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PENCHALA ECOHILL, A GREEN AFFORDABLE MALAY ENCLAVE IN KUALA LUMPUR, MALAYSIA

*Noor Suzilawati Rabe, Mariana Mohamed Osman, Syafiee Shuid, Mansor Ibrahim, Ahmad Zharif Zulmajdi, Aini Najwa Nazri, Ameenrul Afeeq Roslee, Imran Syakir Norfizam, Mirza Sulwani, Mohamad Haziq Razin Mohd Faizal & Nur Aimmah Afni Azmi
*International Islamic University Malaysia

ABSTRACT

This project presents the preparation of a Development Proposal Report (DPR) for Kg. Sg. Penchala. Kg Sg. Penchala is an area within the Malay reserve land adjacent to the traditional Malay village with the potential to develop. The DPR contains a detailed proposal, layout plan and comprehensive report for development in Kampung Sungai Penchala, Mukim Batu, Kuala Lumpur. According to section 19(1) Act 172, every development shall obtain planning permission before its commencement. Section 21A (1) Act 172 explains that the Development Proposal Report (DPR) needs to be submitted to obtain permission for the planning process. Site visits, discussions with relevant authorities, interviews with the local community and on-site data collection were conducted. The data gathered were analysed. As an output, a complete proposal report consisting of the detailed development proposal, layout plan and comprehensive information, i.e. the Development Proposal Report (DPR), were produced.

Keywords: Act 172, Development, Planning Permission, Development Plan

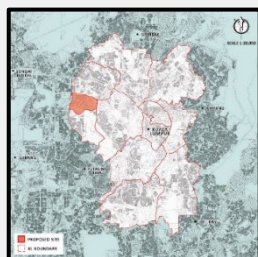
* Corresponding author : suzilawati@iium.edu.my

INTRODUCTION

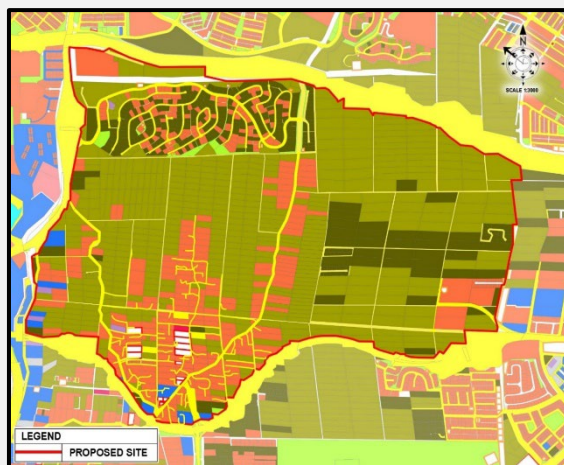
The study area is within the Federal Territory of Kuala Lumpur, specifically in Mukim Batu, i.e.. in the Strategic Zone of Damansara - Penchala. Kampung Sungai Penchala is one of the Malay Villages in Kuala Lumpur. The study area, which is also a Malay Reservation area, Traditional Village and New Village, covers about 1,357.9 acres. There are three (3) other villages located in Kampung Sungai Penchala which are Penchala Indah, Kampung Palimbayan and Kampung Palimbayan Indah. This area is situated next to Taman Tun Dr Ismail and Mont Kiara. It is also adjacent to Mutiara Damansara (IKEA, Tesco and Ikano) and Bandar Utama. Map 1 shows the Key Plan of the site, Map 2 shows the Location Plan, and Map 3 shows the Site Plan of the study area.



Map 1: Key Plan



Map 2: Location Plan



Map 3: Site Plan

METHOD / PROCEDURE

Figure 1 shows the process involved in the preparation of Development Proposal Report

