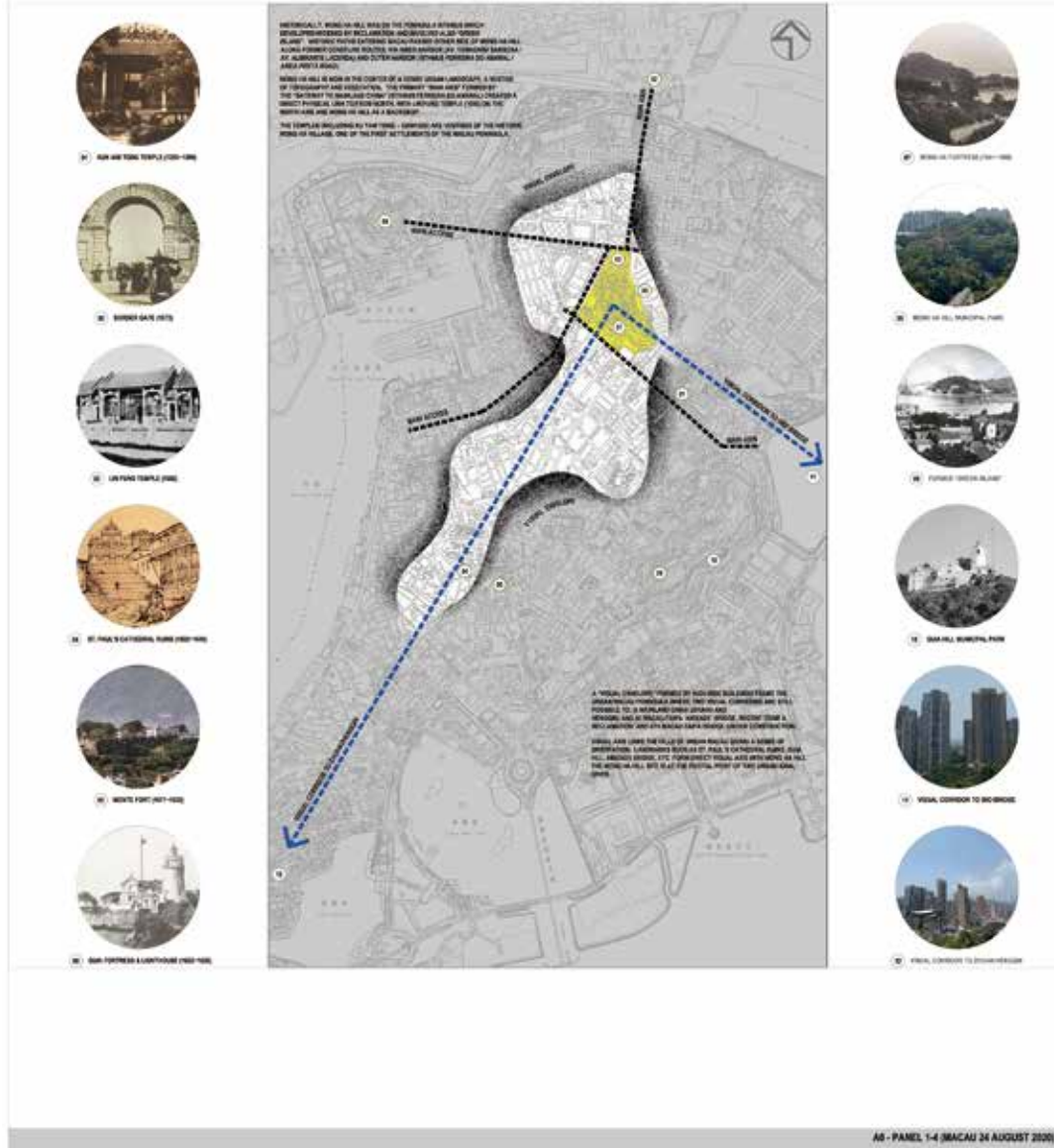
To highlight the contrasts within the Park e.g.:

- Hard and soft;
- Enclosed and open;
- Natural and manmade.

To create spatial sequences linked to emotional experiences.

## ARCHITECTURAL CONCEPT DESIGN COMPETITION BARRIER-FREE WALKING SYSTEM FOR MONG HÁ HILL MUNICIPAL PARK

SITE ANALYSIS (SCALE - 1:6000)



A8 - PANEL 1-4 (MACAU 24 AUGUST 2020)

## ARCHITECTURAL CONCEPT DESIGN COMPETITION BARRIER-FREE WALKING SYSTEM FOR MONG HÁ HILL MUNICIPAL PARK

MASTER PLAN (SCALE 1:600)



A8 - PANEL 2-4 (MACAU 24 AUGUST 2020)



# ARCHITECTURAL CONCEPT DESIGN COMPETITION

## BARRIER-FREE WALKING SYSTEM FOR MONG HÁ HILL MUNICIPAL PARK

### ARCHITECTURAL PLANS & ELEVATIONS



**MONTE HÁ HILL IS STEEP, ROCKY AND HEAVILY VEGETATED. THE WALKING CORSE CONSISTS OF SPHERICAL BRICKWORK, HIGH WOODING, GRASSY SLOPES, LEAN POLISHED WOODY OUTDOORS, OPENING AND SLIPS, SPARKING BRIDGES AND OPEN WALKWAYS. TRIMAL CONNECTION FROM SIDE AND CENTER AND VEGETATION IS THE DOMINANT VISUAL BRIDGE. RECONSTRUCTED WALKWAYS FROM OVER-GROWTH CAN BE POSSIBLE OUT FROM THE WALKWAY PORTS.**

**THE WALKING CORSE CONSISTS OF SPHERICAL BRICKWORK, HIGH WOODING, GRASSY SLOPES, LEAN POLISHED WOODY OUTDOORS, OPENING AND SLIPS, SPARKING BRIDGES AND OPEN WALKWAYS. TRIMAL CONNECTION FROM SIDE AND CENTER AND VEGETATION IS THE DOMINANT VISUAL BRIDGE. RECONSTRUCTED WALKWAYS FROM OVER-GROWTH CAN BE POSSIBLE OUT FROM THE WALKWAY PORTS.**

**TO PROPOSE SOLUTIONS BASED ON EARLY COMMENT MEANS OF ACCESSING THE MONG HÁ HILL, EFFICIENT, SUSTAINABLE, AND ENHANCE THE QUALITY OF THE EXISTING SPACES AND FACILITIES AND HELP CITIZENS TO ADAPT HEALTHY LIFE STYLE CONCEPTS. TO CONSEQUENTLY CREATE A WALKING CORSE AS EXPERIENCE AND LANDMARK, ENOUGH TO GUIDE & OPTIMIZATION FOR LOCAL RESIDENTS AND TOURISTS AWARENESS OF THEIR ASSES.**

**TO RESPECT FOR EXISTING LANDSCAPE, TOWNSHIP, LOCALITY, TO EXPLORE THE RANGE OF EXPERIENCES BEFORE AND AROUND THE WONG HÁ HILL MUNICIPAL PARK. E.G.:**

- HEALTH, FREEDOM AND PRESERVATION.
- RECREATION AND LOCAL GREEN SPACES.
- TOPOGRAPHY AND PHYSICAL URBAN LIFE SERVICE.
- FOR FUN AND EDUCATION.
- LEISURE ACTIVITIES FOR ALL AGES.
- RECALC JOB INTO A NEW PHASE (RECONSTRUCTION) MONTE HÁ HILL GREATER EAST AREA.

**TO HIGHLIGHT THE CONTRAST BETWEEN THE DARK S.L. (SLOPE AND CITY) ENCLINED AND OPEN, NATURAL AND WALKWAY.**

**TO CREATE SPATIAL SEQUENCES LINKED TO EMOTIONAL EXPERIENCES.**

**ARCHITECTURAL PLAN FOR ZONE A (SCALE: 1:500)**

**ARCHITECTURAL PLAN FOR ZONES C+D (SCALE: 1:500)**

# ARCHITECTURAL CONCEPT DESIGN COMPETITION

## BARRIER-FREE WALKING SYSTEM FOR MONG HÁ HILL MUNICIPAL PARK

### 3D PERSPECTIVE RENDERINGS AND SKETCHES



**TO PROPOSE SOLUTIONS BASED ON EARLY COMMENT MEANS OF ACCESSING THE MONG HÁ HILL, EFFICIENT, SUSTAINABLE, AND ENHANCE THE QUALITY OF THE EXISTING SPACES AND FACILITIES AND HELP CITIZENS TO ADAPT HEALTHY LIFE STYLE CONCEPTS. TO CONSEQUENTLY CREATE A WALKING CORSE AS EXPERIENCE AND LANDMARK, ENOUGH TO GUIDE & OPTIMIZATION FOR LOCAL RESIDENTS AND TOURISTS AWARENESS OF THEIR ASSES.**

**TO RESPECT FOR EXISTING LANDSCAPE, TOWNSHIP, LOCALITY, TO EXPLORE THE RANGE OF EXPERIENCES BEFORE AND AROUND THE WONG HÁ HILL MUNICIPAL PARK. E.G.:**

- HEALTH, FREEDOM AND PRESERVATION.
- RECREATION AND LOCAL GREEN SPACES.
- TOPOGRAPHY AND PHYSICAL URBAN LIFE SERVICE.
- FOR FUN AND EDUCATION.
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**TO CREATE SPATIAL SEQUENCES LINKED TO EMOTIONAL EXPERIENCES.**

**ARCHITECTURAL PLAN FOR ZONE A (SCALE: 1:500)**

**ARCHITECTURAL PLAN FOR ZONES C+D (SCALE: 1:500)**



The background features a complex, layered design. On the left, a light gray network of thin lines connects several white circular nodes. This network transitions into a series of thick, vibrant green wavy lines that flow across the page. The text is centered within a white, irregularly shaped area that is part of this green pattern.

# 參與作品

OBRAS PARTICIPANTES  
*PARTICIPATING ENTRIES*



隊伍 / Obra / Entry no.: AA

# 呂澤強

呂澤強建築師  
羅詠詩實習建築師

本設計採用現代簡約的語言，設施盡量避免破壞原有山體，遵從遺產保護的可識別與可逆的原則。

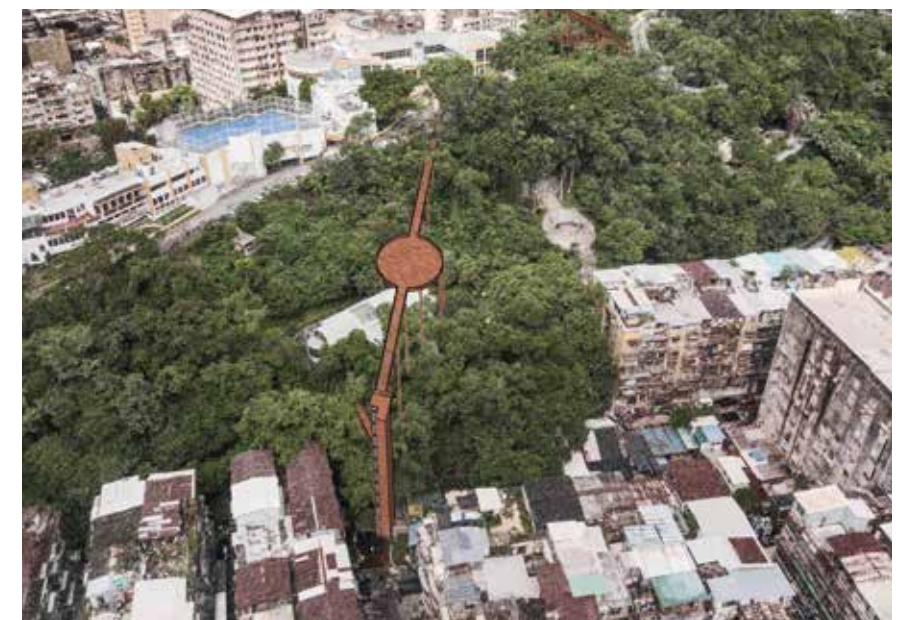
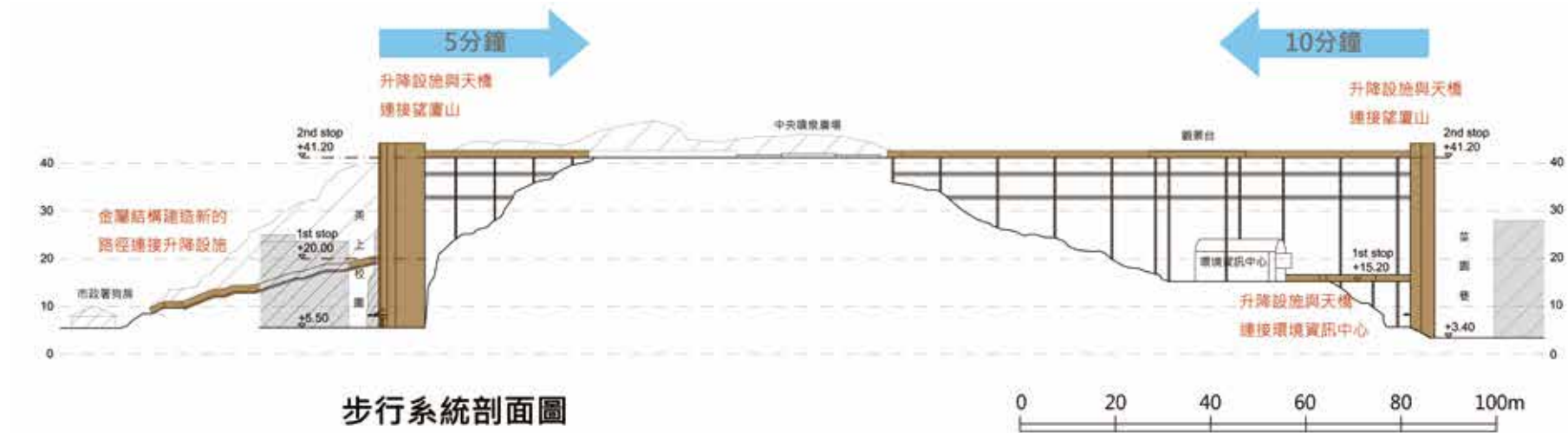
望廈山中央噴泉廣場與美副將馬路、黑沙環馬路的高差有 40 多米，如果要滿足無障礙規範而興建坡道，需要對山體實施大規模的改造，影響範圍大，坡道長，使用上花耗許多時間。

本設計在美上校園及菜園巷兩處已高度城市化的地段，建造升降設施，讓使用者能快速、舒適地從街道升到中央噴泉廣場的水平，再透過天橋接駁到現有市政公園的徑道，創造新的社區旅遊路線。



山體南側已高度城市化，新的無障礙步行系統將集中設置在該區

文化遺產價值較高，保存有軍事遺跡、清代村民墳墓、山體、叢林保存較完整，應被繼續保留



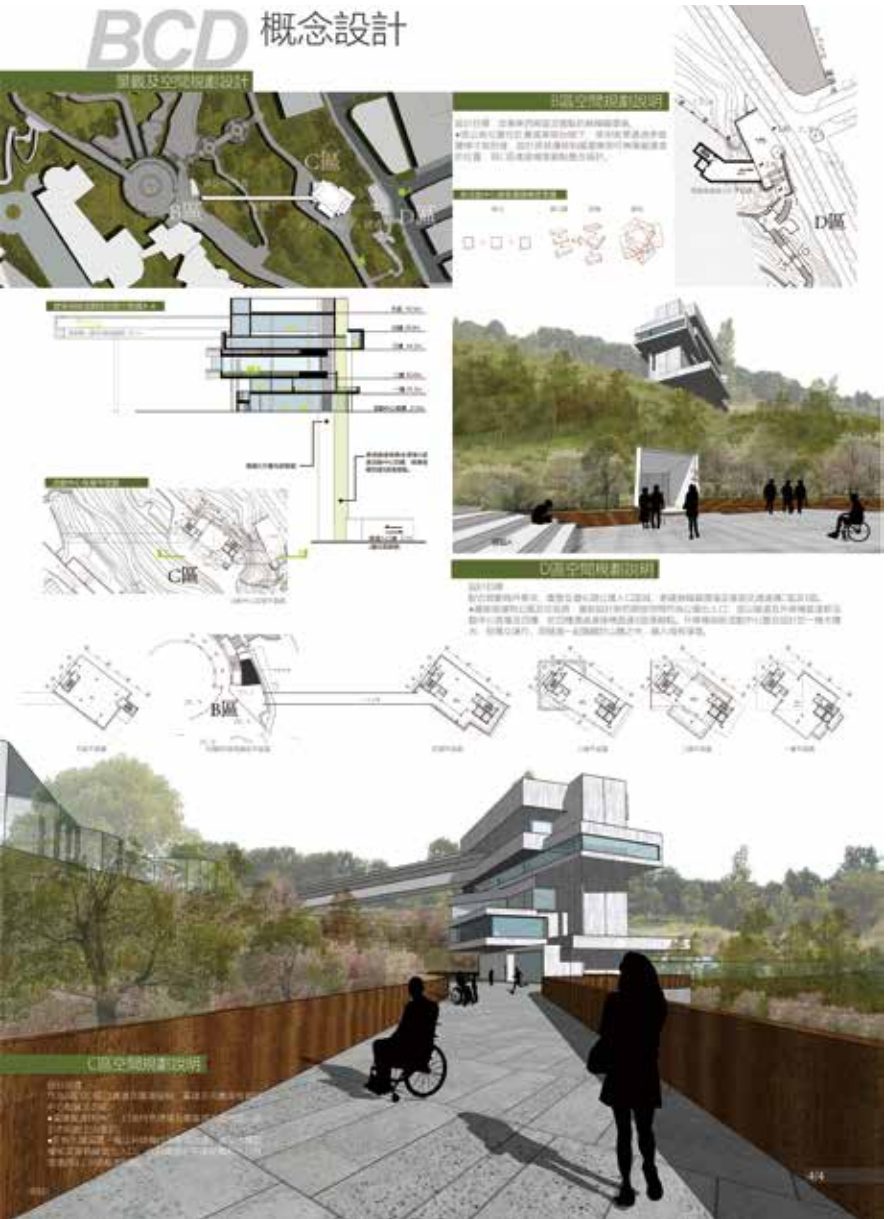
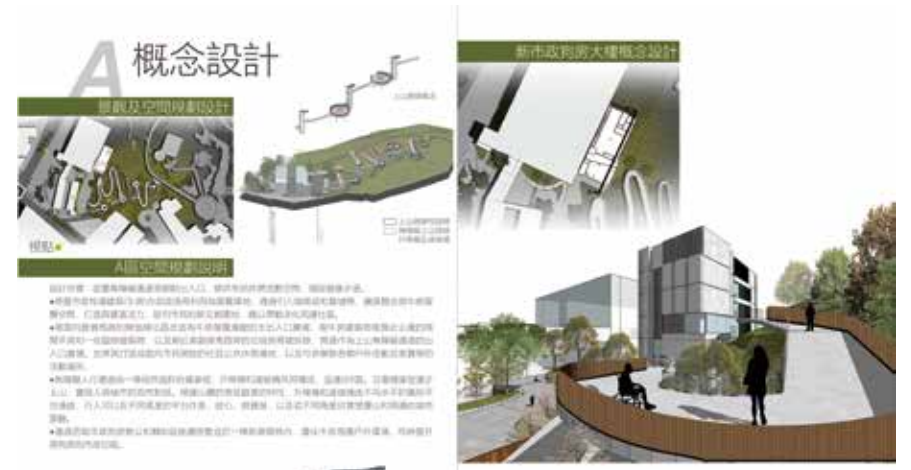
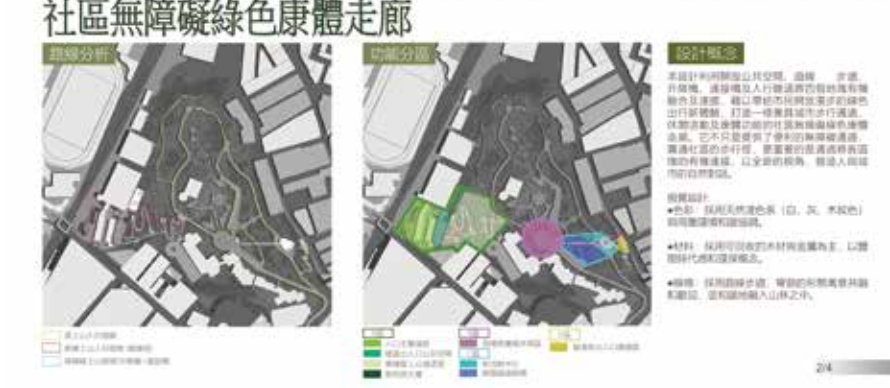


