



Soul of Nature

Abd Aziz Othman

Ecological restoration are focus for mainly large natural areas and reserves. Large reserves are generally better for biodiversity conservation and sustainability which can support more species than smaller ones. However, in recent decades, the practice of restoration has been expanded to smaller green reserves of urban ecosystem which present different challenges and opportunities. Due to their proximity to urban areas and the city dwellers, their recreational and environmental burdens are continuously increasing. An understanding of human and urbanization impact on these diminishing urban forests and contemplating practical design approaches call for urgent solutions.

Hence, the sensitive area landscape studio's project for the year 2011 addressed urban green forest reserves in Klang Valley where the most intensive development in Malaysia is taking place. The original landscape of Klang Valley had been altered through time by human interventions for mining and intensive agricultural production and recently for residential, commercial, educational and industrial purposes. Depending on their intensity of development, these human activities have gradually encroached the remaining green lungs. They resulted in a scattered green reserves where secondary forest of different stages of succession are becoming small green remnants embedded in an urban matrix area.

Three significant Klang Valley's green forest reserves were selected for the exercise. They are the Bukit Nenas Forest Reserve (BNFR), the Ayer Hitam Forest Reserve (AHFR) and the Kota Damansara Forest Reserve (KDFR). Since they serve as the remaining tropical rainforests that still stand tall in the

region, they have been gazetted as the Permanent Reserved Forest in Klang Valley. The BNFR is one of the oldest remnant tropical forest ecosystem located right in the middle of the city centre of Kuala Lumpur with an area of approximately 9.5 hectares. It is classified as a managed lowland dipterocarp forest consisting of various species of dipterocarps and non dipterocarps. It is unique in being the smallest existing tropical rainforest in the country, serving as a biodiversity reserve and a vital green lung for Kuala Lumpur metropolis.

The AHFR is strategically located in the southern part of Klang Valley. Surrounded by residential, industrial and commercial area, it comprises 1248 hectares of hilly and low land ranging from 15.2 to 152.5 meter above sea level. It contains lowland dipterocarp forest, categorized as 'Kedondong Kempas Forest' and become a secondary forest because of previous logging and cultivation activities. Today, the AHFR is managed by Universiti Putra Malaysia (UPM), with limited carrying capacity – for education, research and extension as well as for recreation.

The KDFR, also known as the Sungai Buloh Forest Reserve, is another green reserve located in the western outskirts of Kuala Lumpur, surrounded by highways, residential and industrial areas. This 600-hectare forest reserve is classified as a secondary forest and a Sensitive Area Class II because of logging activities in the past. Despite being classified as secondary forests, a number of primary forest species are still observable at all sites. Both AHFR and KDFR act as the prominent green lungs





for Klang Valley as well as an important source of recreation and education for urban communities.

For the studio exercise, investigation began by approaching the stakeholders, in particular, the forestry department and the communities in order to gain in-depth understanding of the sites and the issues. The process for sensitive landscape planning and design covers site analysis, site assessment and case studies. The basic understanding had led students to innovatively and creatively formulate the best method for the sites' rehabilitation, restoration and revitalization of the landscape characters and functions. The following works show some constructive solutions which relied on the ability to solve those sensitive sites' issue/s.

'Root of Symbiosis' addresses the function of the BNFR as a hub of the city's ecosystem by linking and integrating the main hub with adjacent green spaces through river corridors and parkways. The core of BNFR are expressed by 'Echo Tropicarainforest', designed by Mustafa Ali Gunawan, which signifies the biological interaction between urban and natural environments in order to rejuvenate symbiosis. The 'Therapeutic Forest' is designed by Muhamad Afiq Muhamad Anuar which embraces nature for stimulating the human five senses as well as to revitalize the city's environment.

The idea to revive the AHFR is expressed by 'The Relic Rhapsody', via sustaining the integrity and credibility of the educational forest. As the forest planned to be a centre of forest education and research in the region, the Faculty of Forestry UPM was thus established at the site. To create a strong image for the faculty, designers

Alia Hanie Roslan and Lim Hong Ann, in their works 'Capturing Nature' and 'Nature Unfolding' respectively forward the ideas of integrating the built and natural environments by highlighting and blending their relationships harmoniously through nature, art, space and architecture.

Finally 'The Return for Return' focuses on the conservation of the KDFR to enhance the natural character of lowland dipterocarp forest which is rich in biodiversity. To balance the forest's need for environmental conservation and community's needs of recreation and education, designers, Yong Jia Yu and Ng Ooi Tee, forward the projects titled 'Feel the Layers, Feel the Forest' and 'River Adytum' to highlight the significant features and quality of tropical rainforest in bringing the inspiration and appreciation of nature.

As a conclusion, these exercises have brought some innovative and creative ideas in protecting the natural resources of urban ecosystem for future sustainability. It is important now to move beyond simply protecting these green reserves, but to reverse the pattern of diminishing forest areas, by replicating and expanding urban forest establishments in new development areas. The landscape architecture profession has also moved to a different level in maximizing the utilization of these highly modified landscapes. Its role will now include highlighting the significant role of urban forests in maintaining biodiversity, improving the ecosystem function, enhancing environmental aesthetics, and creating educational opportunities and human relationship with nature.





Roots of Symbiosis

-Kashino Naohiro

The existing forest and its possible expansion are displayed in conceptual diagram. Nevertheless, the practical application of the thinking to the exact site for materialization is not identified. Sustainability should also be mentioned. An observer wonders what the designer wants to do and where. The project should make the spine of the proposal clear. Overall, this project is very well presented with professional graphics.

-Marek Kozlowski

The description, site context and background are too vague. The analytical diagrams should have more description especially regarding the visual attributes, climate and pollution. There should also be more information on historical background justifying the motivations behind this project. Goals and objectives are clearly delivered. However, the Master Plan should be more informative for example, in explaining the terms of a green district or P. Ramlee Forestscape. In its essence, there is no doubt that the project reflects innovation and forward design thinking. It shows good creative thinking about increasing biodiversity and greening the city centre. However, there should be more coverage on the relationship of the site with the city and its current problems. Good presentation, but the use of black lettering on dark green background is not recommended as it would jeopardize the presentation.

Tropicarainforest

-Kashino Naohiro

There is conflicting idea about the issue and the propose development. Although the project says "issue of the site is that the size of the forest is lessen day by day caused by the development", it seems that the project is to replace another development. Thus, contributing to the lessening

of the forest size. Design should lead to solving the actual issue/ problems, unless the issue is that "there is no urban attraction in the existing Bukit Nanas forest". Sustainability is not addressed in the proposal. Urban structures in the forest might match today's Kuala Lumpur context, but the large plaza might not be of one on them. Facilities in a forest that is intended to be conserved should be small and localized. Good presentation with attractive sketches.

-Marek Kozlowski

The whole section dedicated to issues and existing problems is missed out. There is no analytical work behind the project. With no goals and objectives, therefore, the intentions behind this particular design are not clear. It seems that the design concept is to develop a landmark and viewing platform in Bukit Nenas. However, the physical links with other parts of the city have not been sufficiently explored. The idea to develop a viewing platform and cafeteria in Bukit Nenas are definitely worthwhile exploring but there need to be a justification behind each need for the creation of such facility. The presentation is would be better to include more attention to details.

Therapeutic Forest

-Kashino Naohiro

The destination of the project seems in such a way; to turn the only remaining forest in the city into an amusement nature park. This should be justified with convincing reasons. There are a lot of patches of ideas, but not integrated for a good flow with practical experiences expected by the park users. Proper planning and activity/ facility distribution may help creativity. The work produces reasonable presentation with attractive sketches and section.





Jury Review

-Marek Kozlowski

There is no reference to issues, problems and justification. The reader may have this question, "What is the site context and background? What are the motivations behind proposing a therapeutic forest in Bulit Nenas?" The project needs clear and in depth analytical work, articulated goals and objectives, and statements about the site relation to the city. Creating a therapeutic park in the middle of KL may constitute innovative, creative planning and design thinking. As mentioned earlier, the project requires much more in-depth analysis and justification. The presentation is rather average and does not fully reflect the intent of the project.

The Relic Rhapsody

-Kashino Naohiro

Analysis through physical, biological and cultural attribute is thoroughly conducted. From the analysis, it is natural that a way of conservation should be learnt from Orang Asli who has been managing the forest sustainably for centuries. However, this important information is not being carried and translated in the design sheet. The work displays moderate creativity of landscape facility without practicality. It shows a very good presentation with flowing layout and green-eco-oriented visual materials.

-Marek Kozlowski

This work furnishes sufficient information regarding the site both in terms of background and context. Good in depth analysis covering visual, biological and cultural aspects concluded by a comprehensive synthesis. The goals and objectives are clear and the design strategy aimed at recreating the past is a reflection of innovative thinking aimed at reintroducing natural ecosystems within existing urban areas. The design strategy is further reinforced by proposing project phasing for its implementation. The issue of

accessibility has been addressed. The in-depth analysis followed by a well structured design/planning strategy reflects creativity and authenticity. Good presentation quality clearly communicates the analytical and design components of the project.