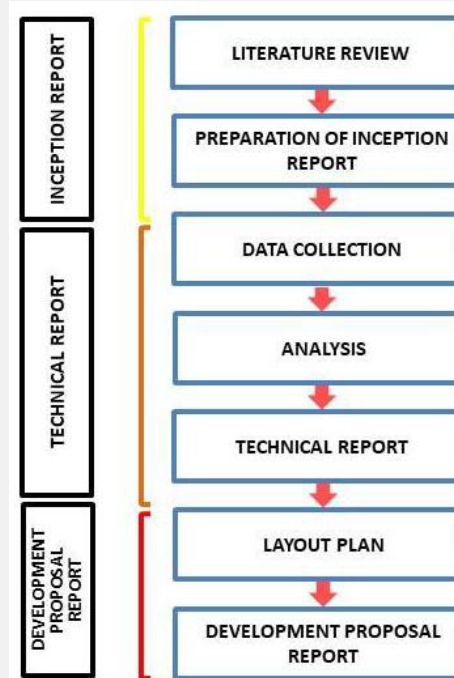


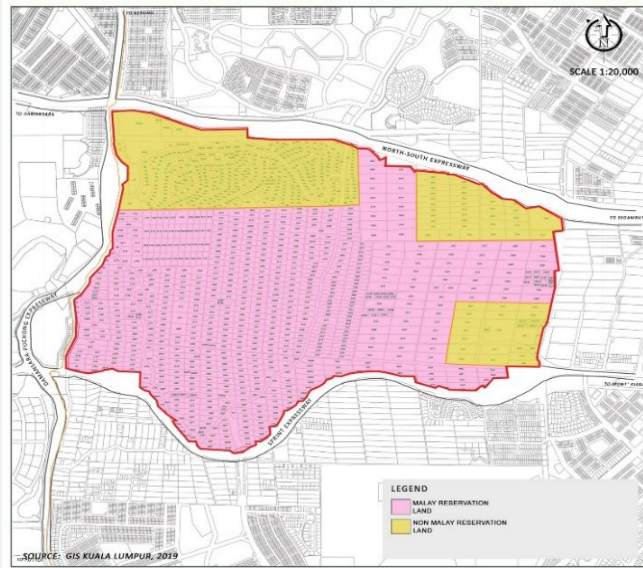
Figure 1 : process involved in the preparation of Development Proposal Report

- The development proposal report consists of 3 stages of the process that begins with preparing the inception report stage.
- The first stage is reviewing existing literature on information related to the background and issues in the study area and reviewing the relevant policy.
- The second stage is the technical report which consists of the data collection and analysis.
- Data collection involves collecting primary data on the site through observation, inventory, and interview surveys with local authorities and the population.
- From the data analysis, the findings will be used to produce a suitable proposal containing concepts, schematic design and a master plan.
- The final output is the DPR, which contains the detailed layout plan and report describing the proposed development for the site.

- The layout plan is based on the best concept befitting the development mission and vision criteria.
- The final process is preparing the development proposal with a detailed report with the master plan.

SITE ANALYSIS

Land Matter in Sungai Penchala



Map 4: Area of Malay Reservation Land

- The majority of the land lots on the site are Malay Reservation Land consisting of 896 out of 1,388 total lots.

Land Status	Total Lot number	Total Acreage (%)	
Malay Reserve Land Lot	776	1076.43	81.70
Non-Malay Reserve Land Lot	534	241.14	18.30
Total	1310	1317.57	100

Topographic Profile in Sungai Penchala



Figure 2 and 3: Site Topography and Elevation (GIS 2019)

Table 1: Existing category of slopes in study area

CATEGORY OF SLOPE	CLASS	ACREAGE (ACRE)	PERCENTAGE (%)	DEVELOPMENT GUIDELINES
<15°	1	909.12	69	Suitable for development
15 - 25°	2	329.39	25	Suitable for development but with restriction for hilly area
25 - 35°	3	65.88	5	Suitable for certain development such as medium density residential area
>35°	4	13.18	1	Restricted to all types of development except for nationally required infrastructure works
TOTAL		1317.57	100	

Site Analysis on Sungai Penchala

- 69% of the site is low land with a slope of less than 15 degrees that is suitable for any development.
- 69.17% of the area of the site is still vacant, and 20.71% consists of the residential area. Regarding land status, 78% are under the Malay Reserve land category.
- The study area consists of water bodies which are Sungai Kayu Ara, which is a tributary of Sungai Penchala
- The proposed area is classified as a Traditional Village with potential for development.