# 鄔劍琴



本設計將望廈山西南側 A 區的舊市政牛房建築物內部改造為展覽場地，並對其旁邊的狗房設施和周邊環境進行整合優化，擬打造成社區公共開放休憩和文創空間，同時作為上山通道出入口廣場。對 B 區圓形廣場區域，主要提出遷移現有公廁以改善其通達性。並設置天橋引領行人到達 C 區的新資訊中心大樓四樓平台，乘坐大樓內獨立運作的升降機往下，再通過新開闢的人行隧道，直達 D 區望廈山東北側面向菜園巷，被重整設計的公園上山入口區域。這條新路徑和設施實現了望廈山東西兩端的無障礙貫通，以及城市休閒和康體活動空間的優化。

## 望廈山市政公園無障礙步行系統

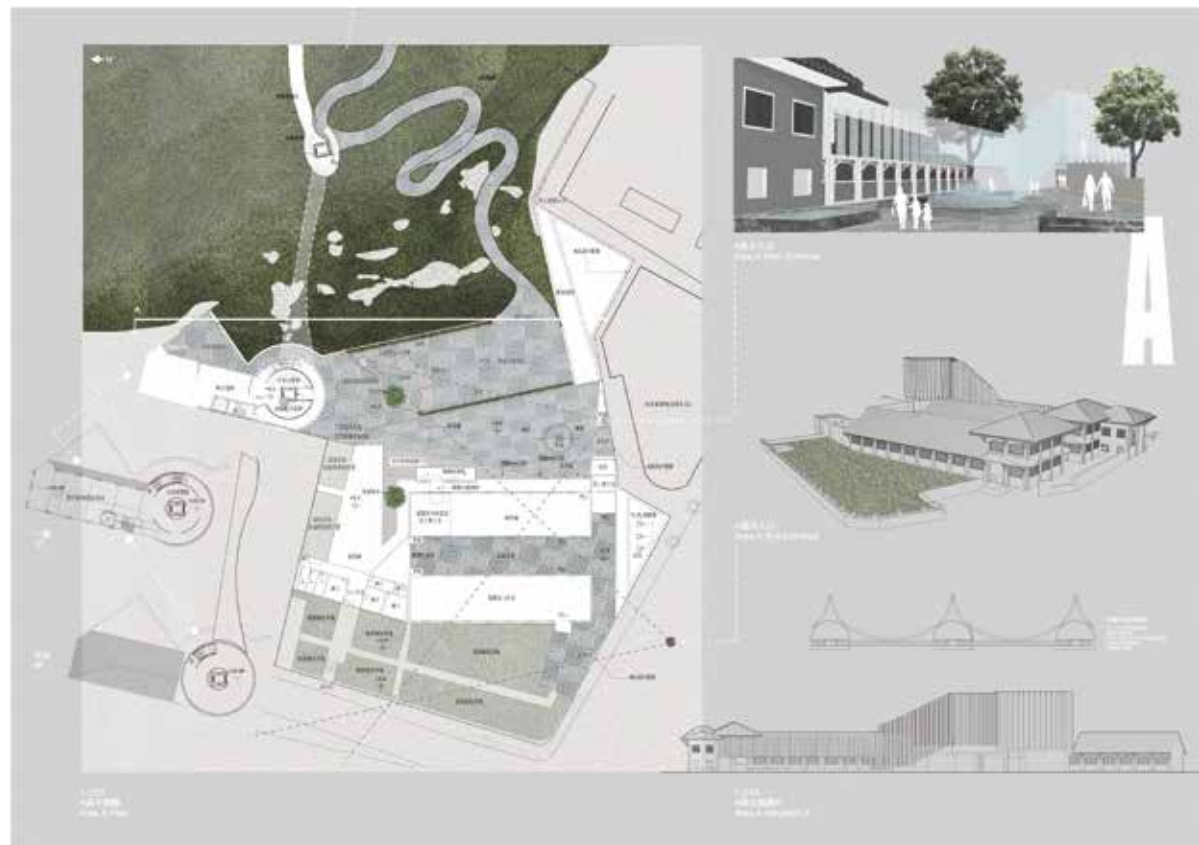
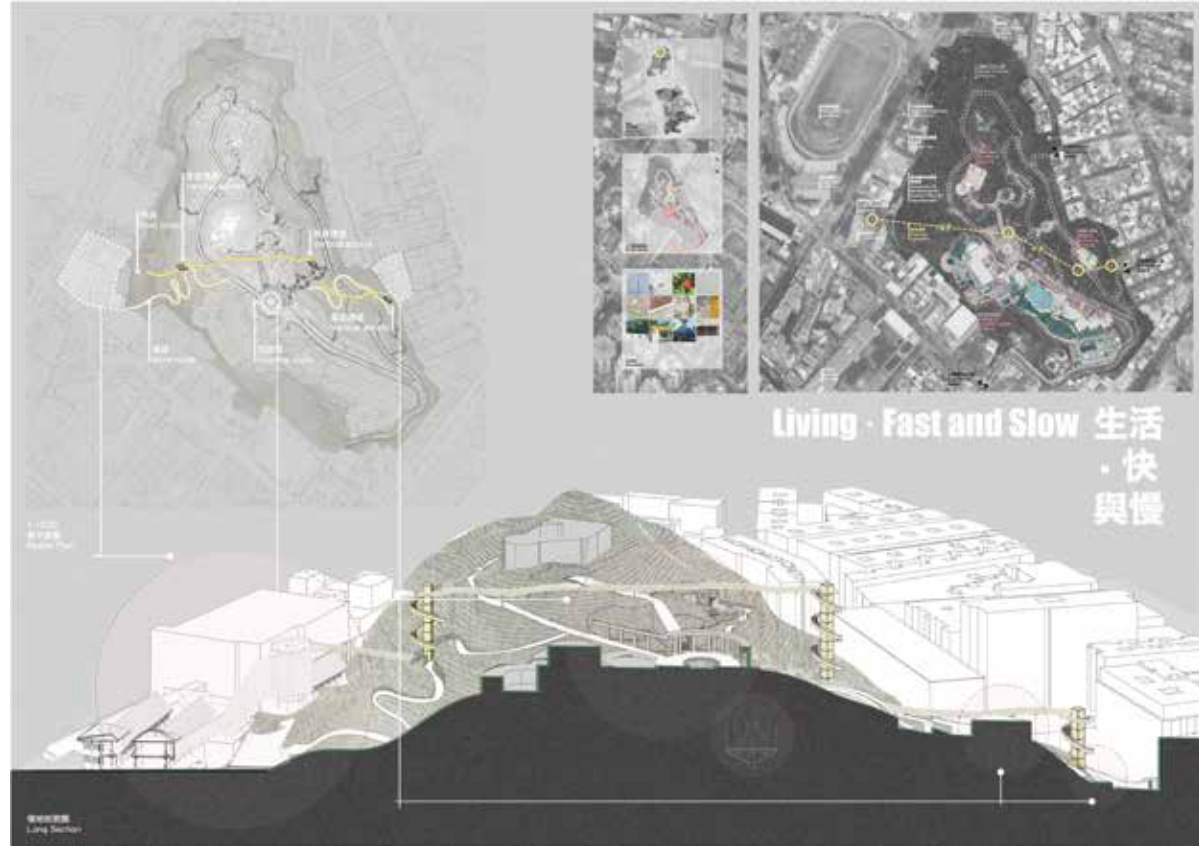




隊伍 / Obra / Entry no.: AC

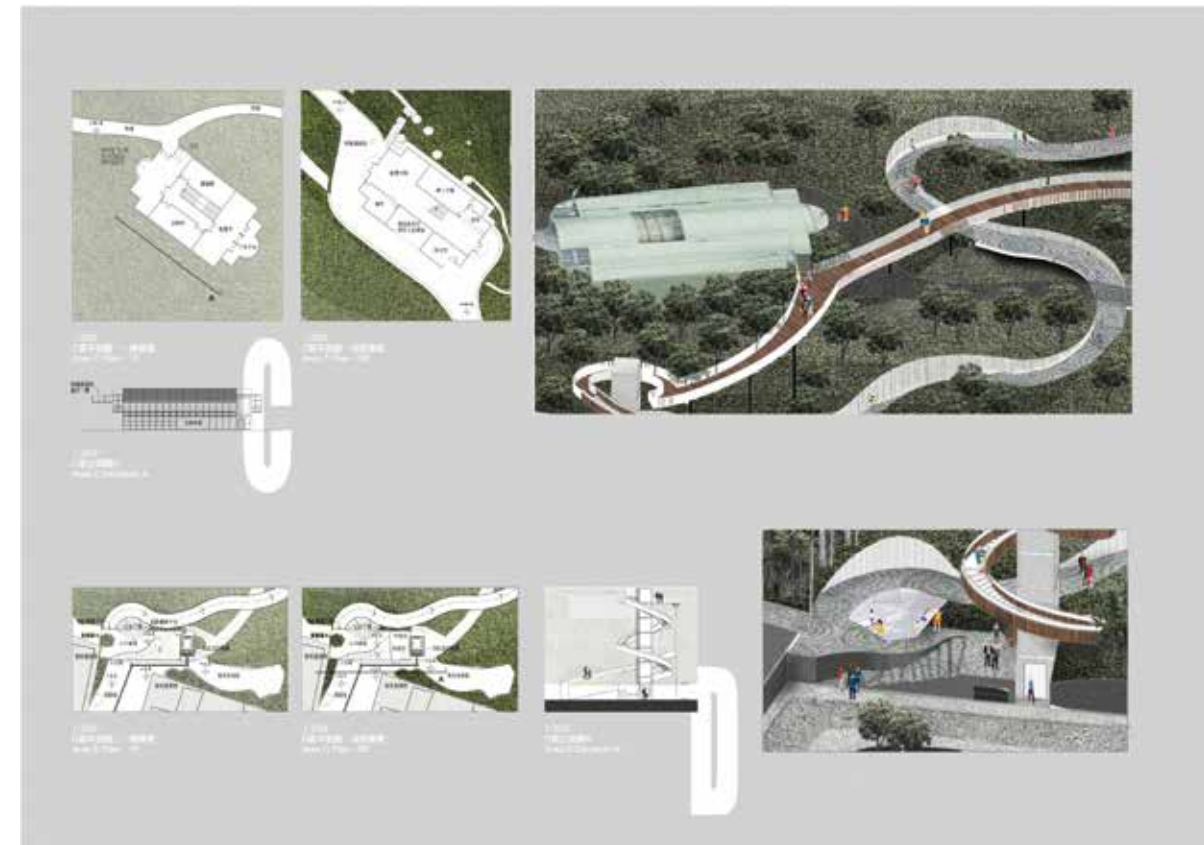
# 董文杰

董文杰  
梁嘉渝  
徐曉暉  
江心怡



本設計上體現了現代城市生活節奏 "快" (增加黑沙環及筷子基之易達性及連貫性) 及 "慢" (提升公園的體驗感) 的特性, 故在設計了 "快線" 及 "慢線" 兩條功能上不一的路線。同時, 為提升鄰近生活圈休憩空間及利用望廈山地理位置帶動各區, 保持現有山體良好的林木環境。

本參賽設計方案以「小橋·流水·人家」作為整體規劃理念, 籍著原本地點的地理優勢, 將公園發展為便利鄰近地段之交匯及休閒點。

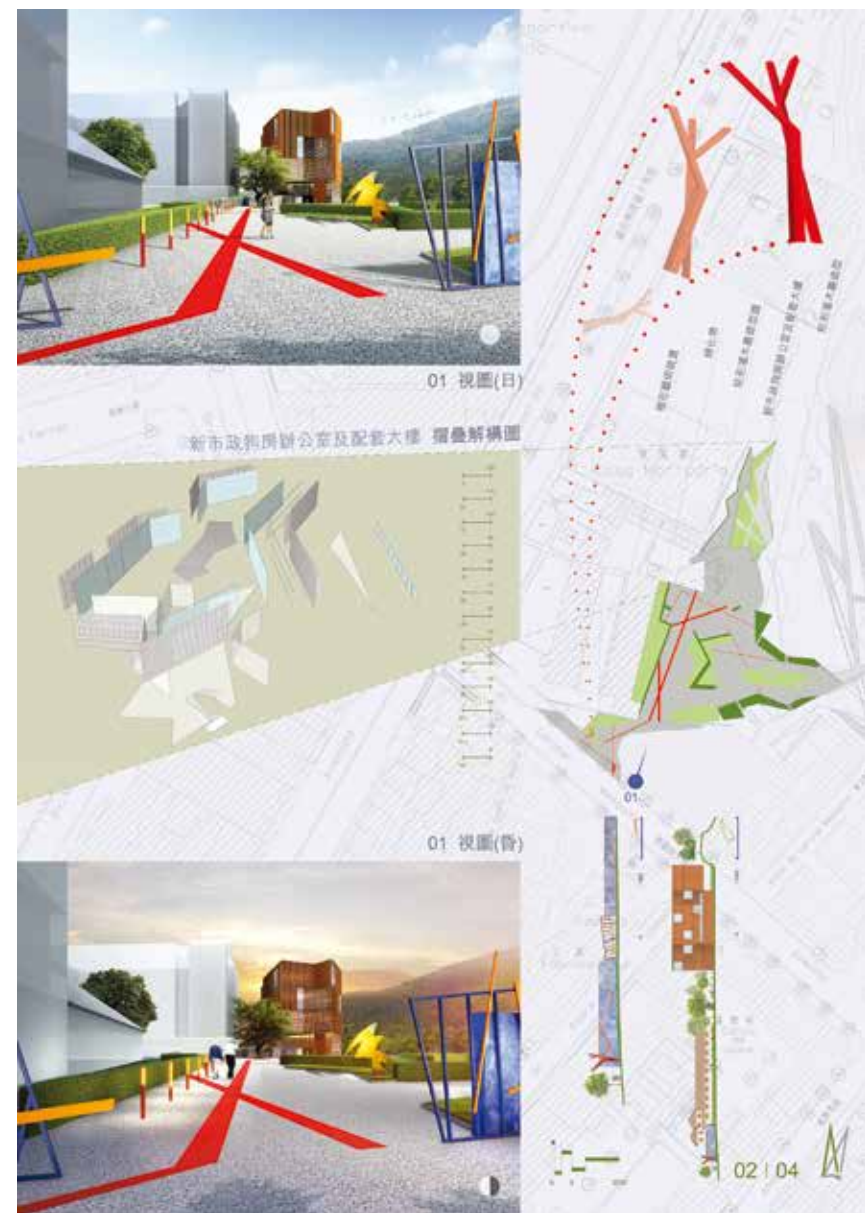
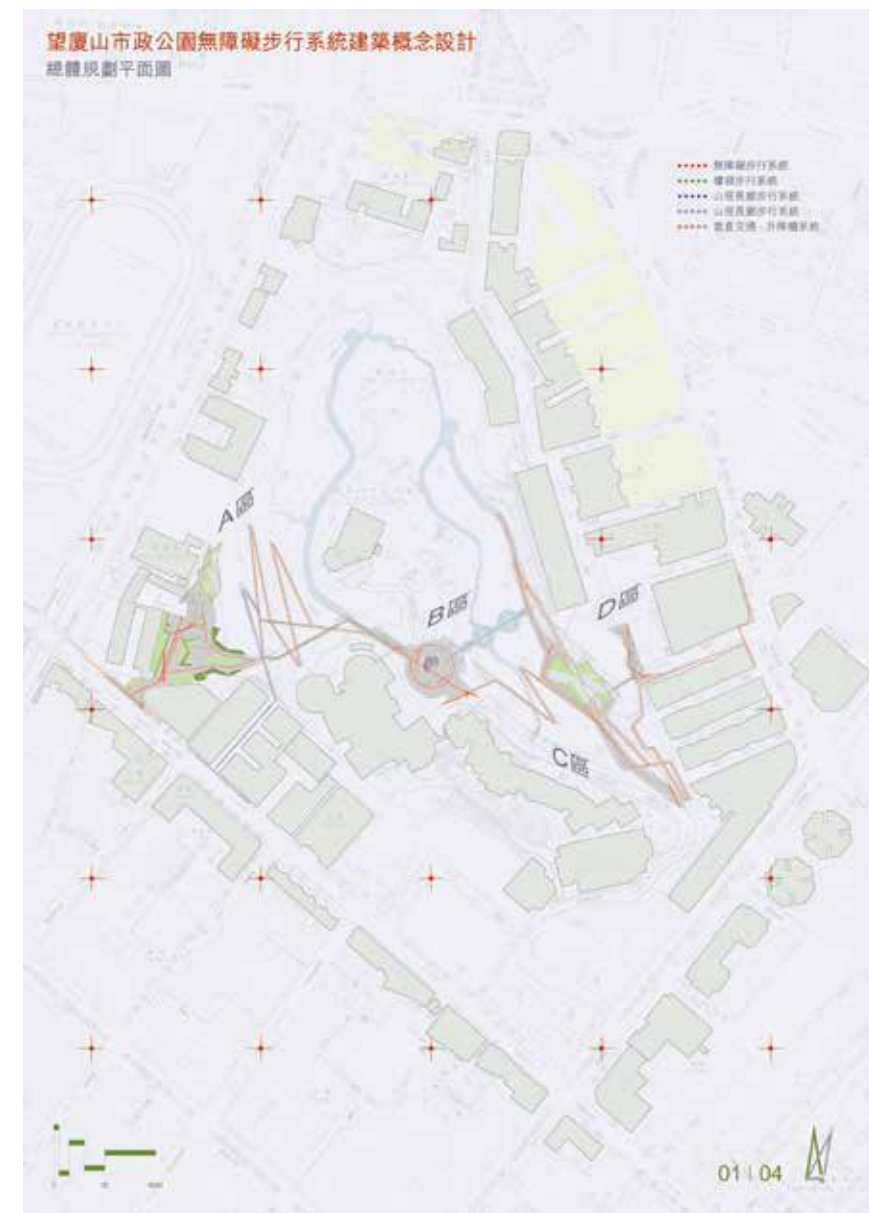