Capturing Nature

-Kashino Naohiro

An observer does not feel the goal achieved and problem solved by the project. The actual reason why the problem occurs should be precisely analyzed. The benefit of the stilt structure should be made known. It is costly and only worth when sustainability can be described. "Mori hako" should be read as "Mori no hako", and if it is Japanese, it needs explanation. Good presentation with horizontal and vertical display layers.

-Marek Kozlowski

There are no statements about issues, problems and justification for the project. The site introduction and context are all too vague. The analytical component is also missing, and it seems that the project jumps straight to the formulation of goals and objectives. The goals and objectives are too general and straightforward, aimed at creating a forest information centre. The idea of creating a knowledge and information centre in the middle of a tropical forest is an innovative and cutting edge proposal. However, the physical links and accessibility to the surrounding areas have not been fully considered. The design proposal provides integration between the outdoor and the indoor spaces allowing the forest to meander inside the building. The feature contributes to creative and innovative design thinking. Good and informative presentation, easy to read and navigate.



Nature Unfolding

-Kashino Naohiro

"The whole conduct environment failed to merge with its nature setting", based on the description on the work panel. On contrary, an observer may have another view in which the function of the existing facility and its relation with the surrounding forest is the key issue of the project. The goal "to provide a landscape which filter nature and architecture" might be achieved in the physical design sense but the function and activity of the landscape and building should be determined in the study. Sustainability is not mentioned in the work. More information with case study or comparison with similar facility may strengthen the proposal. This work provides reasonable presentation with sketches and sections.

-Marek Kozlowski

There is no information about the site, therefore it is not clear where the site is and what are the surrounding areas. There is no section addressing issues and problem and lack of in-depth analytical work. In addition, the goals and objectives are not really clear to give explanation on the intent behind the project. The idea of landscaping an area between existing buildings does not constitute any form of innovative thinking. In fact, improving spaces between buildings by the way of landscaping is not new and a very common practice. The reader cannot identify much creativity behind this project apart from an idea to improve an existing area located between buildings. The presentation is rather good and informative, however, lacks the necessary details.

The Return for Return

-Kashino Naohiro

Good sequence of project development is displayed and issues are clearly stated. The concept of "the return for return" makes an observer feel distant from physical practicality of the development, but zoning, rehabilitation tactics, stage development are well described. Canopy observation point of ring path matches with the natural surrounding and this is innovative. The work is very well presented with flowing sequence. Transition among 2020, 2040, and 2060 can be clearer.

-Marek Kozlowski

There is not much in depth analysis and insufficient information regarding the background and the site context. The work lacks details regarding the justification and motivations behind the design. However, the objectives are clear with the design strategy aimed at conservation, rehabilitation and enhancement. The project should also focus on physical links and accessibility, for example, how does the proposal relate to the surrounding areas of Kota Damansara. The Master Plan should indicate the boundaries of the proposed zones. The idea of returning a natural forest with rich biodiversity reflects creative and innovative design/planning thinking. However, accessibility and relation to surrounding areas should be fully addressed. The presentation is good, depicts the real intents of the project.



Feel the Layers, Feel the Forest

-Kashino Naohiro

The practice of reducing nature resources should be addressed as the global sustainability issue. In the project titled "Feel the Layers, Feel the Forest", the typical four layers of a tropical rainforest are well described with each attraction and character. But a loop of attraction/ facility should be planned and integrated with a centre, an F&B outlet, a typical path, a hut, a resting space, an information booth, etc. Instead of spot attractions, towers could be horizontally linked so that one does not need to come down to climb another tower. The entire circuit could be organically integrated. Good presentation with smooth flow and attractive pictures.

-Marek Kozlowski

The project refers to the Kota Damansara Forest Reserve. The section addressing issues and current problems and justification for the proposed project is too vague. There should be more information about the existing state and the reasons for undertaking this topic. The section dealing with analysis of the existing situation seems to be missing as the project jumps straight to the formulation of goals and objectives. The goals and objectives refer to the provision of different forest layers for research and education purposes. However, it is not clear what user group is this project addressing. Clarification is also needed on the relationship of the Forest Reserve to surrounding urban areas and accessibility, as aspects of physical connectivity and accessibility are important for this site. The idea of creating a Forest Reserve with different forest layers is innovative and contributes to the field of landscape planning. The design strategy aimed at experiencing and exploring different layers is no doubt an authentic solution that constitutes an innovative and creative approach to landscape planning

and design. The overall presentation is good however there is no clear reference to the proposed layers on the Master Plan.

Rivers Adytum

-Kashino Naohiro

The site selection must be of the designer's admiration of the site which is very much of the reason and should not be hesitated to be mentioned. Reincarnation of water's fate is interesting but practical materialization of the concept is expected in the study. Literature in landscape conceptualization is creatively conducted. Reference of actual literature might add a convincing effect. Sustainability of water can be emphasized by the said reference such as poetry. Good presentation with repeated circular visual display.

-Marek Kozlowski

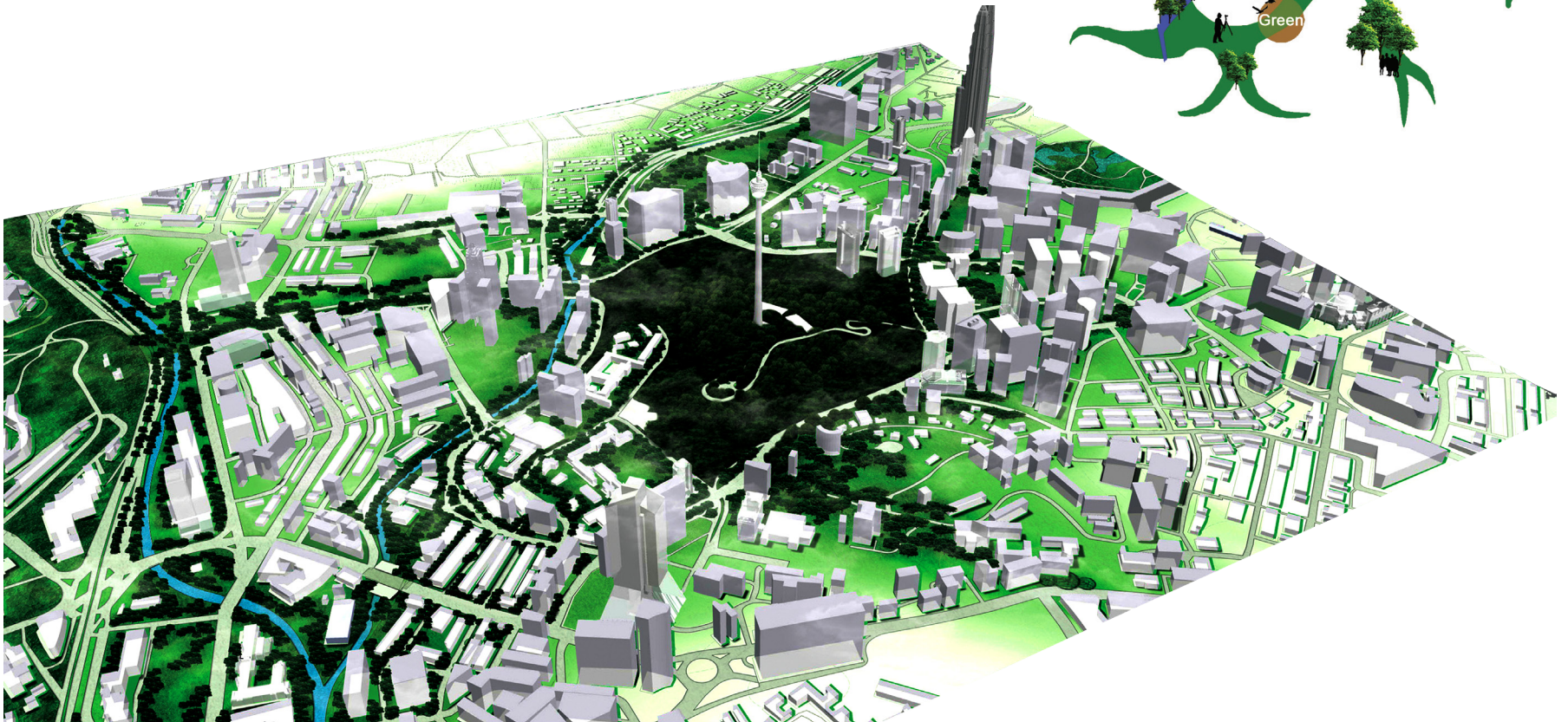
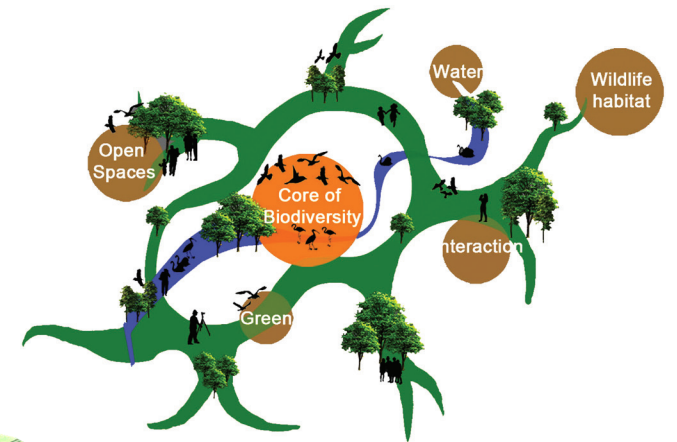
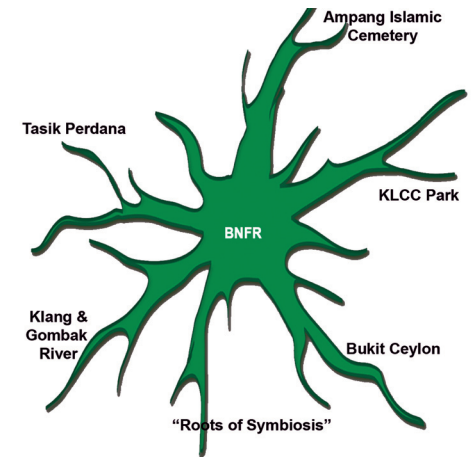
The statement of issues is rather too vague, there should be more clarification on the justifications and motivation for selecting such a topic. The goals and objectives are clear, aimed at protecting an existing riverbed from erosion. The design/planning of the proposal is centered on five layers (space, movement, construction, planting and materials). The idea is no doubt interesting and should require further detailed exploration. The design strategy of introducing five different layers reflects creative and innovative ideas, however, it is not well portrayed in the overall presentation. The overall presentation is rather average, due to the fact that the main issues are not highlighted and the lettering is too small, making it is sometimes difficult to read. The presentation does not clearly communicate the real intentions and motivations of the project.