Existing Land Use Distribution in Sungai Penchala

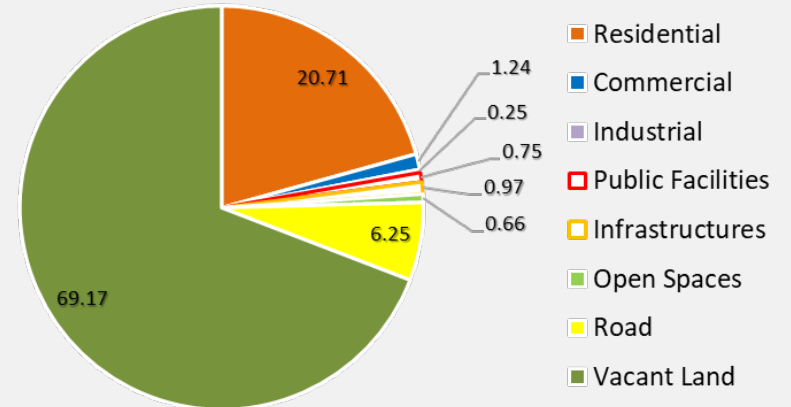


Figure 4: Percentage of Existing Land Use Distribution in Sungai Penchala (GIS 2019)

Market Study in Sungai Penchala

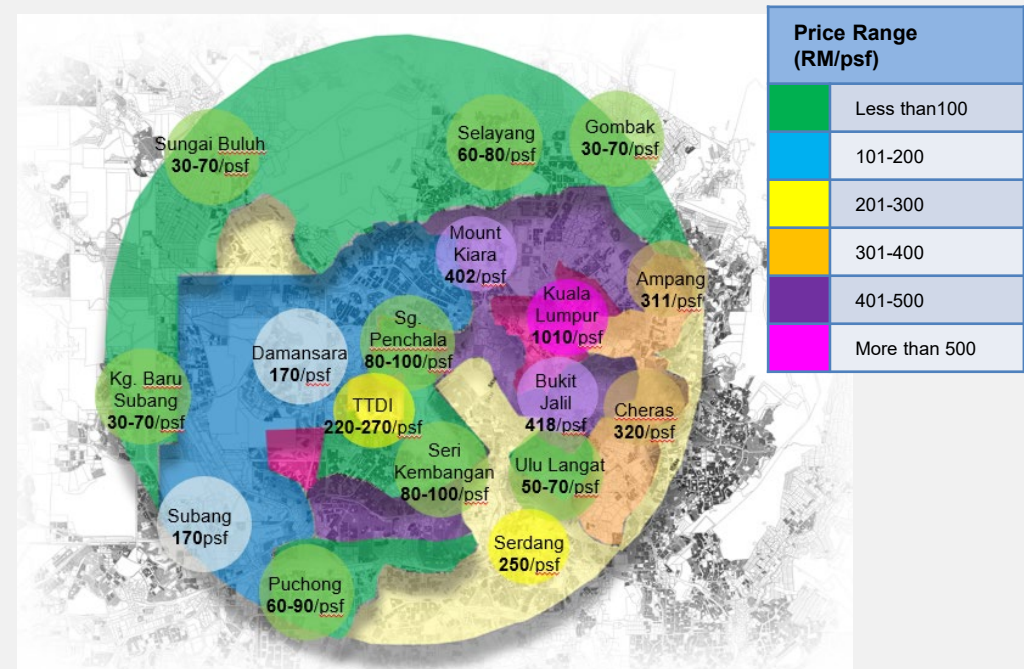


Figure 5: Land Price in Sungai Penchala and the Adjacent Areas 2019

Table 2: Demand of Property in Sungai Penchala

Demand of Residential	Price Range	Demand of Commercial Property	Price Range
High- Rise	RM300k- RM500k	Service Apartment	RM300k- RM500k
Low- Cost	<RM300k	Office Lot	<RM1.0M
Terrace House	RM650k- RM1.0M	Retail Lot	Rm500k- RM1.0M
Semi- Detached	RM800k- RM1.2M		
Preferable Price Range: RM300k –RM500k			

Socio-economic in Sungai Penchala

Total population Kg. Sungai Penchala	8430
Total Population Mukim Batu	361,600
Kuala Lumpur Household Income	M40 the Highest in 2019 (47.7%)
Kg. Sungai Penchala Income Distribution	70% B40
Race & ethnicity	- 90% Malays - 10% Foreigners
Age Distribution	73% working age/youth
Main economy activity	- Food Stall - Delivery Services
Issue	- Land ownership - Flood