隊伍 / Obra / Entry no.: AF

# 劉仲賢

組長：劉仲賢博士  
組員：賴燕珊，黃雅盈



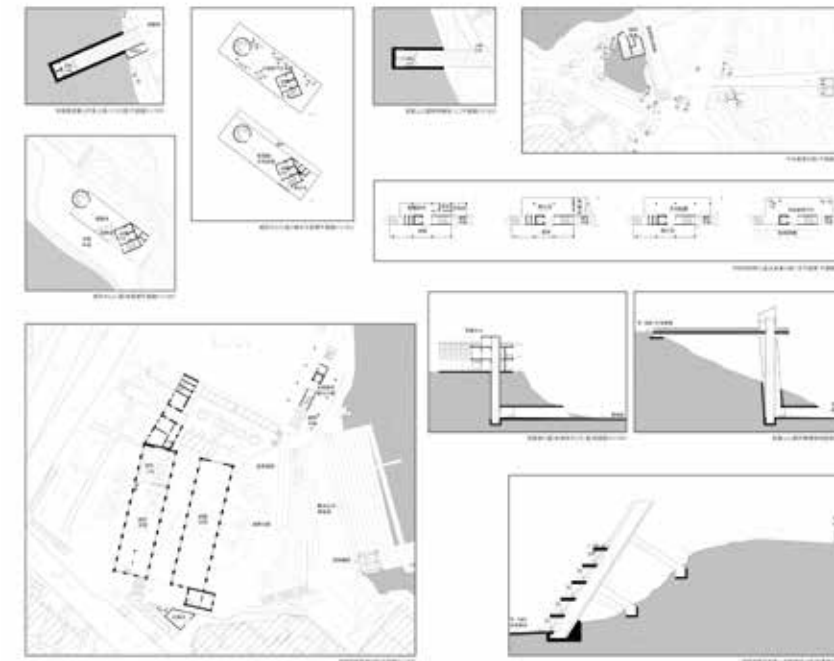
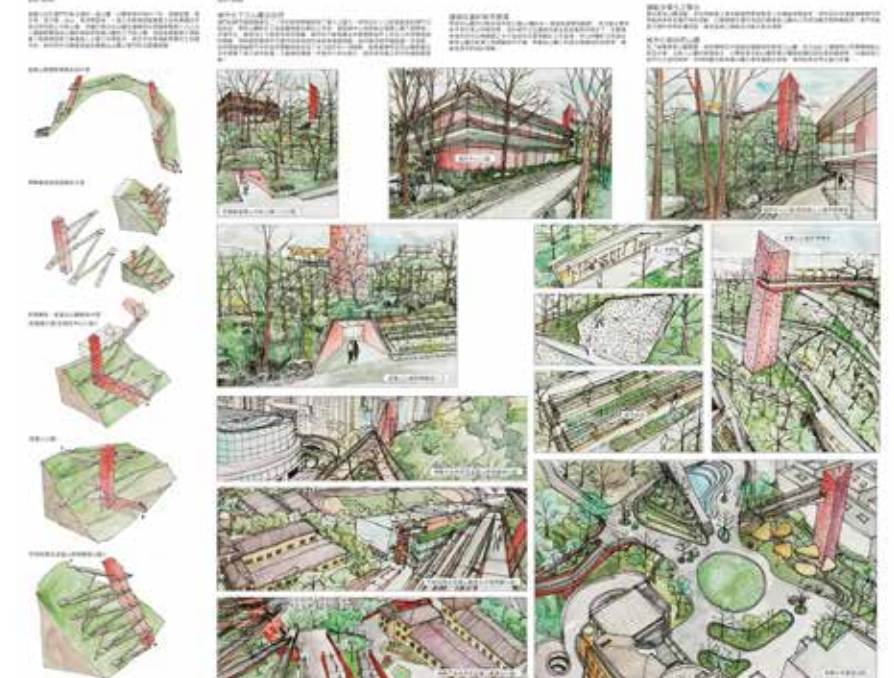
我們的設計團隊針對 A、B、C、D 四個區域，以空間解構美學的設計概念，希望為澳門市民帶來一趟富有藝術性、感官性和互動性的休閒健康之旅。我們不但注入視覺藝術效果，更以多層次的創意、動感，透過變焦的視覺軸線，將無障礙的遊人動線、公共空間景觀及建築物融入望廈山地形環境、連貫並活化周邊自然山脈，推動整體規劃重點；更以各種不同的設計介質，建造無障礙綠色藝術（雕塑）公園、多元式行山體驗、橢圓鋼絲網造型天幕水池、標誌性建築量體以及垂直升降機動線等新元素，優化並活化整體設計區域，從而鼓勵市民綠色出行，為社區加添活力。



隊伍 / Obra / Entry no.: A1

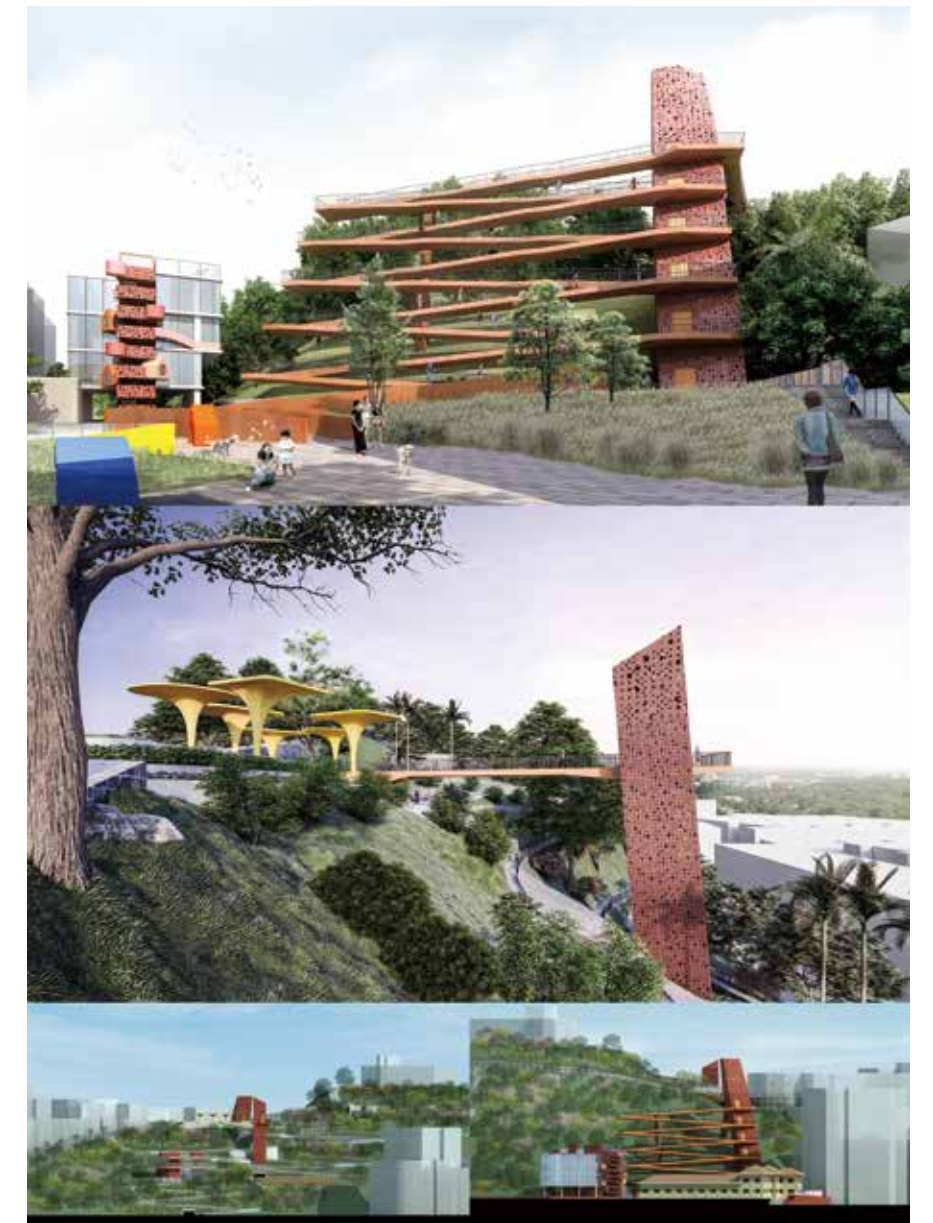
# 何庭芳

組長：何庭芳  
組員：何庭鋒



## 城市化與自然山體 - 便捷與漫遊

為了保護原有山體景觀，此次設計之建築物以升降機塔配以架空步道、及嵌入山體的坡道為主，以釋放更多的山體表面以種植或補回綠色元素，減低對其自然生態之影響。新設計同時滿足城市便捷通道及漫遊城市和山體的雙重特性，快速的升降設備提高了居民跨越望廈山的動機和意欲，使望廈山成為連接鄰近區域之廊道，並可引導市民於日常生活之中多接近自然及綠意，豐富市民之城市空間體驗。





隊伍 / Obra / Entry no.: AJ

# Hugo Rafael Morais Coelho

Hugo Rafael Morais Coelho  
Jasmine Lai  
Benny Chu  
Audrey Lam



The proposal is focused on two main areas that are designed for the community. Sports facilities, study rooms, leisure areas, event spaces, etc. that would complement the hill municipal park and attract more people to enjoy and explore the surroundings. These two areas are connected by a bridge that is divided also in two parts and it meets in the fountain square at its highest point.

### OX Park

A new landscape design involves the building and the hill through circular shapes that raise from the floor inviting people to use the public space and enjoy the scenic of the architectural valued building and the surrounding nature.

With the indoors warehouse and the square, the OX park becomes a prime area for a large diversity of temporary events and activities that can be held such as outdoor cinema, concerts, summer pavilion, crafts market, food festival... giving some new dynamic to this district.

### Municipal Kennel

The existing municipal kennel building is to be renewed and integrated into the functions of the Ox Park event space. The new building for the kennel will be located on the back of the funeral parlor and developed in 3 floors. The forms of the building shape a square that opens to the hill and involves the building and the surrounding natural scenario.

### Hill Connections

A pedestrian bridge and vertical connections are the ways to connect the large elevation difference of the hill engaging the surroundings, but not disrupting the

existing topography. The pathway is leveled above the trees and takes the pedestrians on a journey along the nature creating new views and spots to enjoy the hill and encouraging the citizens to walk.

### Community Building

A new community gathering center with functional diversity to attract people from the area. The building is developed in several floors with sports facilities on the lower levels, study / reading rooms and a green information center above ground.

### COMMUNITY | CONNECTIONS

**Introduction**  
Along the line of the highest hills in Macau, which creates difficulties on the connectivity of the hillside of the city, the existing square at the top and the mountain path is shown by orange lines in the diagram. A new connection throughout the hillside and the existing park square will also link the adjacent to the hillside. The hillside and the existing park square will also link the adjacent to the hillside. The hillside and the existing park square will also link the adjacent to the hillside.

**Urban Context**  
The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center.

**Proposal**  
The proposal is focused on two main areas that are designed for the community. Sports facilities, study rooms, leisure areas, event spaces, etc. that would complement the hill municipal park and attract more people to enjoy and explore the surroundings. These two areas are connected by a bridge that is divided also in two parts and it meets in the fountain square at its highest point.

**Activities at Ox Square**

**Ox House**  
The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center.

### Municipal Kennel

The existing municipal kennel building is to be renewed and integrated into the functions of the Ox Park event space. The new building for the kennel will be located on the back of the funeral parlor and developed in 3 floors. The forms of the building shape a square that opens to the hill and involves the building and the surrounding natural scenario.

**2 Floors of Ox Square**

**ROOF**

**Municipal Kennel Building and Support Office Plan**

**Hill Connections**  
The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center.

**Community Building**  
A new community gathering center with functional diversity to attract people from the area. The building is developed in several floors with sports facilities on the lower levels, study / reading rooms and a green information center above ground.

**Community Centre and Green House Plan**

**Community Building**  
A new community gathering center with functional diversity to attract people from the area. The building is developed in several floors with sports facilities on the lower levels, study / reading rooms and a green information center above ground.

**Hill Connections**  
The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center. The hillside has been considered as an art facility and a community center.

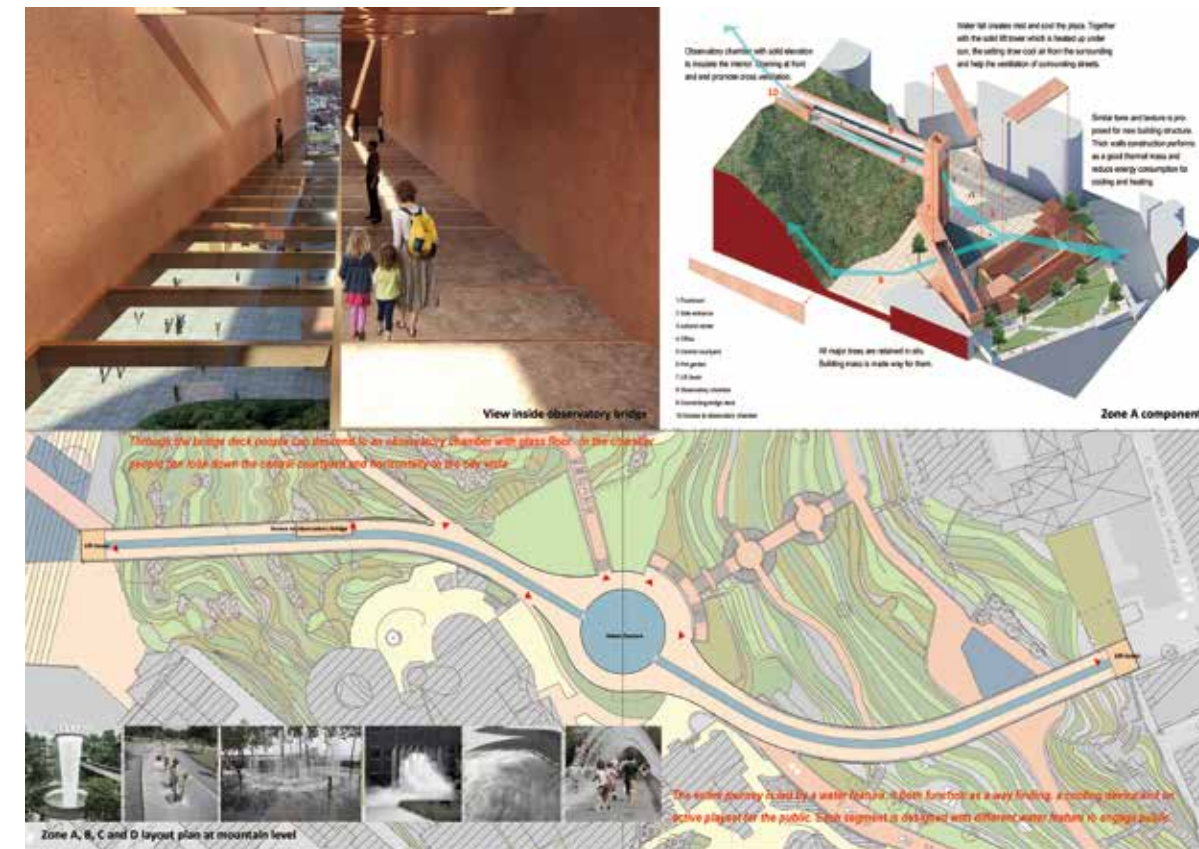
**Community Centre and Green House Plan**



# 梅鉅川



梅鉅川  
李昭明  
洪露琪  
杜永德



**山水之間**  
Between Mountain and water

**1 - A welcoming new Front courtyard**  
Front garden connects directly to the main streets with no steps. Create new entrances at the Av. Do. Alm. Lacerda through the historical building, and the Av. Do Coronel Mesquita.