Roots of Symbiosis

Abd Aziz Othman, Noorizan Mohamed, Norsidah Ujang, Mohd. Fabian Hasna & Murad Abd Ghani

The design looks at the role of the forest as a main ecological hub for the city core. It attempts to highlight the symbiotic relationship of nature and man. This relationship is depicted using interconnected hubs via ecological corridors such as riversides and green parkways to maximize movement of wildlife as well as to unify the city's green fragments. As a main hub, the city's forest is distinguished in the ways in which it combines a concern for the wise interaction of the city's natural and man-made environments, together with a strategic approach to return the forest community to its primeval state and sustainable – 'Roots of Symbiosis'. This concept therefore expresses the values of the new communities by referring to the interdependency of ecological and urbane elements – enhancing the understanding and relationship between the city, its inhabitants and the nature.



Liew Cai Hong, Lim Sheang Leng, Mustapha Ali Gonawan,
Muhammad Afiq Muhamed Anuar





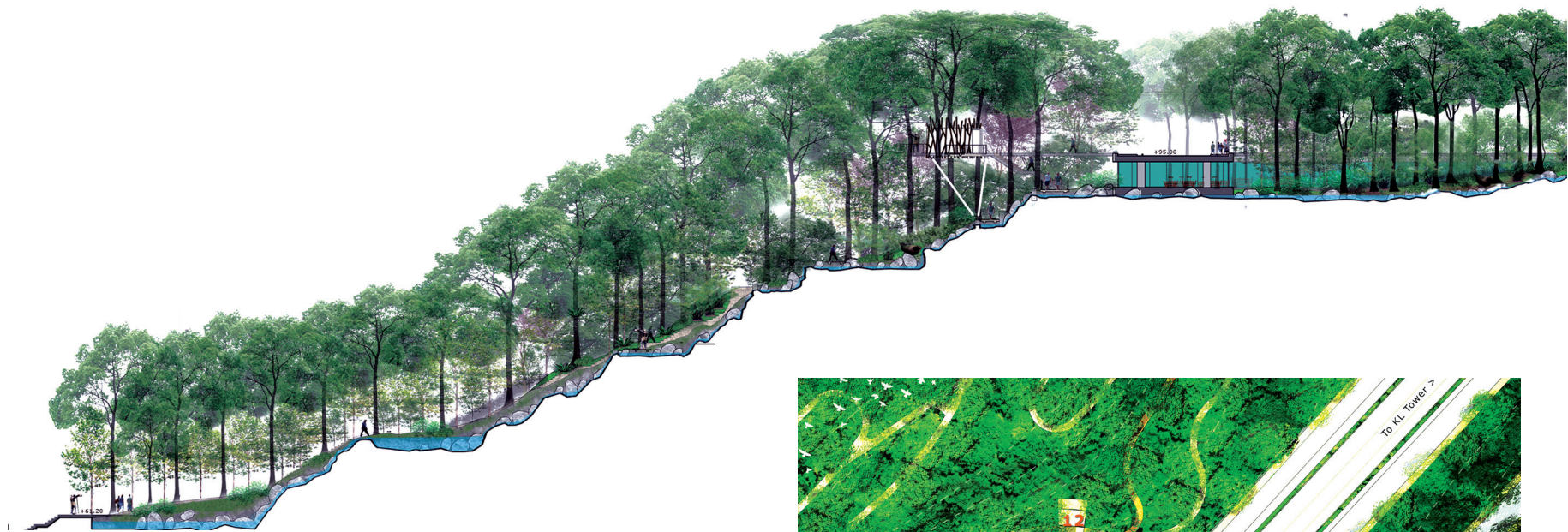


Tropicarainforest

Noorizan Mohamed, Norsidah Ujang, Abd. Aziz Othman & Mohd Fabian Hasna

The main aim of the proposal is to contribute towards conservation of biodiversity in the heart of Kuala Lumpur city centre. By connecting fragments of greeneries for a viable habitat, Bukit Nenas Forest Reserve signifies the core of biological interaction between urban and natural environment to rejuvenate an intimate symbiosis. As a central connector, the Forest Reserve will link the surrounding areas visually and physically by means of variety of elements such as water, trails, plazas, platforms and the forest itself. The water cascades help to create natural linkages that bind the upper elevation with the lower elevation. All these will ensure greater experience to users and give impact to the city's environment.