CONCEPTUAL PROCESS, PROCEDURE AND SCHEMATIC

The goal and objectives of the proposed development were formulated based on the significant findings through a detailed SWOT Analysis during the study. As a result, the best development concept preferred is as shown below:

DEVELOPMENT GOAL

“Resilient Malay Enclave with the Essence of Exquisite Living”

DEVELOPMENT OBJECTIVES

- 01 To revitalize significant values and attributes of traditional villages to improve the existing community's quality of life.
- 02 To bestow the properties, comply with the affordability level in ensuring the marketability and resiliency of the township.
- 03 To promote the resilient economy through diversity in commercial undertaking as self-sustain township.
- 04 To nourish the environment through comprehensive infrastructure practices in response to prevention of disasters in the urban setting.

DEVELOPMENT CONCEPT

Penchala Ecohill is a new **Green Affordable Township** in Kuala Lumpur that applied the concept of **Traditional Malay “Tepak Sireh”**. Tepak Sireh is one of the Malay's cultural heritage decorative boxes for Sireh leaves that is still used as a medium during a ceremony in the Malay community, including royal ceremonies. A highly ornate Tepak Sireh is specifically reserved for special occasions and decorated with elaborate and intricate designs.

TRADITION

EXCLUSIVE

SYSTEMATIC

DURABLE



Figure 6 Illustration of Tepak Sireh (Source: Muziummaya.com 2015)

The characteristic of Tepak Sireh as a traditional, exclusive, systematic and durable Malay cultural heritage ornament is translated into the proposed development components. In turning KL into a city for all by its vision on structure plan, several elements such as a sustainable living will be considered. The proposed development is based on the aspirations of the people who want a dynamically developing city while simultaneously practising fairness and prosperity for all, including being sustainable and resilient. As most of the land has been gazetted as Malay Reserve Land, it is critical to adopt a Malay development concept for this new development to ensure the Malay race as the target market would be interested in buying and living in **Penchala Ecohill**.

DESIGN PRINCIPLES / SCHEMATIC PLAN

Tepak Sireh contains eight (8) elements portrayed in the design principles based on its characteristics as follows:



Figure 7 Traditional Tepak Sireh (Source: Muziummaya.com 2015)

1. **Kacip** (Parcel potential segregation)
2. **Daun Sireh** (Social well-being)
3. **Cengkih** (Resiliency towards hazard)
4. **Buah Pinang** (Village redevelopment)
5. **Kapur Sireh** (Facilities and Utilities)
6. **Gambir** (50% affordable houses)
7. **Tembakau** (Implementation of CPTED)
8. **Puan** (Hold all element which makes Penchala Ecohill as a comprehensive and durable township).



Figure 8 Element of Tepak Sireh (Source: Muziummaya.com 2015)

Focusing on the concept of Tepak Sireh, this project emphasises the development theme of Resilient, Affordable and Islamic City Development through the adoption of the five (5) pillars of Resilient City and the five (5) pillars of Maqasid As Shariah. The proposed development also intends to target the Affordable Housing Scheme through the development of Penchala Ecohill. A summary of the design principles, application and elements is shown in Table 3.;

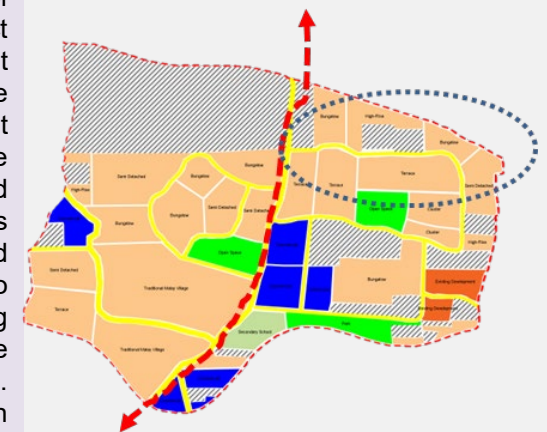


Figure 9 Schematic Plan of Penchala Ecohill

RESILIENT

1. Resilient through preservation
2. Resilient through physical
3. Resilient through social
4. Resilient through economy
5. Resilient through environment