**2 - A new cultural center with ancillary office**  
Add an extension to cover the two old dog buildings to create a new cultural center.

**3 - Central courtyard as event space**  
Create a continuous level of public court which has water feature, pet garden and a generous space for public festive events.

**4 - Water fall lift tower**  
The new 40-meter tower lift towers as shuttle elevators functions as a waterfall feature for the city.

**5 - Observatory bridge**  
Observatory chamber with glass floor, where visitor can look down to the central courtyard and horizontally to the city vista

**6 - Water path**  
A continuous water feature leads people from Zone A to the Zone B.

**7 - East lift tower**  
The old information center is proposed to demolish and replace with a new 3-storey green house.

**8 - East plaza**  
The new information center frees up the area for a new public plaza at the east part of the Mong Ha Park.

**9 - Pet garden**  
Pet garden provision is provided on a higher level with refuse point retained on the street level.



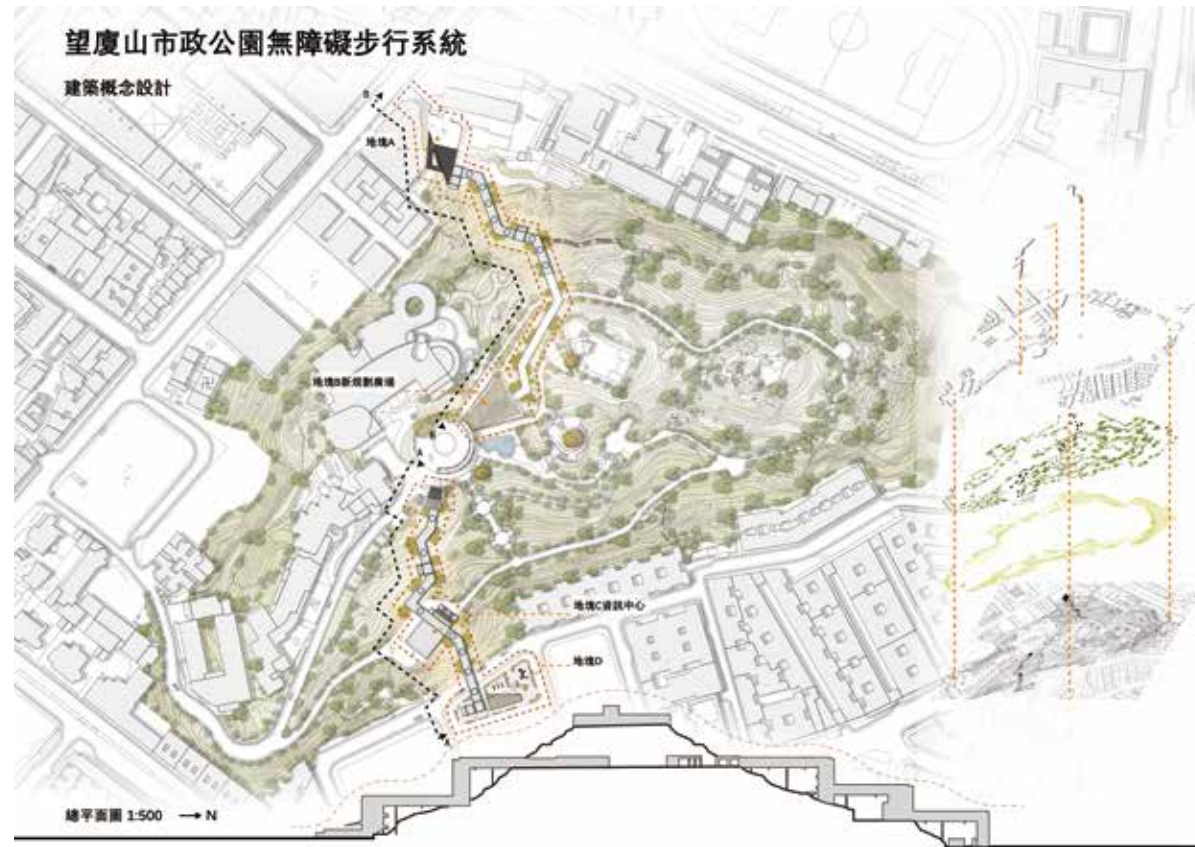
隊伍 / Obra / Entry no.: AN

# 李華超

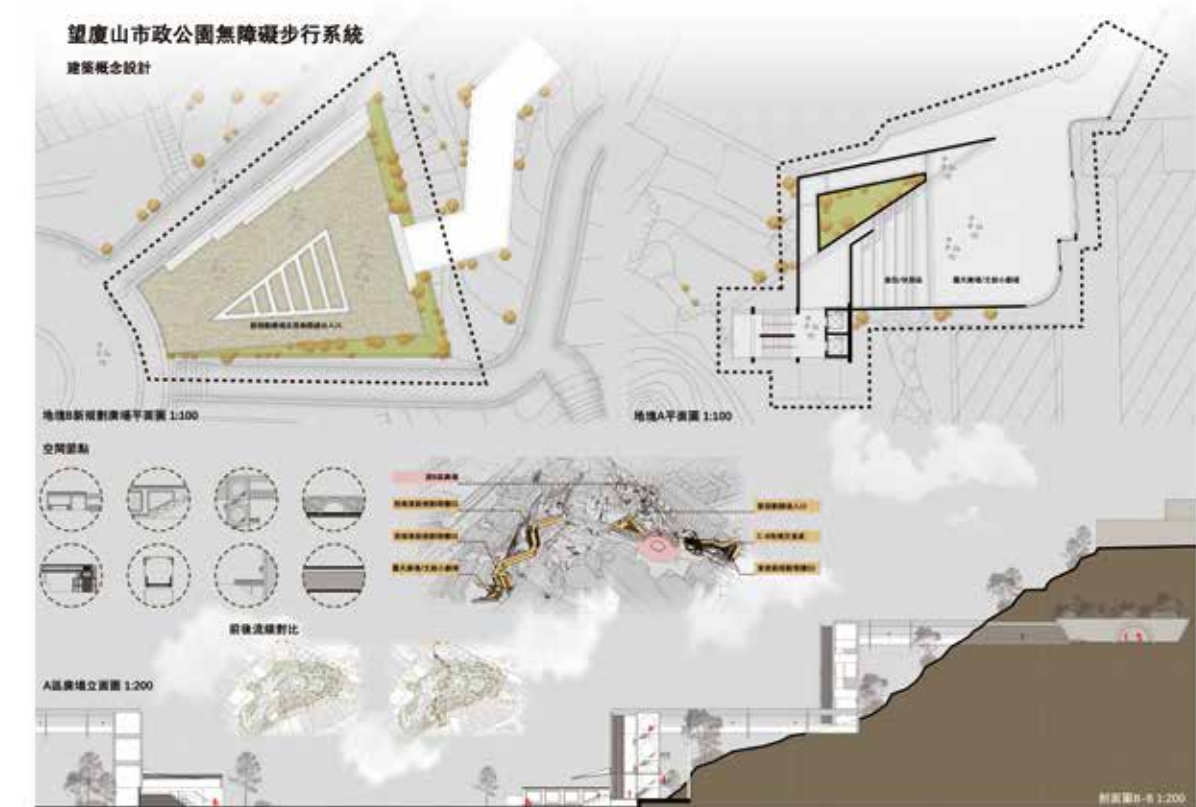


組長：李華超

組員：許亦斌



設計路線分別由望廈山東面菜園巷(黑沙環區域)，經過新規劃的三座無障礙塔樓及空中步道連接，到達望廈山的噴泉廣場，同時作為兩條路線的交匯點。另一條路線則是由望廈山西南面(狗房及牛房後的山邊)，通過新規劃的兩座塔樓及隧道，進入望廈山噴泉廣場。通過新的連結方式，給予附近居民聚集點及場所，使用方便的步道動線，便利居民的出行，帶動人流進入，同時結合望廈山原有場所，連結出一條新舊結合且具功能與趣味的路線。





隊伍 / Obra / Entry no.: AO

# Lourenco Vicente

Group Leader: Lourenco Vicente  
Goncalo Menezes  
Alexandre Marreiros  
Sara Martins Vicente



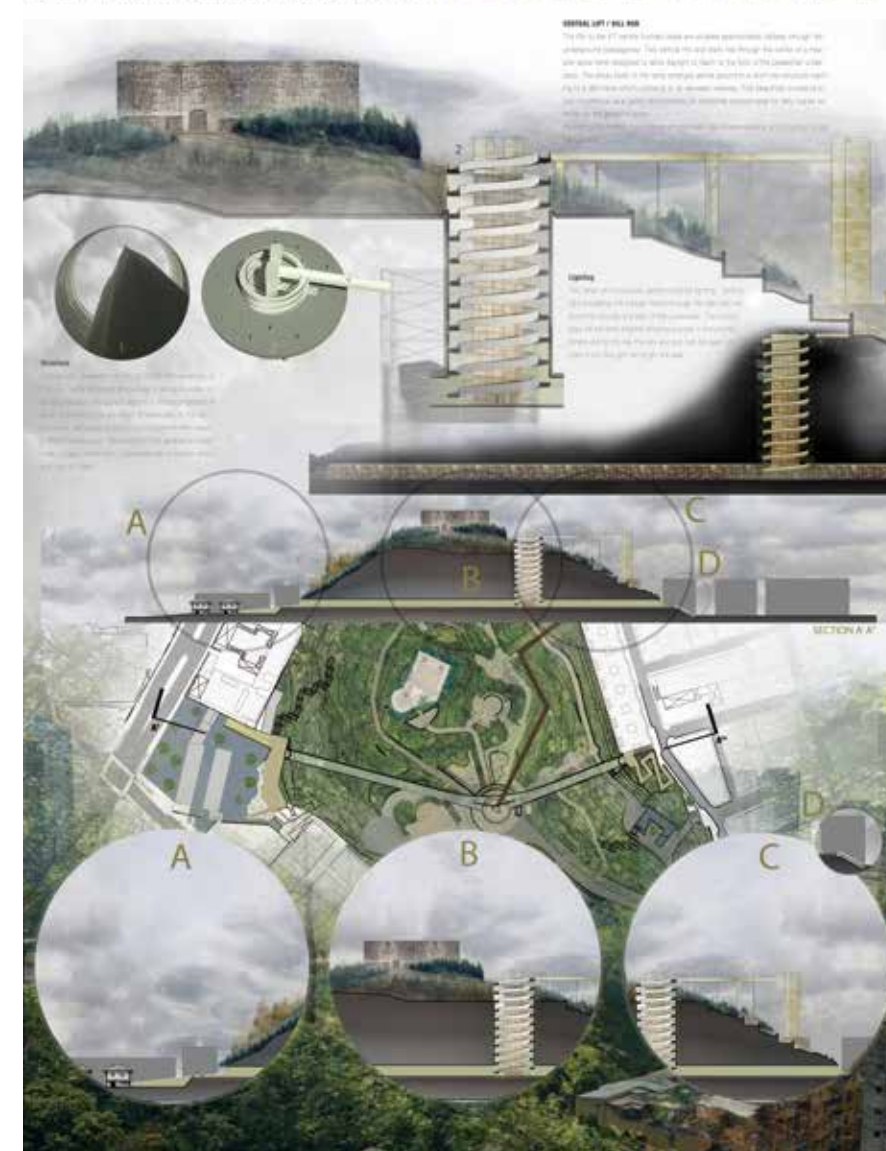
## BARRIER FREE WALKING SYSTEM MONG HA HILL MUNICIPAL PARK P01 CALL FOR A HILL



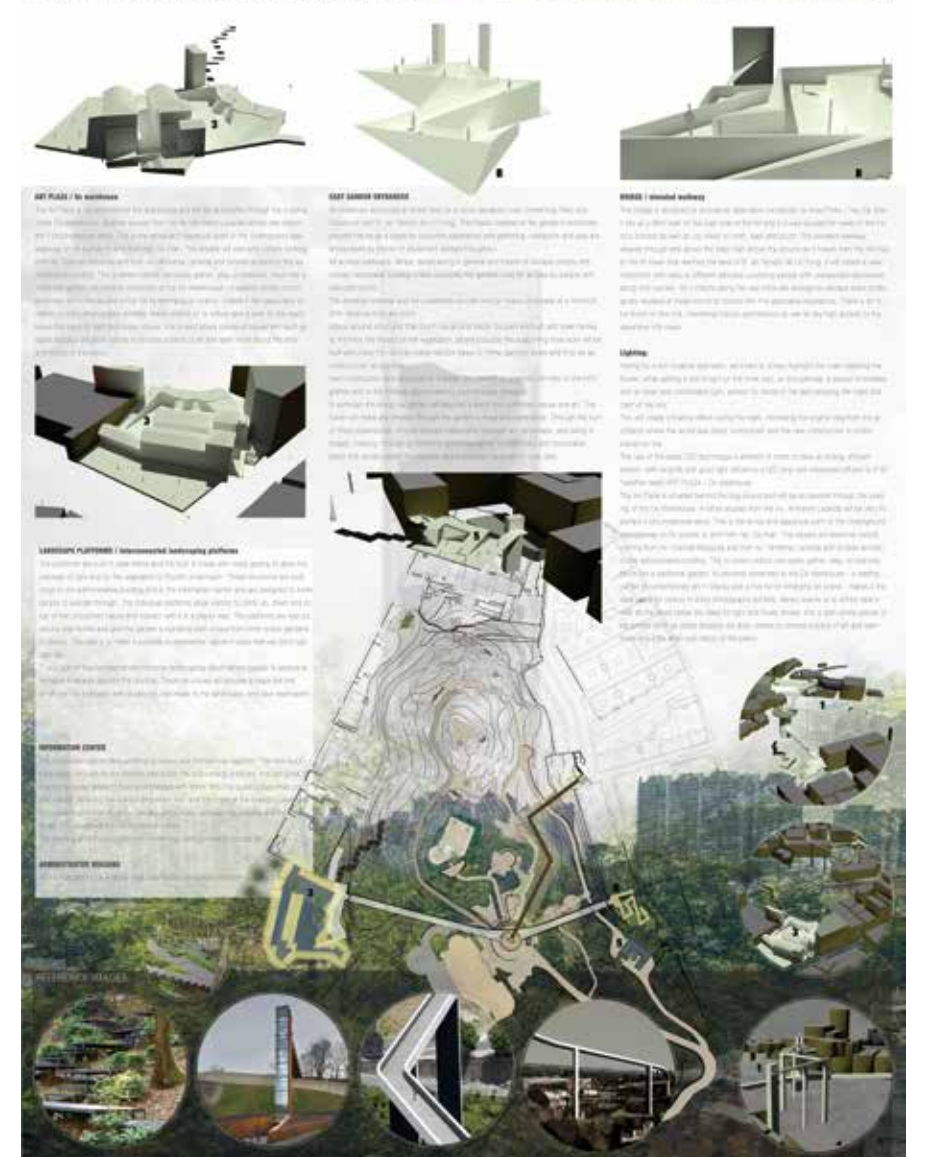
## BARRIER FREE WALKING SYSTEM MONG HA HILL MUNICIPAL PARK P02 CALL FOR A HILL



## BARRIER FREE WALKING SYSTEM MONG HA HILL MUNICIPAL PARK P03 CALL FOR A HILL



## BARRIER FREE WALKING SYSTEM MONG HA HILL MUNICIPAL PARK P04 CALL FOR A HILL



在這全球人口最密集的城市裡，沒有空間再建造新花園，因此迫切地需要新想像方式去設計一個綠色環境。

解決方案是透過非侵入式結構。目的是透過功能性，空間感和視覺藝術去創建一個能提供全年服務的綜合體，從而擴大休閒，娛樂和文化服務，提升花園吸引力。

其中可以利用現有建築物的優勢，尤其是文化遺產建築物 A (牛房) 和炮台，以驚人的結構互相襯托，使人們來發掘藝術和玩樂。



# 梁浩堃

梁浩堃  
林靜欣  
林欣榮  
鍾穎妍

望廈山市政公園『社區共融』無障礙步行系統的服務對象並不局限於傳統意義上的殘障人士，更涵蓋至社會上各層面的人，包括孩童、長者、運動人士、上班一族、寵物和主人等，使人們便於出行、通達和交流。

本方案除了為周邊社區市民提供便捷易達的通道外，更期望帶入寵物友善的元素、提高市民綠色出行及關注身心發展的需要，使望廈山成為一個有機、開放、資源共享的載體，同時為半島北區創造新形態的社區共融環境。





# 林廣虬

組長：林廣虬  
組員：楊海珊、邱曉倩、管皓琿



### 童夢天行 JUMP INTO CHILDHOOD

#### 望廈山市政公園無障礙步行系統建築概念設計

一羣小孩在路邊跳橡筋繩的場景，是本次設計的構思。因此擇題《童夢天行》為本次設計的中心思想。橡筋繩的形狀變化，是空中走廊不規則形態的靈感。山的兩邊被一條橡筋繩樣的狀帶路串通，更設有斜行電梯系統和高架天橋，無障礙步行系統將實現人們登高望遠的夢想，改善公園中各項設施對肢體障礙群體的通行遊玩體驗，增加了趣味及可持續發展的可能性。並在整體上增加了公園的兒童及有肢體障礙群體的遊玩元素。