Mustapha Ali Gonawan



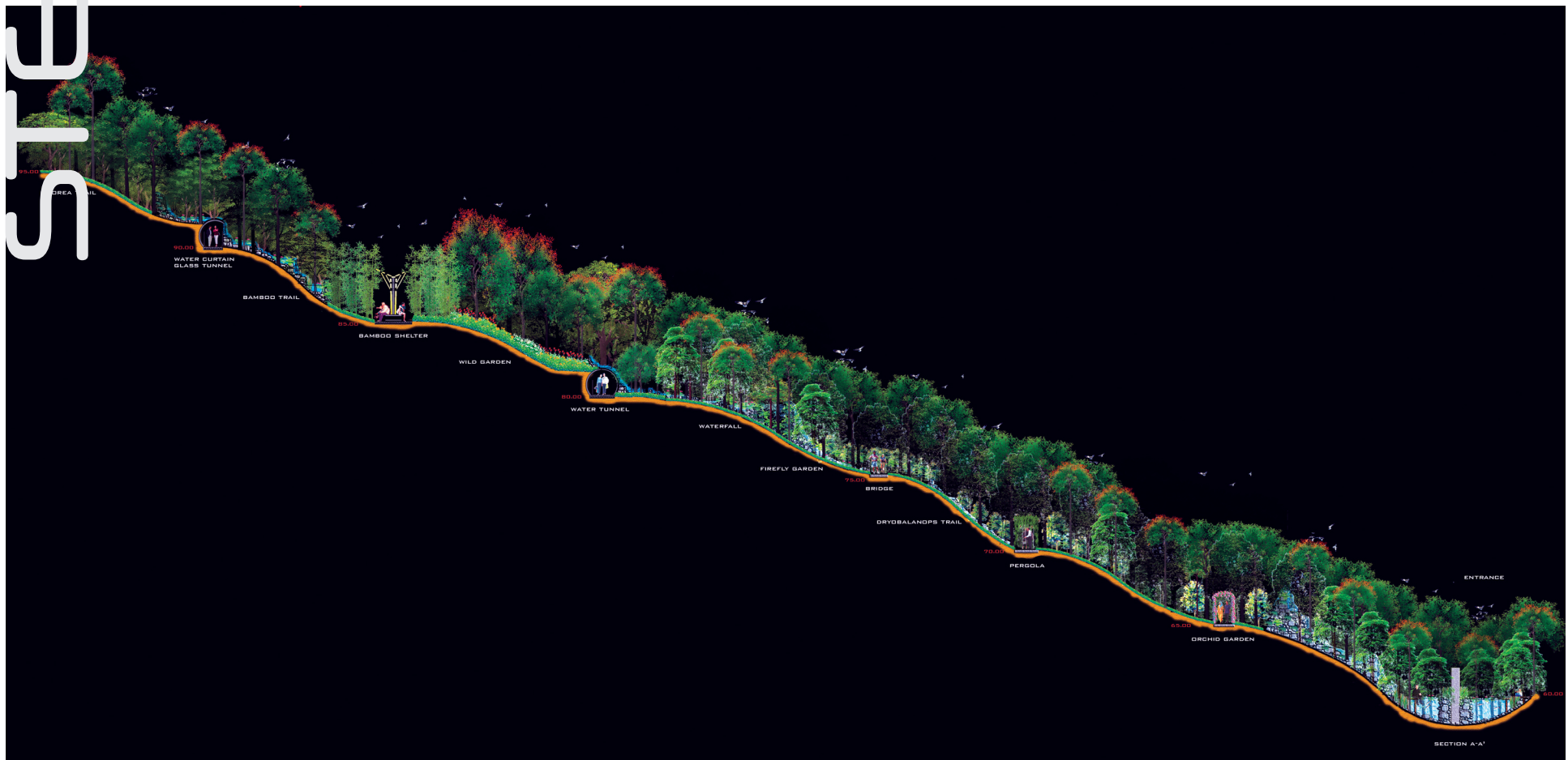


Therapeutic Forest

Mohd Fabian Hasna, Abd Aziz Othman, Noorizan Mohamed & Norsidah Ujang

The title of “Therapeutic Forest” indicates the idea of embracing the nature for therapy as nature contains magical power in healing. The work includes the need to serve the purpose of education, exploiting the natural system such as rain water harvesting and creating a rendezvous point for healing. It attempts to create a place for people to experience and explore the variety of activities in the forest setting. As this site is located at the heart of Kuala Lumpur and eventually as the only tropical rainforest in this city; it also plays the role as asylum for the insect and other animals’ habitat. The characteristics and different ambience of the

site can be really felt at its best during the night as all the living things actively come alive especially fireflies at the Kunang-Kunang Park. Furthermore, the site is designed to stimulate the human’s five senses through color, sound, smell, taste and touch; which are incorporated in its activities, elements and spaces. All the components of “Therapeutic Forest” are well interpreted on the terrace’s terrain which would enable the rejuvenation and healing of the environment and generate the sustainability pulse in the heart of city centre.





SHOREA TRAIL

BAMBOO TRAIL

WATER CURTAIN
GLASS TUNNEL

BAMBOO SHELTER

WILD GARDEN

WATERFALL TUNNEL
WATERFALL

FIREFLY GARDEN

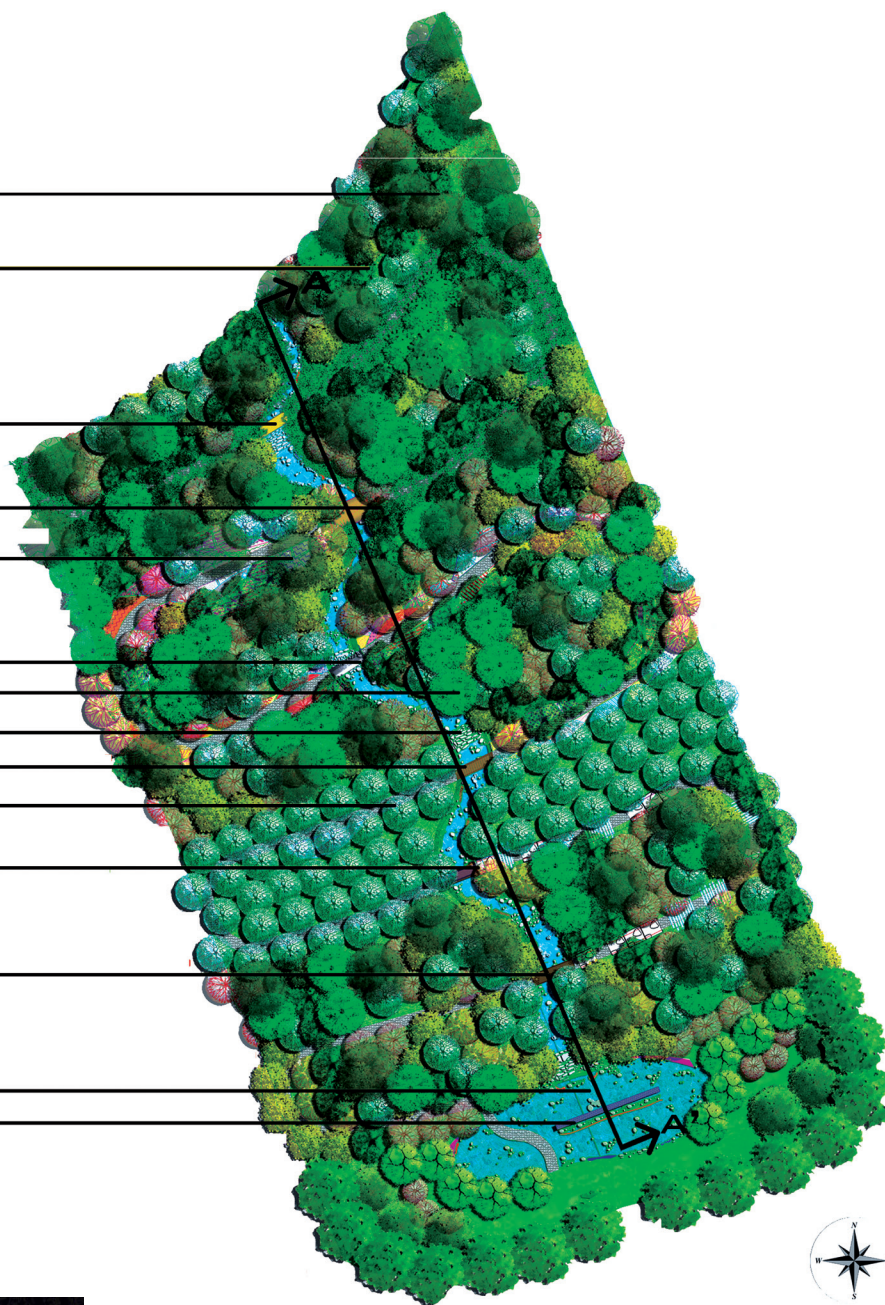
BRIDGE

DRYOBALANOPS TRAIL

PERGOLA

ORCHID GARDEN

ORNAMENTAL POND
ENTRANCE



SCALE 1:2 ■■



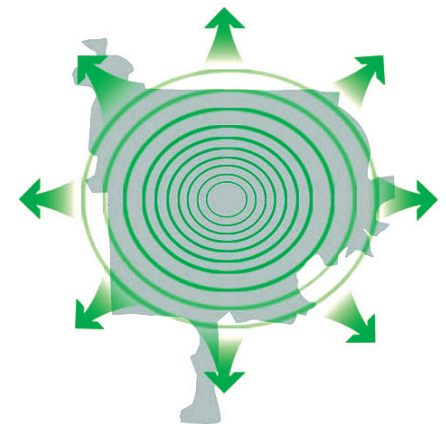
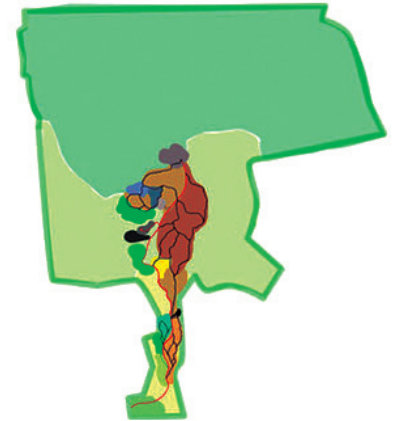
Muhamad Afiq Mohamed Anuar





The Relic Rhapsody

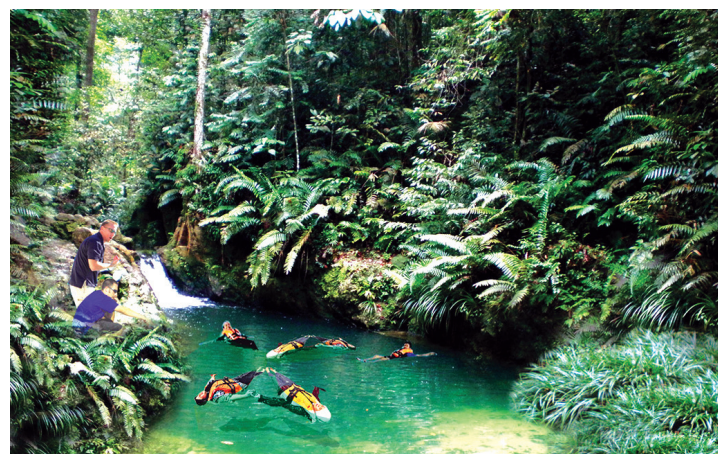
Abd Aziz Othman, Norsidah Ujang, Noorizan Mohamed, Mohd. Fabian Hasna & Murad Abd Ghani





The Ayer Hitam Forest Reserve is managed by Universiti Putra Malaysia. The master plan aims to keep the integrity and credibility of the educational forest - its naturalness and biodiversity. Great emphasis is therefore placed on conserving and improving existing habitats and natural landscape features of tropical rainforest while introducing the recreational and educational needs. These qualities are conceptualized by adopting a beautiful composition of music – The Relic Rhapsody. It defines three significant zones using vocabularies of music. The north is a metaphor of *sostenuto* (performed in a smooth sustained manner) to represent the passive zone with a sensitive preservation approach. The south applies a metaphor of *animato* (performed in a lively manner) for an active zone with major activities and physical development. The central middle zone is a semi-active zone designed to be a buffer for both northern and southern zones. The fine composition of these zones in Relic Rhapsody creates harmonious design for the forest.