AFFORDABLE

1. Residensi Wilayah
2. Rumah Wilayah Persekutuan (RUMAWIP)
3. Perumahan Penjawat Awam Malaysia (PPAM)
4. Micro-Housing by DBKL

ISLAMIC

- Maqasid As-Shariah
1. Deen/Religion
 2. Life
 3. Intellect
 4. Lineage
 5. Wealth

DEVELOPMENT COMPONENTS

Residensi Wilayah & Condominium

The 113.15 acres of the well-planned development offers lifestyles homes and planned spacious layout that caters to growing families' needs. Due to the high market demand, developing condominiums and high-rise units such as Residensi Wilayah is the priority of this proposal. The development of SeriMas Residensi is influenced by the location of The Trees Damansara, which is a committed development in this development.



Figure 10: Illustration of Terrace and Semi-Detached House
(Source: propertyguru.com)

Integrated Park

Providing private open spaces and recreational areas in each neighbourhood will promote community wellness and improve property value. The parks will assist in providing connection spaces and act as one of the solutions to prevent floods in the area.

The Trees Damansara, considered a committed development, is a Malay Reserved Property that offers the living lifestyle in the city centres.



Figure 12: Illustration of Penchala Lake Park
(Source: pinterest.com)



Figure 11: Illustration of Open Spaces and High-Rise Building
(Source: pymnts.com)

The Central Lake Park, known as Penchala Lake Park, with an expanse of nearly 33 acres, will further assist the area in maintaining the sustainability and resilience of the township. Furthermore, Penchala Lake Park serves as a recreational place for the entire township, including sports and social events and has been designated as the local park.

Connectivity and Pedestrian Walkway

Some of the development adheres to the development plan's objectives of revitalising significant values and characteristics of traditional villages and improving the existing community's quality of life. The development follows the Tepak Sireh tradition of preserving and redeveloping Kampung Sungai Penchala and its natural topographic features.

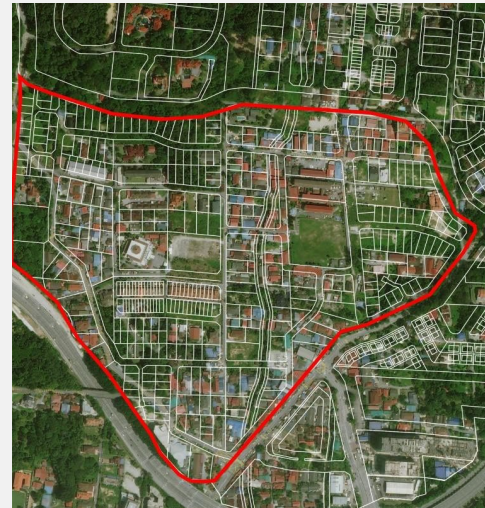


Figure 13: The process of subdivision of land in Kg Tradisi Sg. Penchala
(Source: GIS Analysis)

A bridge or a link has been designed to connect Sireh Junjung Convention Centre to the central open space across the road. This link has its unique concept, which can attract people to visit its striking architecture as part of the overall development concept of a walkable city with a pedestrian walkway within the township.



Figure 15: Sireh Junjung link
(Source: Pinterest, 2021)

In addition, there is Sg. Penchala river that runs through Kampung Tradisi Sg. Penchala and an 850m promenade for pedestrian walkways with bicycle lanes connecting the village area to D'Medan and the public facilities.

The river serves as a tool for blue infrastructure, which helps nourish the environment through comprehensive infrastructure strategies in reaction to disasters such as flash floods in urban areas.



Figure 14: Illustration of walkway and bicycle lane along Sg. Penchala
(Source: ArchLa, 2016)



Figure 16: Walkable and Safe City
(Source: Pinterest, 2021)

The landscape in this development will emphasise the green and the blue infrastructure treatment because it includes both primary and collector roads. This concept is essential to ensure the area's resiliency towards any hazards especially flash floods and landslides.