設計中心：一羣小孩在路邊跳橡筋繩的場景，是本次設計的構思。因此擇題《童夢天行》為本次設計的中心思想。橡筋繩的形狀變化，是空中走廊不規則形態的靈感。山的兩邊被一條橡筋繩樣的狀帶路串通，更設有斜行電梯系統和高架天橋，無障礙步行系統將實現人們登高望遠的夢想，改善公園中各項設施對肢體障礙群體的通行遊玩體驗，增加了趣味及可持續發展的可能性。並在整體上增加了公園的兒童及有肢體障礙群體的遊玩元素。

#### 基地分析

- 居住區 / 住宅密度**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。
- 學校**  
望廈山鄰近多間學校，包括望廈小學、望廈中學、望廈中學附屬學校等，人口密度高，人口老化程度高。
- 綠地**  
望廈山鄰近多間學校，包括望廈小學、望廈中學、望廈中學附屬學校等，人口密度高，人口老化程度高。
- 兒童遊樂設施**  
望廈山鄰近多間學校，包括望廈小學、望廈中學、望廈中學附屬學校等，人口密度高，人口老化程度高。
- 歷史建築 / 山體分佈**  
望廈山鄰近多間學校，包括望廈小學、望廈中學、望廈中學附屬學校等，人口密度高，人口老化程度高。

#### 空間組合

望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。

#### 動線分析

- 原動線**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。
- 新動線**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。
- 舊動線**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。

一群小孩在路邊跳橡筋繩的場景，是本次設計的構思。因此擇題《童夢天行》為本次設計的中心思想。橡筋繩的形狀變化，是空中走廊不規則形態的靈感。山的兩邊被一條橡筋繩樣的狀帶路串通，更設有斜行電梯系統和高架天橋，無障礙步行系統將實現人們登高望遠的夢想，改善公園中各項設施對肢體障礙群體的通行遊玩體驗，增加了趣味及可持續發展的可能性。並在整體上增加了公園的兒童及有肢體障礙群體的遊玩元素。

- 斜行電梯及樓梯**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。
- 空中步橋**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。
- 山體分佈**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。
- 兒童遊樂設施**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。
- 歷史建築 / 山體分佈**  
望廈山位於望廈新邨住宅區邊緣，鄰近新邨中心，人口密度高，人口老化程度高，人口老化程度高。



隊伍 / Obra / Entry no.: AV

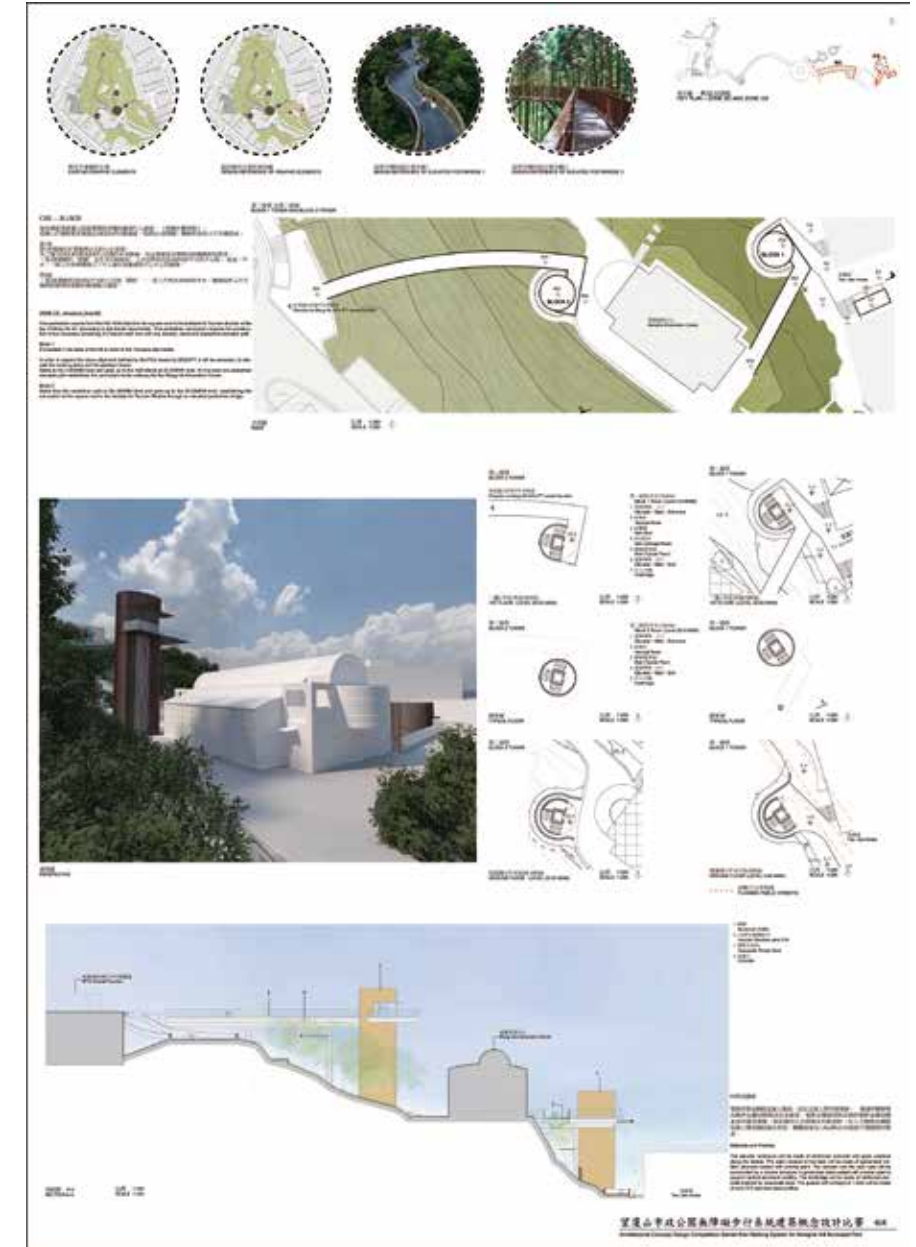
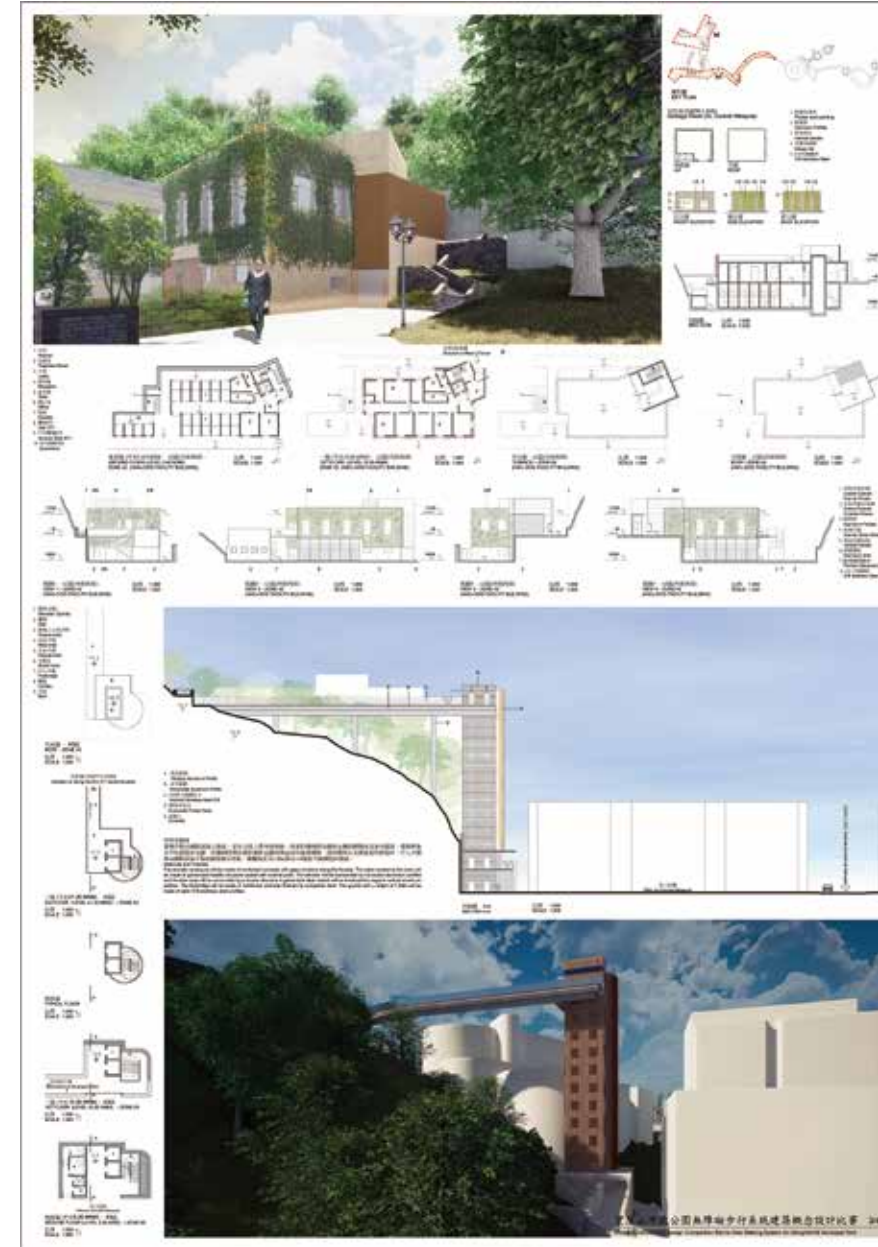
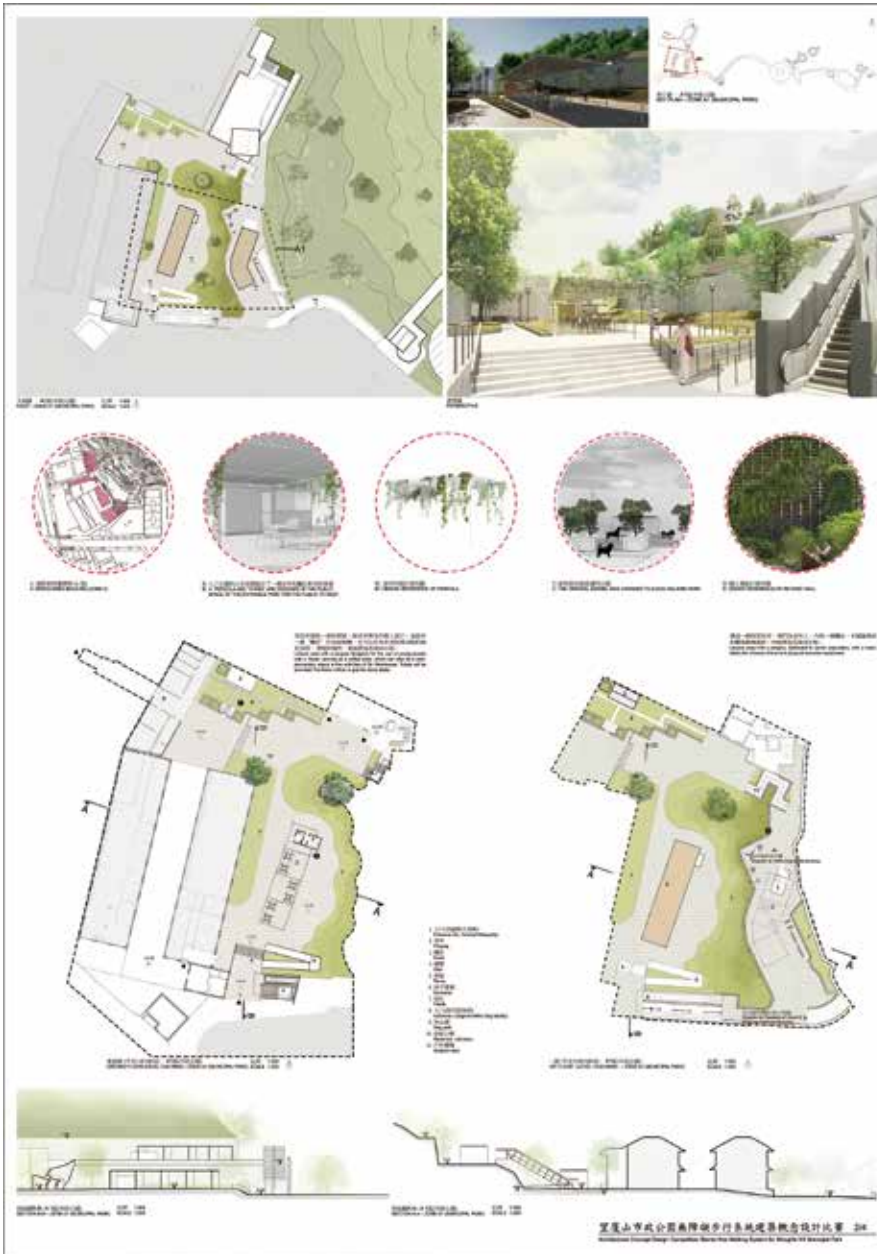
# 梁桂賢

組長：梁桂賢  
組員：甘宇令、陳潔穎、張凱棋

望廈山是澳門北部的綠肺，有一些具有歷史和遺產價值的建築物和設備必須加以保存，並且不受新建建築的影響。

對山坡進行的干預還包括建造 3 “座” 電梯，樓梯和高架人行道。

高架人行天橋位於樹梢上方或樹梢處，因此您有機會靠近樹木，以不同的視角欣賞風景，從而使公眾與自然更加親近。為了將建築結構產生的視覺影響減至最小，將採取了不建造屋頂的選擇，從而獲得“視點”，以享有欣賞山上樹頂的特權視野以及更遠的澳門和珠海天際線視野。

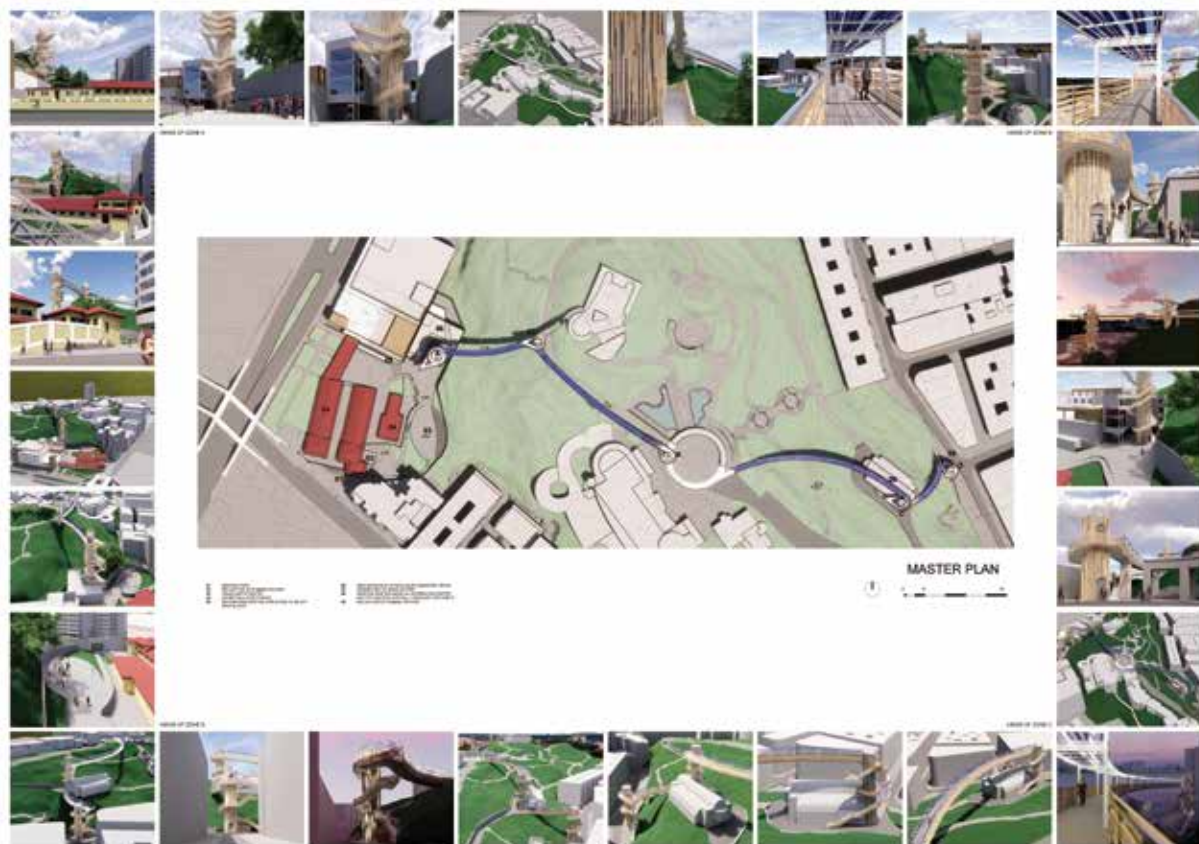




# 鄭建美



鄭建美  
△△建築設計事務所



## 輕“竹”橋網·“切”入民生

切線軸網是一個能配合局部地區的整體規劃系統。以切線圓弧重整望廈山分佈形態，為各區建立清晰意象；同時以地標性塔樓打造筷子基新形象。在尊重區內自然環境下整合各區及注入新元素：使用再生有機物料、節源照明系統、生產能量太陽能管、積極保留現有建築物，以減少建材廢料。

橫跨 260 米，高達 54 米，整合山體，結構輕形、形態縹緲，形成一條貫通望廈山東西的地標性無障礙步行系統，給澳門帶來可持續發展的綠建築及體驗性的空間規劃。

## TANGENTIAL NETWORK

Mong Hoi is a road between the region of Ancestral Temple, the most distinctive elements in the urban landscape in paths, roads, angles, districts and landmarks. These elements give shape to individual identity, representation of the city. Out of the five elements, the most satisfactory outcomes were identified based on currently clear geometry. This proposal is to connect the existing nodes to form a network using Tangential Paths, while anchoring best use entrances to the park. Entrance at Fat Chi Kai serves as a new beacon for the district and the cultural values under the auspices of park D serves as connection to community and amusement education programs. Tangential Cores are located strategically for environmental justice, serving as new nodes to connect the existing routes with elevated pathways. Together, they form a Tangential Network that can provide a barrier free walking system, sustainable and experience spatial quality.