■ Nabilah Abdul Karim, Tan Wei Wei, Chen Fei Wen,
Nur Athirah Khalid

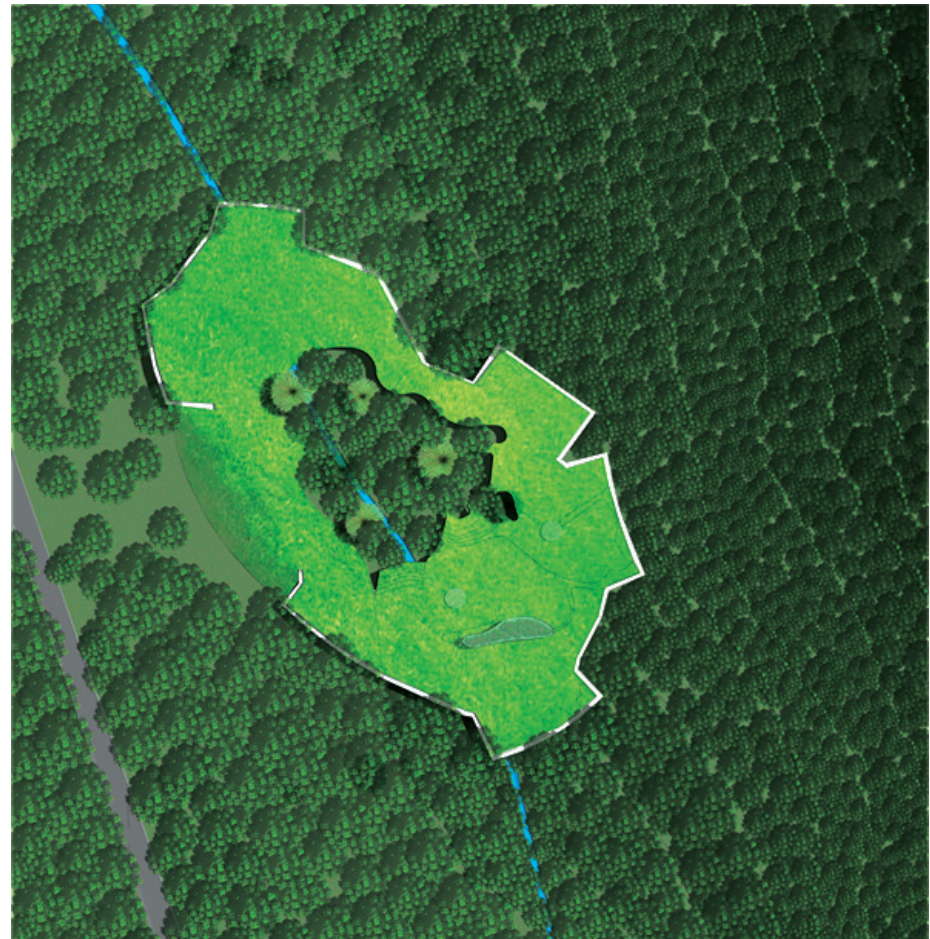
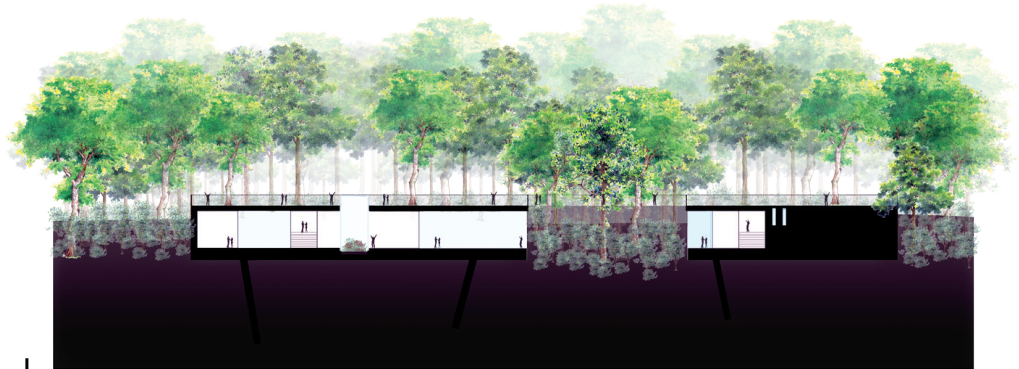


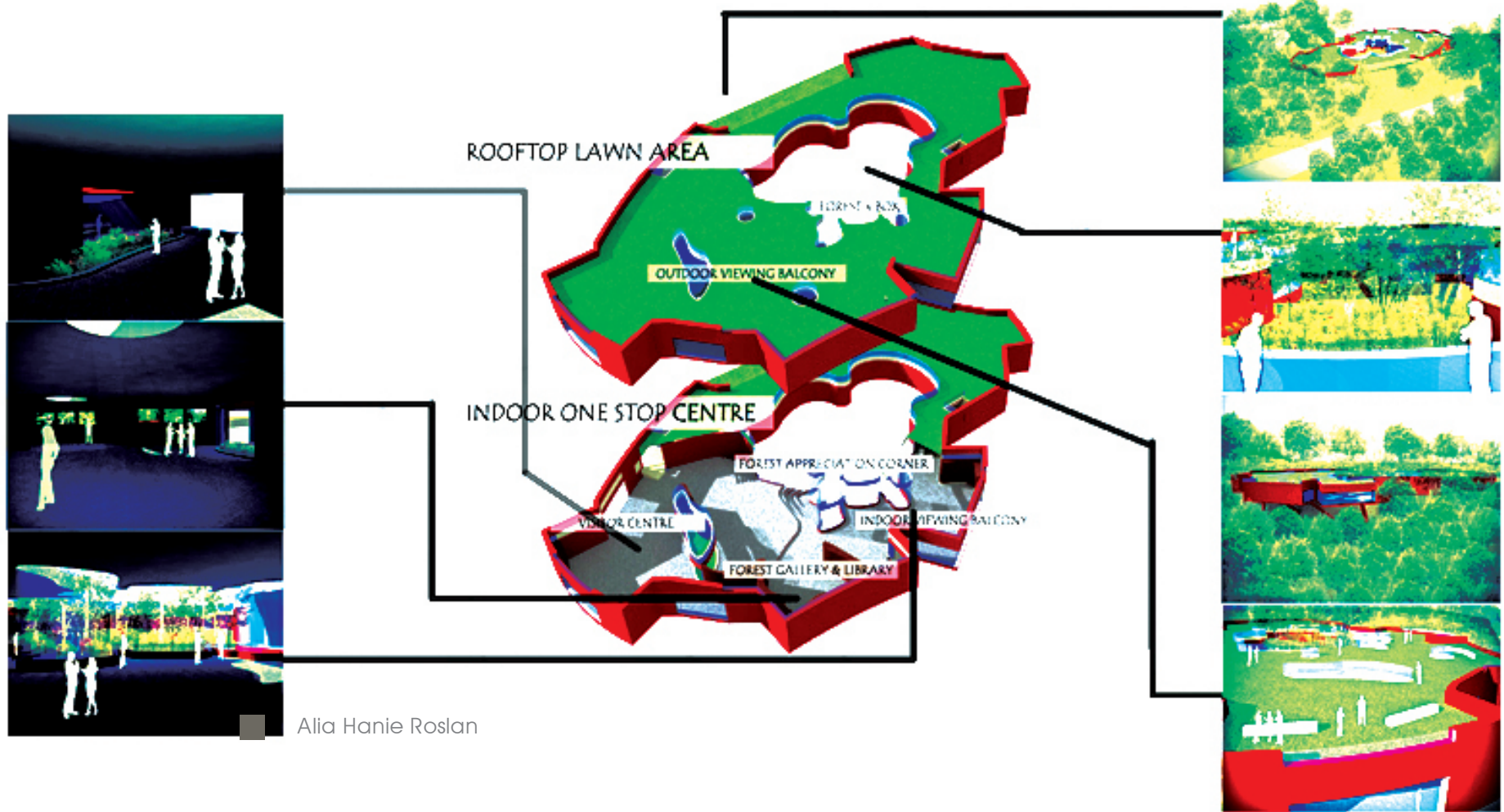


Capturing Nature

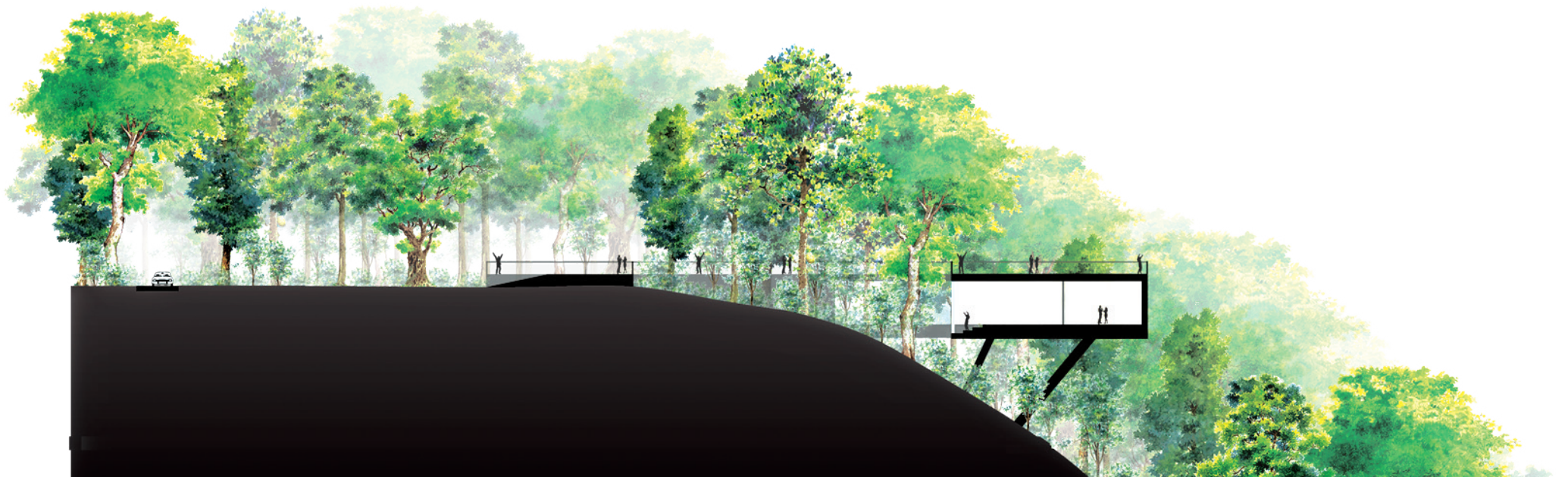
Norsidah Ujang, Abdul Aziz Othman, Noorizan Mohamed & Mohd Fabian Hasna

The infinite experience of nature is captured in a one-stop centre for appreciation of forest in Ayer Hiram Forest Reserve in Puchong, Selangor. The form of the structure symbolises the organic nature of a tree trunk circulating a group of existing trees which can permeate the sense of familiarity to the observers. Layering of spaces hanging at the edge of a hillside creates the feeling of closeness to nature. Due to restriction for visitors to explore deep into the forest, the spaces is designed as an extension of the forest experience defined by closely integrated spaces that blends well with the forest environment. Outdoor spaces for viewing defined by low walls invite visitors to pause and contemplate on nature and living organism with maximum views outwards to the forest and inward to the central planting area. The visitor centre, gallery and library on the lower level offer knowledge enrichment and information via interactive communication about forest. Inspired by Mori no Hako's philosophy of design, the diversity of trees is showcased in series of boxes with glass walls in between interior spaces, creating an organic continuation of nature into the building. The simplicity of the design solution creates opportunity for an extensive spatial and visual experience inwards and outwards.