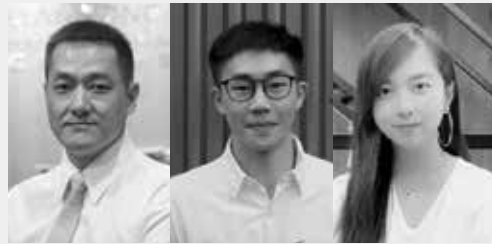
Tangential network is to bring the quality of Legibility and Imageability to the city of Macau by implementing existing facilities and natural resources through reorganization and creation.





隊伍 / Obra / Entry no.: BA

# 江輪



江輪建築師  
譚啟輪  
陳穎琳

解決功能需求是市政設施存在的首要要素，因此建立快捷方便的筷子基、高士德高密度住宅區，與黑沙環區域的連結將是本設計的第一要素。

本設計一共設置了二條 20 米左右高度的垂直升降電梯，由 A 區的動物牧場文創觀景園內一條由兩個層疊而上的觀景樓梯連接到旅遊學院前地再由空中走廊一直到資訊中心再到另一條垂直升降電梯直達菜園巷入口。讓市民增加了一個真正與周圍環境融合親近的地方，成為繼健康徑後又一個受歡迎的打卡點。

### 望廈山市政公園無障礙步行系統建築概念設計

## 樂於使用 便捷快速無障礙

穿越林間廊道，觀景樓梯為市民提供與山景融合的紐帶！  
 Delightful to use. Provide a convenient and accessible pathway to cross the natural corridors. The Scenic Stairs link people into the landscape, forming a connection between people and the environment.

### 設計說明

望廈山市政公園位於望廈山麓，是澳門半島的重要綠地之一，也是望廈山居民休閒活動的主要場所。本設計旨在提升公園的步行系統，為市民提供一條安全、便捷、無障礙的步行路徑，並與周圍的自然環境相融合。

設計概念包括：1. 設置垂直升降電梯，方便市民從山腳到達山頂。2. 設置觀景樓梯，提供與自然環境融合的步行體驗。3. 設置無障礙步行道，確保殘疾人士和老年人可以安全使用。

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## 動物牧場

### 文創互動觀景園 Animal Pasture Cultural and Creative Park

在望廈公園一帶，以自然環境為背景，結合望廈山麓的自然景觀，設計一條安全、便捷、無障礙的步行路徑，並與周圍的自然環境相融合。本設計旨在提升公園的步行系統，為市民提供一條安全、便捷、無障礙的步行路徑，並與周圍的自然環境相融合。

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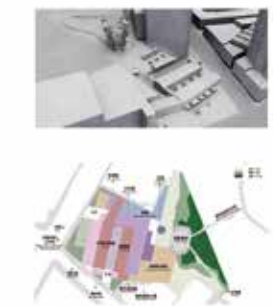
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## 望廈空中 資訊中心

### 及菜園巷入口 Mong Ha Sky Information Center and Travessa das Hortas entrance

望廈空中資訊中心及菜園巷入口，是望廈山麓的重要地標之一。本設計旨在提升該區域的步行系統，為市民提供一條安全、便捷、無障礙的步行路徑，並與周圍的自然環境相融合。

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動物牧場  
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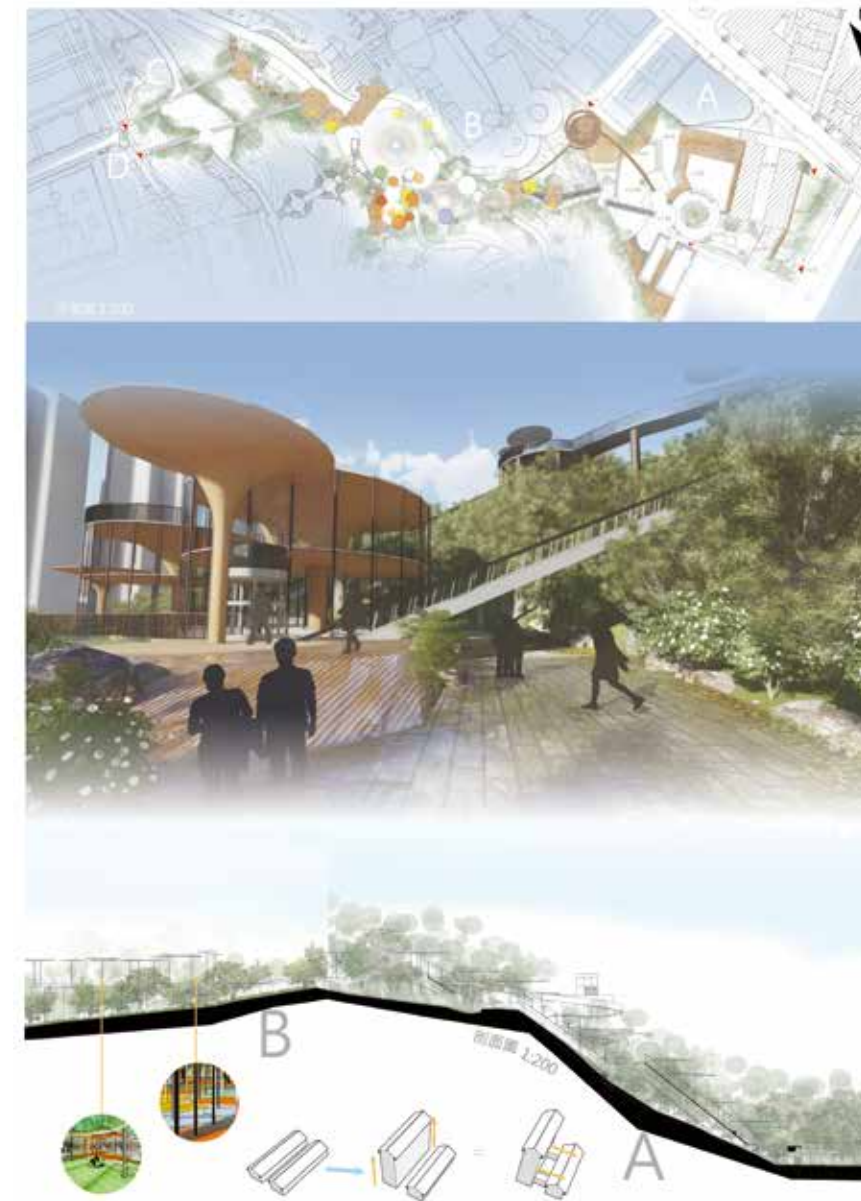
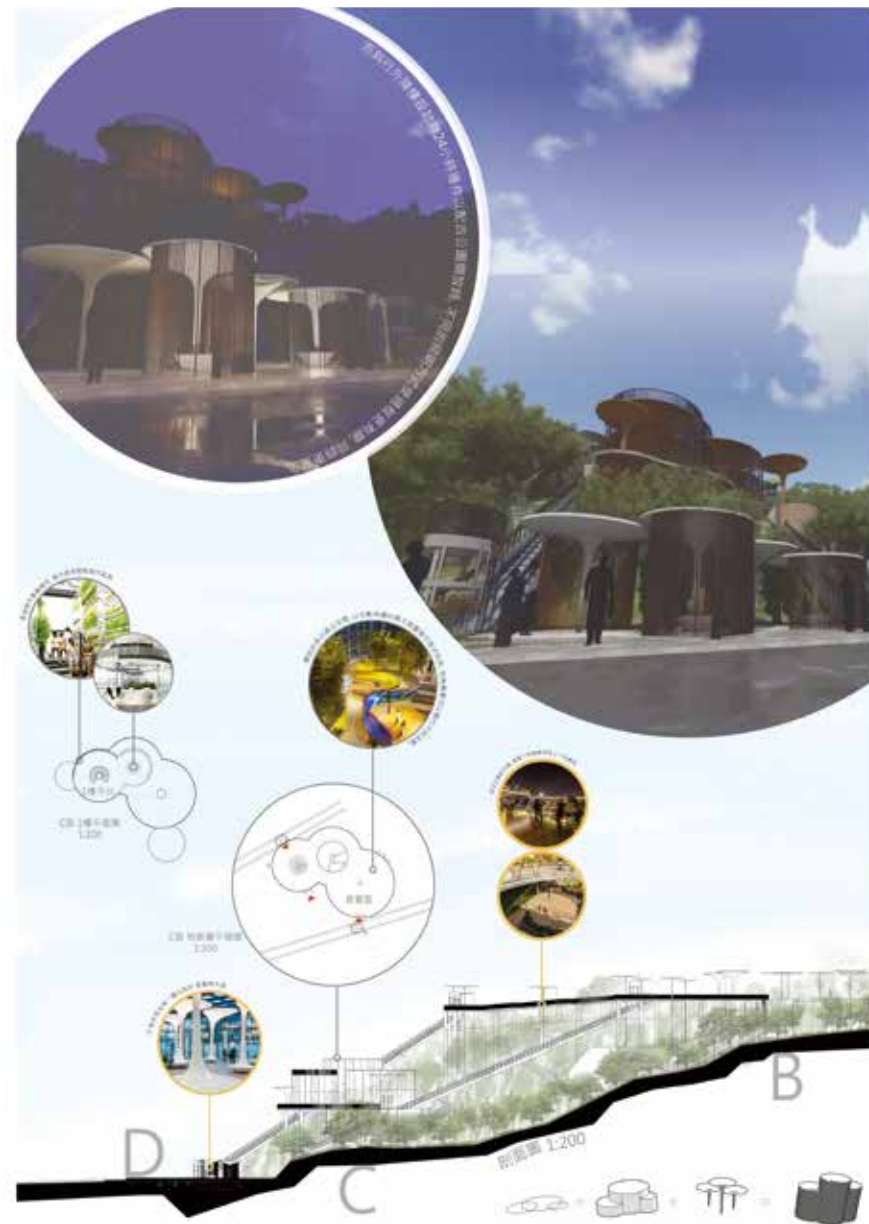


隊伍 / Obra / Entry no.: BF

# 吳玲華

組長：吳玲華

組員：黃惠玲、丁雅雅



“兩點，一線”是連，也是蓮。

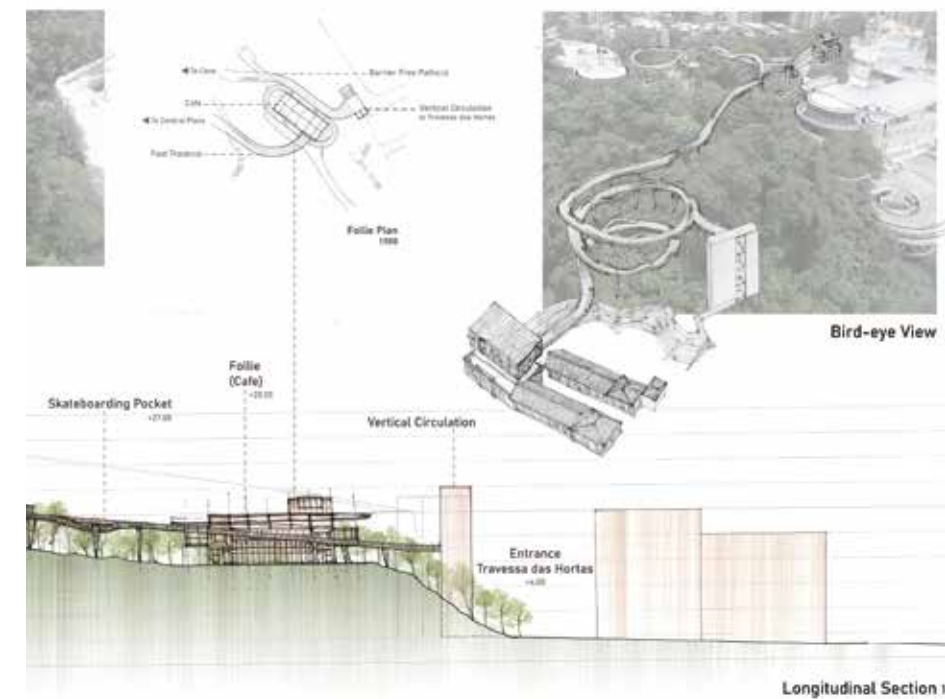
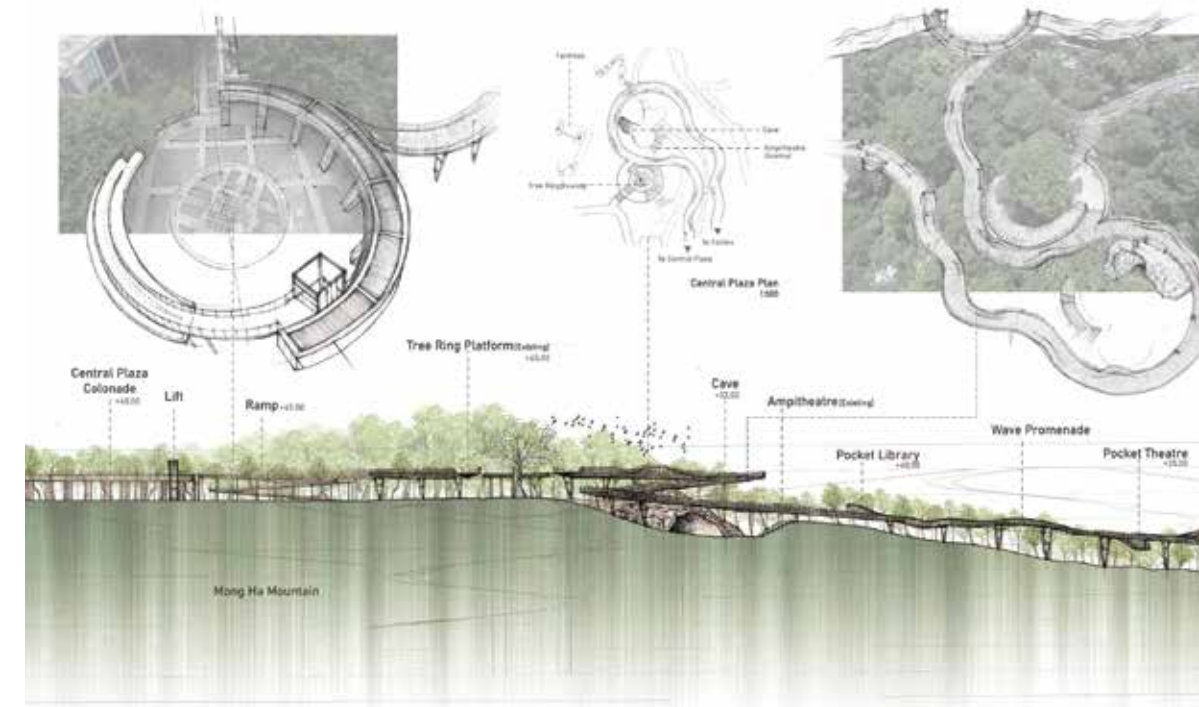
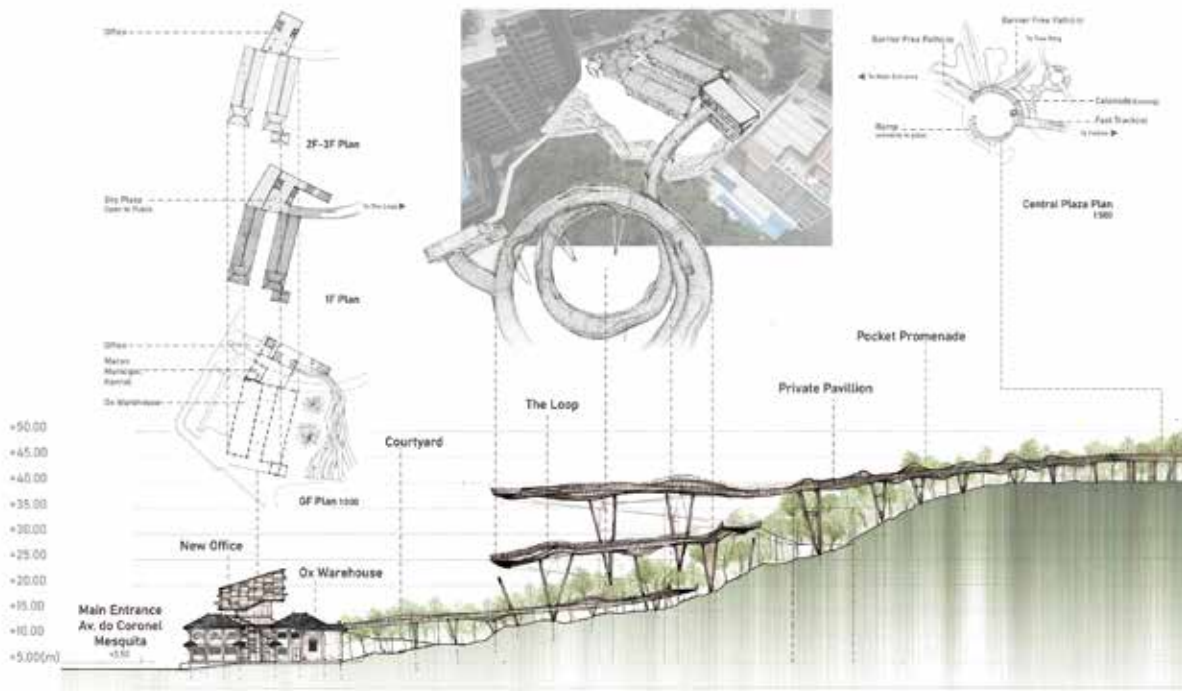
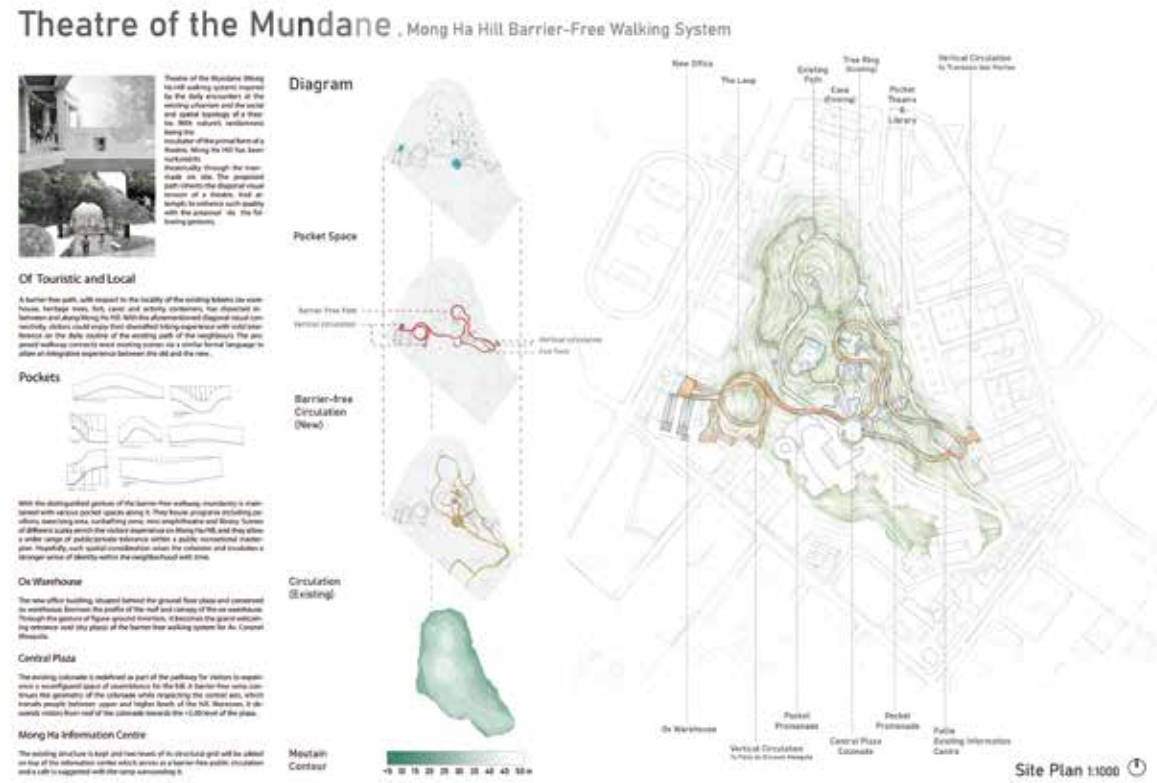
設計概念取“蓮”字作為設計核心，兩點之間一線，是為連，而連上加上“兩點一線”，則作蓮。”連”與”蓮”為同音字，同時望廈山的舊稱是蓮花山，蓮花更是澳門特區的區花，蓮字此刻蘊藏多重意義。設計取蓮葉其形態、躍動、高低、大小等特點作為建築元素，打造出步道與活動平台交替的步行系統，連接各個區域在連繫各個區域之餘亦打造出擁有不同特色的空間予市民進行多元化活動。