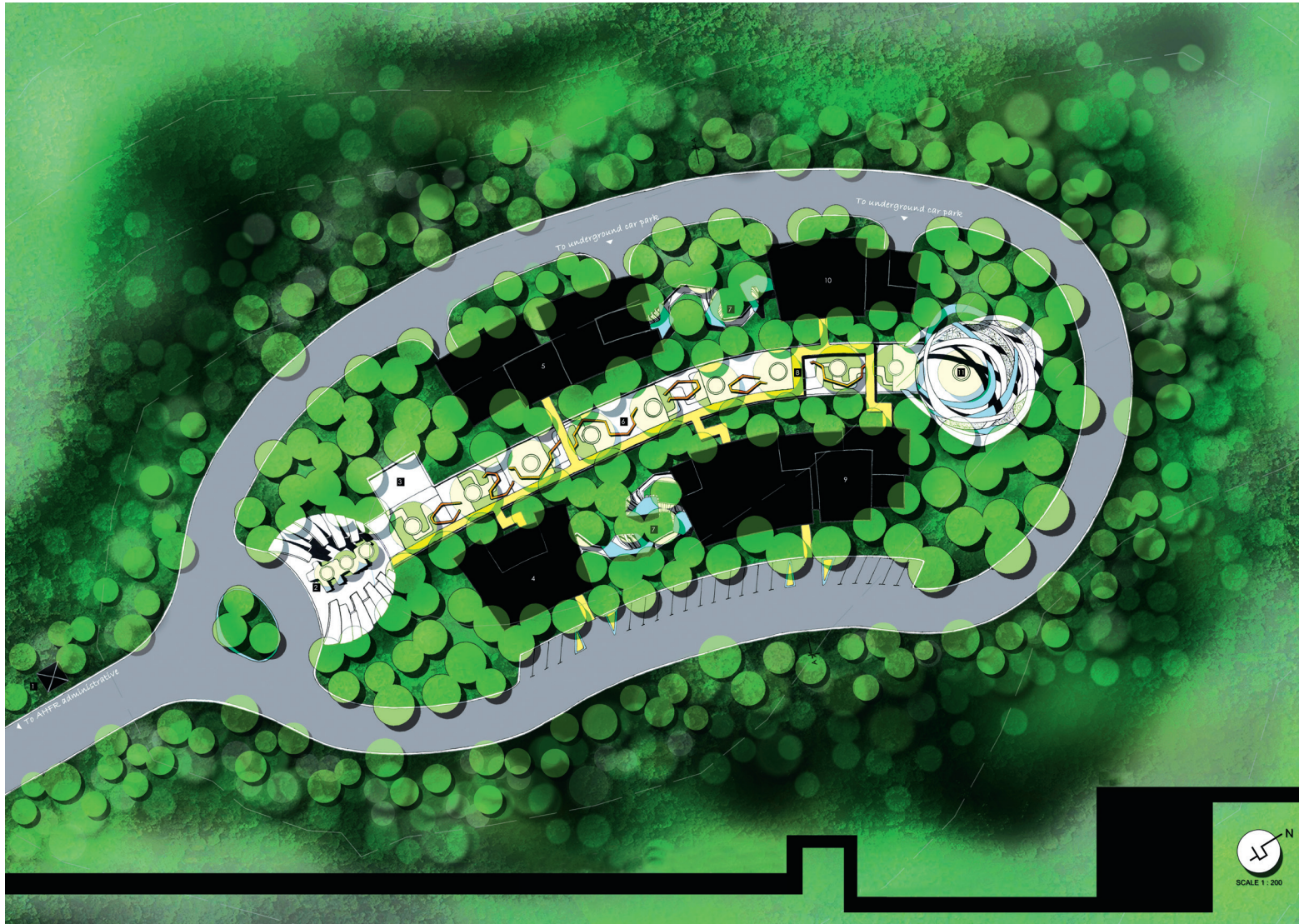
Alia Hanie Roslan





Nature Unfolding

Norsidah Ujang, Noorizan Mohamed, Abdul Aziz Othman & Mohd Fabian Hasna



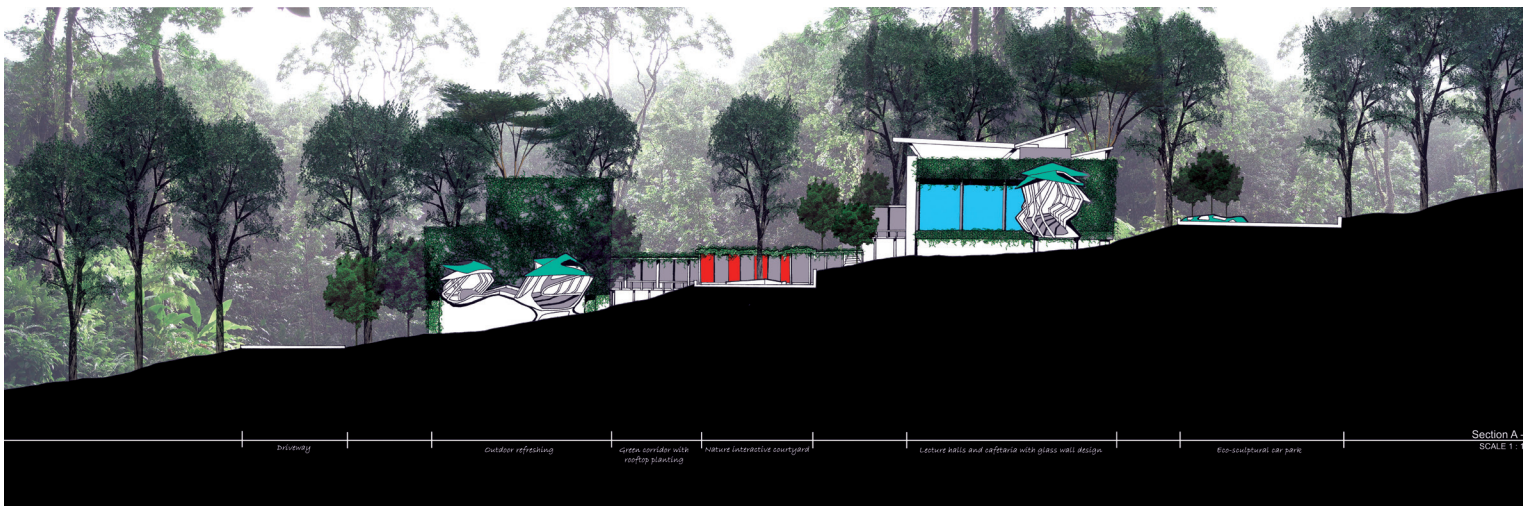
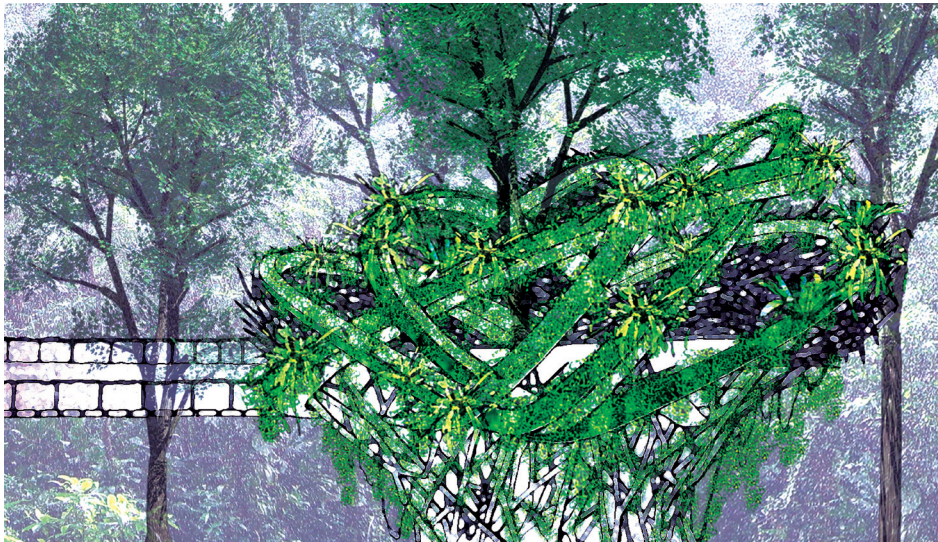
■ Lim Hong Ann





The essence of nature is interpreted to redefine the identity of Faculty of Forestry in Ayer Hiram Forest Reserve in Puchong, Selangor. Challenged by the need to preserve biological resource and diversity, the work displays a sensitive redesign of the spaces and elements within existing buildings. The central spine of the building complex is enhanced by the integration of interactive landscape spaces to stimulate the outdoor experience and educational activities. Inspired

by nature, the courtyard, green corridor, sculptural wall, seating design and paving pattern are designed to capture the visual, sensory and meaningful human interaction with nature. Harmonious blend between nature, art and architecture creates stronger sense of identity for the faculty as a significant centre for forest biodiversity research and innovation.



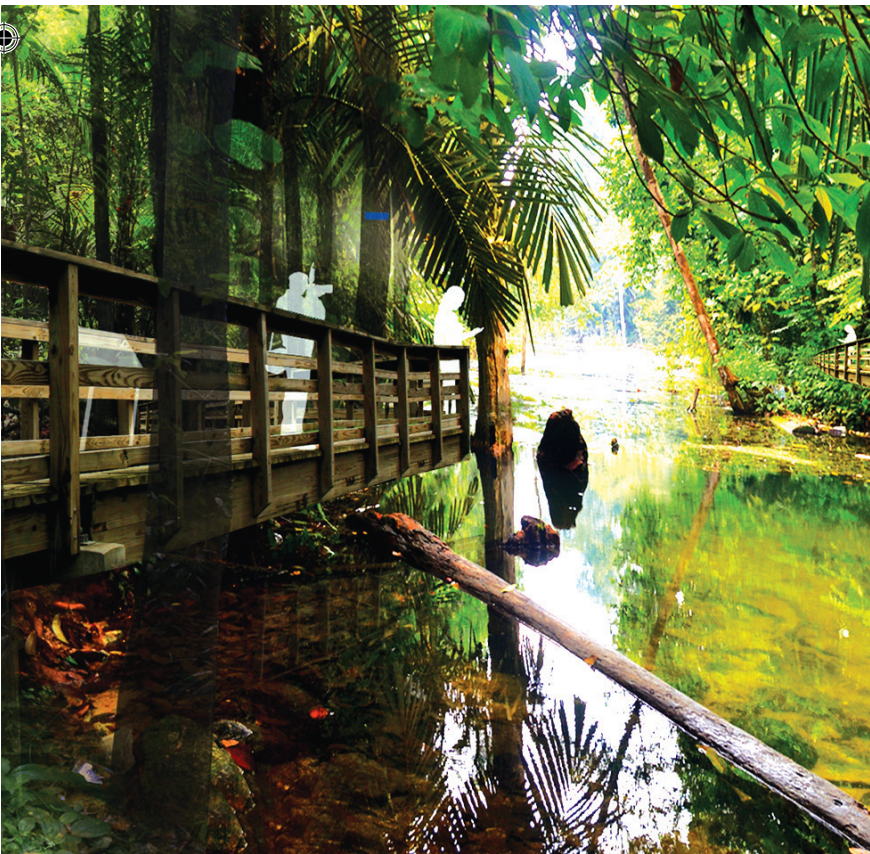
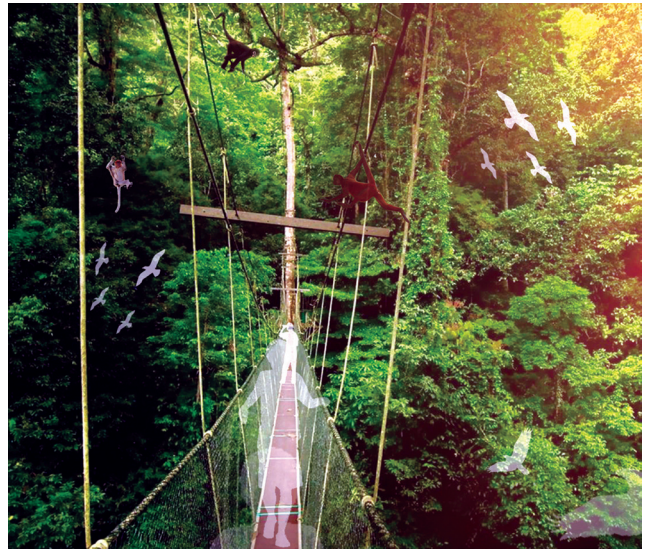


The Return for Return

Abd Aziz Othman, Noorizan Mohamed, Norsidah Ujang, Mohd. Fabian Hasna & Murad Abd Ghani

'The Return for Return' reflects the idea of bringing back the original communities of tropical rainforest that are rich in biodiversity which eventually will benefit our current and future generation. To achieve this, three comprehensive approaches are established to handle this complicated and sensitive site involving. First, the in-situ and ex-situ conservation – the most appropriate action to be executed towards the whole site as this is a gazetted forest reserve. Second, involves rehabilitation of disturbed areas in particular along the forest perimeter to encourage regeneration as well as being a buffer to protect the forest core. Third, calls for enhancement of forest profile by managing wilderness for luxuriant vegetation and wildlife habitation as well as scenic corridors. As the forest is one of the Klang Valley's green lungs bounded by residential and industrial areas, it is also designed and managed to serve the public as an integrated function of recreation, education and research. Among interesting activities proposed are nature experimental field and a trail system for jungle trekking designed using durable materials blending well with the natural context.





Chio Kang Er, Kong Kok How, Noor Syazwani Amrus, Yong Jia Yu



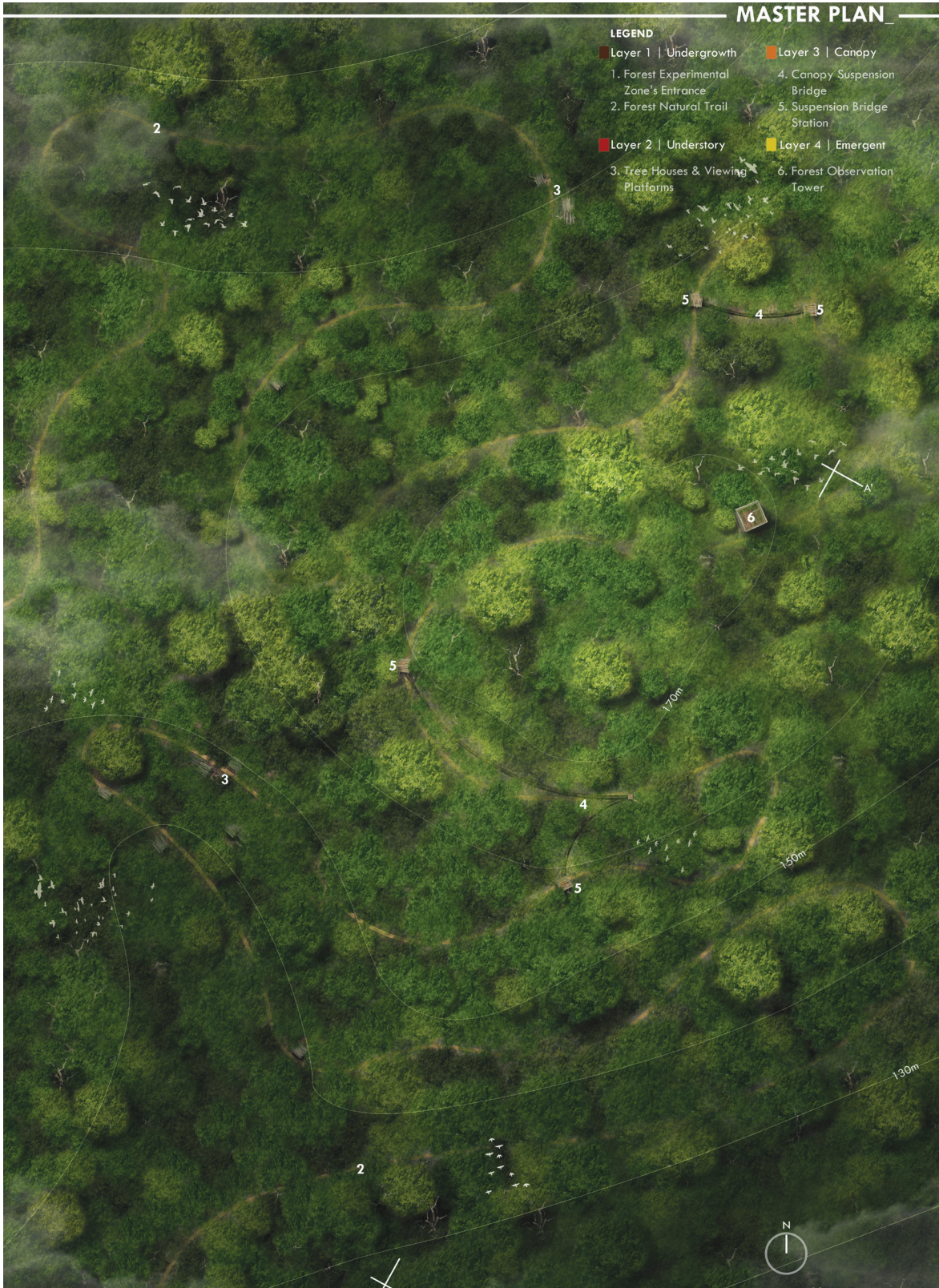


Feel the Layers, Feel the Forest

Mohd Fabian Hasna, Noorizan Mohamed, Norsidah Ujang & Abd Aziz Othman

The concept of "Feel the Layers, Feel the Forest" provides a complete series of vertical experience that users have ever had before. It consists of four forest layers of experience and exposures. The first layer is the undergrowth zone is designed to feel the surrounding of the forest floor. Here, the dim, moist and cold condition provokes a deeper feeling. The second layer encompasses of the understory zone where tree houses and viewing platforms are placed on the big branches of the forest trees. In this zone, users will be exposed to the authenticity of forest by viewing from the tree houses and viewing platforms tangled with





vines and lianas. The third layer, which is the canopy zone, includes the suspension bridge which intermittently covered with the lianas, tree branches and hanging roots, providing extraordinary dipterocarp forest walking experience. Finally, the last layer which is the emergent zone consists of an observation tower that shoots approximately 60 meters above the ground located at the highest elevation for the overall observation. By walking through these zones, users will truly experience and further understand the different layers of this lowland dipterocarp forest.

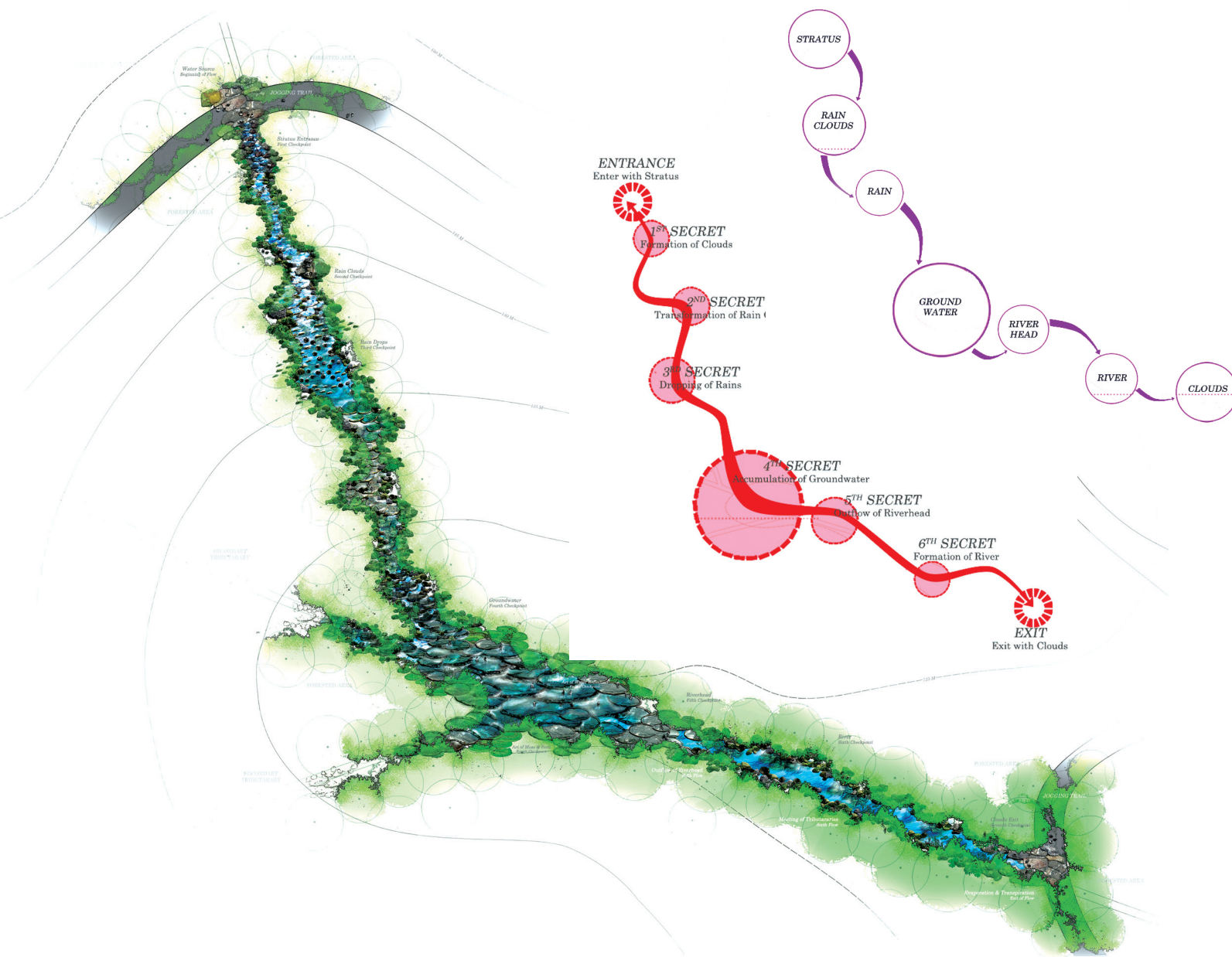
Yong Jia Yu

Rivers Adytum

Noorizan Mohamed, Norsidah Ujang, Abd. Aziz Othman & Mohd Fabian Hasna

"Rivers Adytum" is to reveal the secret of river by understanding the complex hydrological process of forest's riverhead transformation. Knowledge is gained through the exploration of forest ecosystem in which the designed spaces act as nature's classroom, intended to create community awareness on the needs to protect and conserve natural resources. The design strategy focuses on the layers of space,

movement, construction, planting and materials. The intricate relationship of all these elements is translated by using repeated circular visual display, representing droplets of water that serve as a filtration mechanism for the whole system. The application is to harmonize human and the environment within.





■ Ng Ooi Tee