# 胡嘉濠



胡嘉濠  
韓梓濠  
蘇嘉明  
劉建輝



THEATRE OF THE MUNDANE,  
Mong Ha Hill Barrier-Free Walking System

“And to the degree that the individual maintains a show before others that he himself does not believe, he can come to experience a special kind of alienation from self and a special kind of wariness of others.”  
— Erving Goffman

Theatre of the Mundane (Mong Ha Hill walking system) inspired by the daily encounters at the existing urbanism and the social and spatial typology of a theatre. With nature's randomness being the incubator of the primal form of a theatre, Mong Ha Hill has been nurtured its theatricality through the man-made on site. The proposed path inherits the diagonal visual tension of a theatre. And it attempts to enhance such quality via a barrier-free path, with respect to the locality of the existing totems (ox warehouse, heritage trees, fort, central plaza, cave) and activity containers, which has dissected in-between and along Mong Ha Hill. Visitors could enjoy their diversified hiking experience with mild interference on the daily routine of the existing path of the neighbours. The proposed walkway connects most existing scenes via a similar formal language to allow an integrative experience between the old and the new.



# 梁鳳儀

Leong Fong I  
leong In Leng  
Hon Man Hin



望廈山市政公園無障礙步行系統 建築概念設計比賽  
以人為本 永續暢達 整體規劃



望廈山市政公園無障礙步行系統 建築概念設計比賽  
以人為本 永續暢達 建築物

整體設計概念「以人為本，永續暢達」，並符合聯合國可持續發展 SDGs 7 個單元。

## 1. 暢通易達

所有設計均符合無障礙設計要求，到達旅遊學院廣場，並連接至新環保資訊中心，再經垂直升降機到達菜園巷入口。

## 2. 永續設計

### A) 建築物

- 環保資訊中心以被動式設計以達至自然通風效果，依山而建，融入山體，廣植植物及天台農耕。安裝可再生能源裝置。
- 市政狗房以被動式設計為主，外牆為木百葉遮陽板，以調節自然通風及遮陽效果。

### B) 公共戶外空間

- 文創廣場下部為蓄水池，所有公共空間廣種本土原生植物。所有地表物料為可散水性，以助減低熱島效應。



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以人為本 永續暢達 節能及可再生能源 環保及生物多樣性 社區參與



# 陳量

陳量  
黃偉明  
馮少媚  
何小敏



**澳門** (葡萄牙語: Macau; 英語: Macao), 簡稱澳, 名稱來源, 經橫濱江。澳門由澳門半島、氹仔、離地及填海組成, 總面積 113.5 km<sup>2</sup>, 土地面積 32.9 km<sup>2</sup>, 常住人口 672,000 人, 每平方公里人口密度 2 萬, 世界上人口密度最高的地區。

**望廈山**, 又名望神山、望石山, 通稱為望廈的舊名, 位於澳門半島北部的東邊。"望家園" 稱"望神山, 在(望山)城東海一頁十五家大海中, 有聖母孔。" 一說望神稱澳門為聖母, 故此山與聖母同稱, 一說此山所有聖母可而得也。

**人口規模** 根據統計局《2016年中國人口統計》, 望廈區範圍內約有七個區, 合計約有 24 萬人, 約佔澳門半島人口的 46%。本項目位置之望廈及水環區, 和周圍另外七個小區當中, 人口密度均超過每平方公里 8 萬人, 遠高於全澳每平方公里 2.1 萬人的平均人口密度。(澳門半島每平方公里 5.7 萬人, 本大區每平方公里 8 萬人, 屬最高水平)

**規劃** 按五分鐘的步行半徑, 即 300 米半徑範圍內, 形成總佔面積 約 60 萬平方米 作為土地用途項目管理研究服務人口規模的依據, 人口密度, 內約有 55,211 人。預期未來研究範圍內將有 4,376 個新建的住宅單位, 按每戶平均人口 3.08 人估算, 預期未來研究範圍內的人口, 2021 年增加至 68,689 人。

### 望廈區的市民需要什麼? 優質交通, 綠化空間, 活躍空間, 社會服務

**土地用途**

住宅商業用途	16 萬平方米, 26.7%
住宅用地	4.7 萬平方米, 7.8%
教育用地	4.9 萬平方米, 8.2%
體育用地	4.4 萬平方米, 7.3%
綠化用途	6.1 萬平方米, 10.2%
公共設施	3.0 萬平方米, 5.0%

**學校所需空間**

澳門學校生均	建築面積 12 平方米/人
區內學校生均	建築面積 只有 7.8 平方米/人

**社會設施**

如對地區性設施作推算按 68.689 人口規模推算, 區內應提供:

- 7 間托兒所
- 5 間長者日間中心
- 1 間綜合長者護理中心
- 1 間家庭服務設施
- 1 間社區服務設施
- 少量青少年服務設施空間

所需總面積約 21,443 平方米



**整體設計概念及構想**

為配合及提升望廈山山體之自然環境, 以步行系統之設計, 以步行系統之設計, 以步行系統之設計...

項目	單位	數量	面積	佔地	佔地
步行系統	單位	100	100	100	100
步行系統	單位	100	100	100	100
步行系統	單位	100	100	100	100
步行系統	單位	100	100	100	100
步行系統	單位	100	100	100	100



**總平面圖**

**綜合服務功能設計:** 本綜合服務樓作為步行系統之重要節點, 位於步行系統之重要節點, 位於步行系統之重要節點...

**電梯樓入口:** 為方便行人乘搭電梯, 在步行系統之重要節點, 位於步行系統之重要節點...

**老幼活動中心功能設計:** 本中心作為步行系統之重要節點, 位於步行系統之重要節點...

**觀景設計:** 本觀景平台作為步行系統之重要節點, 位於步行系統之重要節點...



**老幼活動中心功能設計:** 本中心作為步行系統之重要節點, 位於步行系統之重要節點...

**觀景設計:** 本觀景平台作為步行系統之重要節點, 位於步行系統之重要節點...



把牛房側垃圾房作為新入口並進行優化。鏡湖殯儀館後的新綜合服務樓與旁邊的梯田平台相連接, 梯田分為三層, 分別作為遛狗區、植物園及棧道小路, 結合山勢以無障礙方式通往電梯樓。

黑沙環入口設老幼活動中心增加人流, 為彌補望廈體育館的不足, 可提供一些比較小眾的活動空間。例如攀岩, 可利用本身望廈山山體, 稍作安全設施改良而成。

兩個入口均有觀光電梯樓, 有助有需要人士通往不同地方。橋的設計以棧道形式沿途可欣賞景觀。



# 獲獎作品評語

39 份獲接納的參賽作品，競逐不多於 10 名的獎項，要得到 11 位不同背景的評判的青睞，並脫穎而出，有關作品則需要明顯的優點和特色。在參賽作品眾多的情況下，圖紙上展示的設計意念是否鮮明和易於讓評判理解，表現效果是否吸引就顯得尤其重要。然後才比拼設計考慮的深度和豐富度，圖上的文字說明是否精準和凸出重點。

是次建築概念設計比賽目的為望廈山市政公園增添無障礙步行系統，以提升澳門黑沙環區及筷子基區之間的交通易達性和連貫性，比賽範圍圖上標示了 A、B、C、D 四個節點，所以簡單而言，就是要有便捷的手段，以無障礙的設計去將這四個節點串連起來。有少數參賽作品採用迂迴的盤山步道，本著不破壞山林特色的意念，但忽略了便利性這需要，沒有採用機械運輸的手段去將公眾快捷地引導上、下山。這些作品就達不到比賽目的了。

另一極端是部分參賽作品設計過於豐富，可以說由山腳玩至山頂，再由山頂玩至山腳，又或形象過於誇張，日後工程的實施既大費周張，亦容易造成喧賓奪主效果，使望廈山失去山林之美。

機械運輸的手段有多種選擇，包括升降機、扶手電梯、斜行升降機，以至吊車等，分別都有參賽作品採用，當中既有單一手段的，亦有混合多種手段的。比賽本身沒有限定採用哪種手段，不過扶手電梯或吊車會限制輪椅使用者的無障礙登山，則有需要結合其他手段一併考慮。無可置疑，升降機會是較多作品所採用，分別在動線兩端的 A、D 區設置升降機又是最多採用的方案。他們如何連通動線中間的 B、C 區則構成了各參賽作品中存有雷同或有差異。

雖然評審之前並沒有任何協定，但評審結果卻又反映了參賽作品構思的多樣性，也即當有多個作品的構思是較接近甚至雷同的話，他們之間將會形成競爭和淘汰，所以，儘管有些得獎作品不一定較某些落選作品在方案深度上優勝，卻能因作品構思別出心裁而贏得獎項。

由於一等獎的作品將會獲邀請參與下一輪的工程設計實務工作的競標，所以相關作品不僅在於構思的獨特新穎，更要在可行性上取得優勝。

何培基  
澳門建築師協會理事會  
副理事長

## 一等獎作品



### 隊伍 AE

參賽團隊對望廈山公園進行過仔細的調研，以盡量減少影響自然景觀的設計，故方案採用了升降機、架空行人天橋和隧道結合的無障礙步行系統。B 區現有的中央噴泉廣場設計成下沉式，即改為地面以下，變成水池和人工水簾瀑布。新造的建築物亦加強了綠化的考慮。整體展現出一個平實、不花巧但又精心的設計。與其他同樣採用橋隧結合設計的參賽作品比較，本方案優勝之處在於構思相當全面，提出並加以處理的問題頗多。加上圖紙表現清晰易明，凸出設計重點，串連 A、B、C、D 四個節點的動線清晰，當中還考慮與山上現有其他步行徑以及旅遊學院的連接等等。

### P.14-17



### 隊伍 AQ

「張揚」是本方案的特色，設計的考慮延伸至地段以外，直接把公眾引入來。它建議把美副將大馬路及罅些喇提督大馬路交界的行人天橋擴闊 / 加建出一個架空平台，並藉此繞過牛房直達山坡上的廣場，再從該處透過斜行升降機上山以到達 B 區中央噴泉廣場。同樣的架空平台手法又應用在 C 區重建的資訊中心大樓屋頂，以連接 B、C、D 區。此外，D 區的升降機結合重建的資訊中心填塞了菜園巷的狹縫天際，然而低調的色彩緩解了建築體量上的壓迫感，但實際建成效果如何則有待驗證。

### P.18-21



### 隊伍 AX

形象鮮明逼真的表現圖吸引評審的青睞，仿佛就是已建成並真實存在的景況，是那麼自然，並與環境融為一體。C 區的資訊中心重建後外圍的兩圈迴旋斜坡是方案的趣味所在，其依山勢逐步引向 B 區中央噴泉廣場。另外 A 區則採用了斜行景觀升降機，目的減低對望廈山及望廈炮台的視線遮擋。結合現有牛房的翻新重整，運用水池、蠔殼牆、葡式碎石鋪地之設計，以中西文化碰撞、新舊交織、自然與人工並存等手法來打造入口廣場，全都清晰展示於表現圖上，為方案營造更多贏點。

### P.22-25



### 隊伍 AY

方案以升降機作為垂直交通的主要手段，而圖紙則以誇張的手法，引人注意其在升降機外形設計上的心思。方案最討人之處是營造 A 區牛房後的山坡成為一個繁花似錦的花園，配上如天使雙翼造型的升降機塔樓，造出先聲奪人，引人入勝的效果。C、D 區的兩座升降機塔樓又是另一光景，圓筒狀的升降機塔突出於重建的資訊中心屋頂，其外面圍以螺旋坡道，最終接上通往 B 區中央噴泉廣場的架空步道。D 區採用玻璃觀景升降機，高度只到資訊中心負一層。倘仔細推敲，三座升降機實際不會很高大，並不如圖紙表現那般突出而對山體景觀產生衝擊。

### P.26-29



### 隊伍 BE

方案著重考慮了建築物與山體的結合，A 區新建的辦公樓和 C 區重建的資訊中心都採用綠化屋面，以營造出建築物與山體融為一體的效果。同樣以升降機作為垂直交通的主要手段，配以架空行人天橋簡單直接地串連 A、B、C、D 四個節點，而本方案更進一步對天橋提供了加有上蓋的考慮，利用一個個以不同角度逐步扭轉的矩形框架，豐富了天橋的外形。另外方案亦建議改造牛房前的花園，拆走與罅些喇提督大馬路之間的圍欄，把行人道擴闊以避開現有行人天橋扶手梯所形成的障礙。

### P.30-33

## 優異獎作品

### 隊伍 AG

方案設計以「牛」為立意，再藉「牛棚」延伸作為 D 區入口建築的形象構思，予人形象鮮明的感覺。此外，山下先經過隧道通往升降機，以及山上的架空步道凌空於現有 B 區中央噴泉廣場的方案都是較為獨特的想法。

### P.36-39

### 隊伍 AP

方案在 A 區位置採用吊車作為登山的交通手段，引起人們對此手段的探討，從而對方案產生興趣。“V”的形狀反覆應用在方案設計上，包括 A 區新建的辦公樓平面形狀，連接 B、C 區的架空多邊形螺旋步道的平面形式和步道的切面構造等。

### P.40-43

### 隊伍 AU

A 區和 D 區都採用升降機分段地把公眾帶上山，其間更設計出觀景台。方案相當詳盡地介紹了各種設計細節，包括優化現有 B 區中央噴泉廣場設計和環保方面的考慮，使方案給予人一種具備相當深度的感覺。

### P.44-47

### 隊伍 BH

從蓮花演變出以圓形作為方案中建築物的主要造形元素，創造出可愛的建築形象和簡潔清新的圖面效果。而 D 區入口則設計為隧道以到達 C 區重建後的資訊中心地底，把相關升降機結合起來，達到簡潔的效果。

### P.48-51

### 隊伍 BM

方案為 A、B、C、D 四個節點考慮了無障礙步行系統之餘，更深入地分析了整個望廈山市政公園的多個位置，建議透過引入新的裝置、遊戲設施及步道設計等豐富望廈山的功能。手繪式的設計表現圖也吸引了評判的注意。

### P.52-55



# Comentário sobre as obras premiadas

No concurso, foram admitidas 39 obras para concorrer a um máximo de 10 prémios. Para ganhar o favor dos 11 jurados de contextos diferentes e vencer o concurso, as obras deveriam ter as suas próprias vantagens e características. Tendo em conta o elevado número de obras apresentadas, uma concepção de desenho usada na obra nítida e fácil de compreender pelos jurados e o efeito atractivo da sua forma de apresentação são muito importantes. Em seguida, o júri verificou a profundidade e a riqueza das considerações do desenho e se as especificações mostradas na obra eram ou não precisas e se estavam destacadas as ideias principais.

O presente concurso de design de concepção arquitectónica tem por objectivo adicionar um sistema pedonal sem barreiras para o Parque Municipal da Colina de Mong Há, no sentido de elevar a acessibilidade e a ligação entre as zonas da Areia Preta e do Fai Chi Kei de Macau. O mapa da área de desenho indica quatro pontos: A, B, C e D. Em termos simples, é preciso aproveitar meios convenientes para ligar estes quatro pontos mediante um desenho sem barreiras. Alguns concorrentes, com base no conceito de não prejudicar as características florestais, adoptam um trilho sinuoso de montanha, desvalorizando a conveniência e não utilizando transportes mecânicos para levar o público a subir e descer a colina de forma rápida e conveniente. Assim, esses trabalhos não atingiram os objectivos do concurso.

No outro extremo, uma parte dos trabalhos concorrentes apresenta um desenho sobrecarregado, do sopé até ao topo da colina e vice-versa, ou com uma imagem exagerada. Como também implicavam uma obra complicada, aquando da sua execução, causando facilmente um efeito exagerado, fariam com que a Colina de Mong-Há perdesse a sua beleza natural.

Os meios de transporte mecânicos são variados, incluindo elevadores, escadas rolantes, elevadores inclinados e guindastes. Esses meios também são aproveitados nos trabalhos concorrentes, entre os quais alguns utilizam um meio único, enquanto alguns outros optam por combinar vários. No concurso, não se limitam os meios a adoptar, mas as escadas rolantes ou os guindastes limitam a acessibilidade dos utentes em cadeira de rodas na subida da colina e, por isso, é necessário considerar a integração dos outros meios. Obviamente, os elevadores são adoptados na maioria das obras concorrentes, enquanto a instalação de elevador nas zonas A e D dos dois lados da linha de fluxo é o plano mais adoptado pelos concorrentes. Assim, a ligação das zonas B e C, no meio da linha de fluxo, constitui semelhança ou diferença entre as obras concorrentes.

Embora não haja nenhum acordo entre os jurados, o resultado da avaliação reflecte a diversidade de concepções das obras concorrentes, ou seja, se a concepção de várias obras for próxima ou até semelhante, entre elas haverá concorrência e eliminação. Por isso, mesmo que algumas obras premiadas não sejam as melhores em termos de profundidade, comparativamente à de determinadas obras não premiadas, podem ser distinguidas pela originalidade da sua concepção.

Uma vez que as obras vencedoras do prémio para o 1.º lugar da classificação serão convidadas a participar na próxima fase do concurso para os trabalhos práticos do projecto de engenharia, as obras foram consideradas relevantes não só pela originalidade e excentricidade da sua concepção, como também pela sua viabilidade.

## Ho Pui Kei

Vice-Presidente da Direcção da Associação dos Arquitectos de Macau

## Obras classificadas com o 1.º Prémio



### Obra AE

P.14-17

A equipa concorrente realizou uma pesquisa pormenorizada sobre o Parque Municipal da Colina de Mong-Há, a fim de reduzir ao mínimo o impacto do projecto para a paisagem natural, adoptando nesse sentido um sistema pedonal livre de barreiras, composto por um elevador, passagem superior pedonal aérea e túnel. A praça central da fonte existente na Zona B é desenhada de forma afundada, ou seja, abaixo do nível do solo, formando um tanque e uma cachoeira artificial. As novas construções tomam também em conta a arborização. O trabalho em geral representa um desenho prático, não extravagante, mas sofisticado.

Comparando com as outras obras concorrentes que também adoptam a concepção de integração de passagem e túnel, o presente projecto tem a vantagem de uma concepção relativamente completa, indicando também os eventuais problemas e fornecendo as devidas soluções. Além do mais, a sua planta mostra-se clara e fácil de compreender, destacando-se os pontos importantes do desenho e as linhas de fluxo na ligação dos pontos A, B, C e D são muito claras, tendo ainda em consideração a ligação com outros trilhos existentes na montanha e com o Instituto de Formação Turística.



### Obra AQ

P.18-21

“Pomposidade” é uma característica deste projecto. O desenho do projecto estende-se para fora do lote, atraindo directamente o público. Propõe-se alargar a passagem superior para peões entre a Avenida do Coronel Mesquita e a Avenida do Almirante Lacerda e construir uma plataforma aérea, para contornar o Antigo Estábulo Municipal de Gado Bovino (Armazém do Boi) e chegar directamente à praça da encosta e, a seguir, utilizar o elevador inclinado desta praça para subir à praça central da fonte da Zona B na montanha. O mesmo tipo de plataforma aérea é também aplicado no topo da Ecoteca reconstruída na Zona C, no sentido de ligar as zonas B, C e D. Por outro lado, o elevador da zona D articula com o Centro de Informações reconstruído, tapando o espaço entre as fendas da Travessa das Hortas. No entanto, as cores descontráidas atenuam a pressão na massa de construção, embora o efeito em concreto da obra ainda esteja por ser verificado.



### Obra AX

P.22-25

Imagem real e luzente, atrai o olhar dos jurados, como se fosse uma paisagem já construída na realidade, muito natural e integrada no ambiente. Após a reconstrução da Ecoteca da zona C, a rampa de duas voltas no exterior é o ponto mais interessante do projecto, sendo orientada passo a passo em direcção à praça da fonte central da zona B. Além disso, na zona A foi adoptado um elevador panorâmico inclinado, com o objectivo de reduzir a obstrução da vista da Colina de Mong Há e da Fortealeza de Mong Há. Combinando com a remodelação do Antigo

Estábulo Municipal de Gado Bovino (Armazém do Boi), utilizando no design da fonte, uma parede em concha de ostra, pavimento ao estilo português para criar a entrada da praça num encontro da cultura oriental com a ocidental, interligando o antigo e o novo, e com a coexistência da natureza com o artificial, etc. Tudo isto é mostrado claramente na planta, criando muitos pontos vencedores para o projecto.



### Obra AY

P.26-29

A ideia principal do projecto consiste em utilizar o elevador vertical como meio de transporte. A planta do projecto utilizou a técnica do exagero para atrair a atenção das pessoas para o conceito do estilo usado no design do exterior do elevador. O elemento mais atractivo do projecto é o exuberante e próspero jardim de flores, criado na zona A, na encosta posterior do Antigo Estábulo Municipal de Gado Bovino (Armazém de Boi), com o elevador com formas inspiradas em anjos alados, criando assim um efeito emocionante para atrair o coração das pessoas. Os dois elevadores das zonas C e D remetem para outras paisagens, a forma cilíndrica do elevador sobressai no tecto da Ecoteca e o exterior do elevador é em forma de hélice. O ponto terminal do elevador liga-se a uma passarela aérea que dá acesso à praça da fonte central da zona B. A zona D adopta um elevador panorâmico de vidro, sendo que a sua altura só vai até ao cave 1 da Ecoteca. Se observado em detalhe, o tamanho real dos três elevadores não é muito grande, ao contrário do que o desenho mostra, e que ameaçavam impactar a paisagem da colina.



### Obra BE

P.30-33

O projecto considerou, no essencial, a conjugação entre a construção e a colina, utilizando tectos arborizados no novo edifício construído na zona A e na Ecoteca remodelada na zona C, para alcançar o efeito de combinação única entre a construção e a colina. Aplicou a mesma ideia principal de adoptar elevador vertical como transporte, ligando directamente, através de passagem superior pedonal aérea, os quatro pontos nodais das zonas A, B, C e D. No entanto, o presente projecto considerou dar mais um passo, ao criar uma cobertura na passagem superior, utilizando grandes quadros torcidos em diferentes ângulos, enriquecendo assim o aspecto da passagem superior. Além disso, o projecto ainda propôs transformar o jardim, localizado ao lado oposto do Armazém do Boi, remover a vedação localizada na Avenida do Almirante Lacerda, alargar o passeio pedonal para evitar o obstáculo que a escada rolante da passagem superior pedonal constitui.

## Obras do prémio de mérito

### Obra AG

P.36-39

O design do projecto foi criado a partir do conceito de “boi” e aproveitou-se a “vedação de touros” para a concepção de imagem na construção da entrada da zona D, transmitindo uma emoção forte. Além disso, o projecto apresentou uma ideia exclusiva, ao levar a passar pelo túnel, no sopé da colina, para aceder ao elevador, enquanto, no alto da colina, a passarela superior aérea aparece por cima da praça da fonte da zona B.

### Obra AP

P.40-43

O projecto adaptou, na zona A, um camião-guindaste para servir de transporte na subida da colina, o qual atraiu a discussão das pessoas sobre a ideia do projecto, despertando então interesse pelo projecto. A forma em “V” foi aplicada recorrentemente no design do projecto, incluindo a configuração do novo edifício construído na zona A, a ligação entre a superfície plana da passarela aérea em forma cónica poligonal e a pista com estrutura em plano tangente das zonas B e C.

### Obra AU

P.44-47

As zonas A e D também utilizam elevadores para transportar, de forma distribuída, o público à colina, sendo ainda realizado o design de um miradouro. O projecto é muito detalhado e introduz, de forma particular, cada tipo de design, incluindo a optimização do design da praça da fonte existente na zona B, e considerou ainda a protecção do ambiente, tocando assim em sentimentos profundos das pessoas.

### Obra BH

P.48-51

Transformando uma flor de lótus na construção do projecto, através de um estilo que toma a forma do círculo como elemento principal, cria-se o efeito da planta numa imagem arquitectónica adorável, simples e luzente. A concepção da entrada da zona D adopta um túnel para aceder à cave da nova Ecoteca da zona C, unindo com o respectivo elevador para alcançar um efeito simples e limpo.

### Obra BM

P.52-55

O projecto, além de considerar o sistema pedonal livre de barreiras arquitectónicas nos pontos nodais das zonas A, B, C e D, ainda analisou profundamente as localizações de todo Parque Municipal da Colina de Mong-Há, bem como propôs enriquecer a função da colina de Mong-Há através da introdução do design de novos equipamentos, instalações de jogos e passeios. A representação do design, desenhada à mão, também atraiu a atenção dos jurados.



# Comments on Award-winning Entries

Competing for no more than 10 awards, the 39 accepted entries have to showcase their distinctive advantages and characteristics in order to stand out and be chosen by the 11 judges from different backgrounds. In the context of fierce competition with a large number of entries, it is particularly important to make sure the design ideas displayed on the drawings are clear and easy for the judges to understand, and the renderings are eye-catching. What follows would be the depth of considerations and richness incorporated in the designs, and whether the descriptions on the drawings are precise and highlight the key points.

The purpose of this architectural concept design competition is to add a barrier-free walking system to the Mong Há Hill Municipal Park to improve the traffic accessibility and connectivity between the district of Areia Preta and the district of Fai Chi Kei in Macao. The scope map of the competition is marked with four points: A, B, C and D. In short, the goal is to design a convenient and barrier-free route that connects these four points. A small number of entries have adopted the form of winding mountain trails so as not to dilute the characteristics of the hill forest, yet they fail to address the need for convenience with the absence of mechanical transportation for quickly guiding the public up and down the hill. These entries therefore do not fulfil the objective of the competition.

At the other end of the spectrum, some entries are too rich in design features distributed from the foot to the top of the hill and back, or their forms are greatly exaggerated, which will not only lead to laborious construction in the future but also upstage and diminish the natural beauty of the Mong Há Hill.

There are multiple means of mechanical transportation, including lifts, escalators, inclined lifts and cable cars. Each of the means are adopted by the entries, singly or together with other means. The competition itself does not limit which method to use, but escalators or cable cars restrict barrier-free hill climbing among wheelchair users, making it necessary to consider combining them with other means. Undoubtedly, lifts are adopted in many entries, and installing lifts in Zone A and Zone D at both ends of the circulation is the most adopted scheme. How Zone B and Zone C in the middle of the circulation are connected contributes to the similarities or differences in the entries.

Although there is no prior agreement to the judging phase, the judging results reflect the diversity of the ideas presented in the entries, i.e., when multiple designs share similar or identical ideas, they face competition and knock-out between themselves. Therefore, although some award-winning entries may not be better than the eliminated entries in terms of the depth of the proposals, they have won the awards by virtue of their creativity.

Since the entries of Award Winners will be invited to participate in the succeeding bidding phase with practical engineering drawings, the relevant works do not only need to demonstrate unique and novel concepts but also need to be superior in terms of feasibility.

**Ho Pui Kei,**  
Vice President of the Board of Directors,  
Architects Association of Macau

## Entries of Award Winners



### Entry no. AE

P.14-17

The participating team has conducted a detailed investigation of the Mong Há Hill Municipal Park to minimize the impact of the design on the natural landscape, and come up with a proposal of barrier-free walking system that combines lift, overhead pedestrian bridge and tunnel. The overall design displays simple, practical but elaborate features, in which the existing central fountain square in Zone B is altered to a sunken one, that is, it is transformed into a pool and artificial curtain waterfall at underground level, and the new buildings are designed based on more careful consideration to greening. Compared with other entries that also adopt bridge and tunnel in the design, the advantage of this proposal is that it has incorporated comprehensive concepts, raised and addressed many issues. In addition, the drawings are clear and easy to understand, highlighting the key points of the design. The circulation route connecting the four zones A, B, C, and D is clear, and even its connection with other existing trails on the hill and the Institute for Tourism Studies has been considered.



### Entry no. AQ

P.18-21

“High-profile” is the feature of this proposal, and the design goes beyond the lot to directly bring in the public. The proposal suggests widening the pedestrian bridge at the intersection of Avenida do Coronel Mesquita and Avenida do Almirante Lacerda or adding an overhead platform right next to it, through which the pedestrians can bypass the “cattle stable” and reach the square on the hilltop where the inclined lift takes them to the fountain square in Zone B. This strategy is also applied to the rooftop of the information center to be rebuilt in Zone C, connecting Zone B, Zone C and Zone D. Moreover, the lift in Zone D and the information center together fill up the tiny gap between the buildings in Travessa das Hortas, while their plain colours help to diminish the sense of oppressiveness caused by the volume of the buildings. However, the actual construction outcomes are yet to be determined.



### Entry no. AX

P.22-25

What has won the judges over is the lifelike renderings that realistically portray how the system would look like when it is built - naturally and harmoniously integrated with the environment. Around the periphery of the information center to be rebuilt in Zone C are two spiral slopes which lead to the central fountain square in Zone B along the shape of the hill. They are where the fun part comes in the play. In addition, an inclined viewing lift has been adopted in Zone A to reduce the obstruction of the view to the Mong Há Hill and the Mong Há Fort. The design of the entrance square factors in the renovation and restructuring of the existing “cattle stable”, involves the specially designed pool, oyster shell wall and Portuguese

pavements, and makes use of the collision of Chinese and Western cultures, the interweaving of the old and the new, and the coexistence of the natural and the man-made. All of these are clearly displayed in the renderings, adding to the winning features of the proposal.

### Entry no. AY

P.26-29

The proposal adopts lifts as the main means of vertical transportation, and the drawings depicts the ingenuity on the exterior of the lifts in an exaggerated manner to catch attention. The most appealing part of the proposal is the flowery garden on the hillside behind the “cattle stable” in Zone A complemented by a lift tower shaped like angel wings, creating a striking and fascinating effect. The two cylindrical lift towers in Zone C and Zone D, overtopping the roof of the information center to be rebuilt, make another attraction. They are surrounded by a spiral ramp that connects to the overhead trail at the central fountain square in Zone B. Zone D uses a glass viewing lift of which the height is only one floor below the information center. Examining the proposal in detail, we believe the three lifts will not be very tall in reality, and they will not be as prominent as shown in the renderings to conflict with the landscape of the hill.



### Entry no. BE

P.30-33

The proposal gives utmost consideration to the blending of the buildings and the hill. Green roofs are adopted for the new office building to be rebuilt in Zone A and the information center to be rebuilt in Zone C, harmoniously integrating the buildings into the hill. Lifts are also used as the main means of vertical transportation complemented by an overhead pedestrian bridge to connect the four points of A, B, C and D in a simple and direct way. This proposal takes a further step to consider making it a sheltered bridge and using rectangular frames gradually twisted at different angles to enrich the shape of the bridge. In addition, the proposal suggests renovating the garden in front of the “cattle stable”, removing the fences close to Avenida do Almirante Lacerda and widening the sidewalks to bypass the blockage caused by the escalators of the existing overhead pedestrian bridge.



## Entries of Honorable Mentions

### Entry no. AG

P.36-39

Based on the concept of “cattle”, the design further extends the concept of “cattle stable” into the style of the entrance building of Zone D and offers the latter a distinctive look. In addition, passing through the tunnel at the foot of the hill before reaching the lift and placing the overhead trail on the hill above the existing central fountain square in Zone B are all unique ideas.

### Entry no. AP

P.40-43

The proposal adopts cable cars as a means of transportation for climbing up the hill from Zone A, which arouses public discussion on this method and thus ignites their interest in the proposal. The shape of “V” is repeatedly adopted in the schematic design, including the plan of the new office building to be built in Zone A, the plan of the overhead polygonal spiral trail connecting Zone B and Zone C, and the section of the structure of the trail.

### Entry no. AU

P.44-47

Both Zone A and Zone D are designed with multi-section lifts to bring the public up the hill, and a viewing platform is also included along the route. Various components of the design are explained in the proposal in great detail, including optimizing the design of the existing central fountain square in Zone B, as well as the environmental aspects considered, suggesting an all-embracing design solution.

### Entry no. BH

P.48-51

A circle evolved from a lotus flower acts as the main element of the building form in the proposal, creating a lovely architectural style as well as simple, clear and fresh visualization effects. The entrance of Zone D is designed as a tunnel to reach the underground level of the information center to be rebuilt during the reconstruction of Zone C, with the relevant lifts connected to achieve simplicity and clarity.

### Entry no. BM

P.52-55

The proposal has not only considered the barrier-free walking system connecting the four points of A, B, C and D, but also conducted an in-depth analysis of the multiple locations of the entire Mong Há Hill Municipal Park. It recommends introducing new installations, play facilities and trail design which add to the functions of the Mong Há Hill. The hand-drawn renderings also attract the attention of the judges.



# 評審當天情況 / Situação do dia de avaliação / A Glimpse into the Judging Day





## 2020 澳門建築設計比賽作品集 – 望廈山市政公園無障礙步行系統

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