PROPOSED AND EXISTING DEVELOPMENT COMPONENT

Table 3: Proposed Land Use component

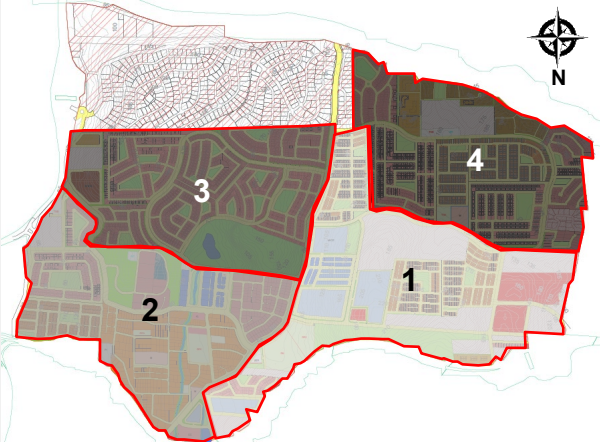
Land Use	Acreege (acre)	Percentage (%)
Residential	351.71	26.7
Commercial	45.05	3.4
Public Facilities	36.78	2.8
Traditional Malay Village	55.44	4.2
Infrastructure and Utilities	6.52	0.5
Open Spaces	139.99	10.6
Water Bodies	4.93	0.4
Road	321.57	24.4
Committed and Existing Development	355.58	27
TOTAL	1317.57	100

Source: Ground Truth Survey of Kampung Sungai Penchala

Saleable Area
41.2%

DEVELOPMENT PHASE

Table 4: Project Timeline

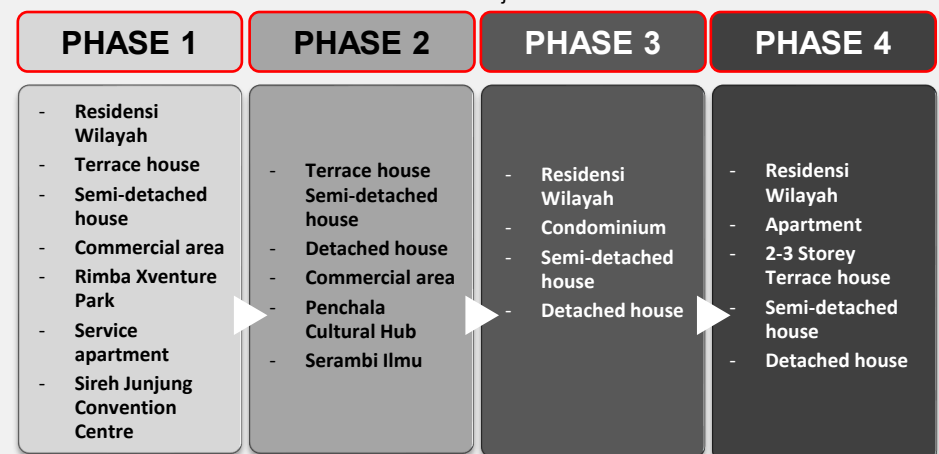


Phase 1 (3 Years)
2021 - 2023
Phase 2 (3 Years)
2024 - 2026
Phase 3 (3 Years)
2027 - 2029
Phase 4 (3 Years)
2030 - 2033

Map 5: Proposed Development Phase

Estimated time taken for the development: **12 years**

Table 5: Detail of Project Timeline



CONCLUSION

In summary, Kampung Sungai Penchala, with its 1,317.57 acres of proposed mixed-use development, will consist of 2,053 units of terrace houses, 1,748 units of semi-detached houses, 867 units of bungalow houses, 157 units of shop lots, 83 units of affordable shop lots, three (3) units of mosques, two (2) units of primary schools, one (1) unit of secondary school, one (1) unit of MICE (Meetings, Incentives, Conferencing, Exhibitions) building, four units of SoHo/SoFo/Service Apartments, three (3) units of electrical substations, two (2) units of water tanks and one (1) unit of a sewage treatment plant. This proposed development is expected to improve the overall perception of Kampung Sungai Penchala towards a well-organised and clean development that adds to the Malay living environment. The new development of Kampung Sungai Penchala is committed to improving the physical, environmental and quality of life of Kuala Lumpur and beyond.

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REFERENCES

- Federal Territory (Planning) Act 1982. (n.d.). Federal Territory (Planning) Act 1982. Retrieved July 11, 2021, from http://www.commonlii.org/my/legis/consol_act/fta1982283/
- Hanif, N. R., Azriyati, W. N., Abdul-Rahman, H., Wang, C., & Wood, L. C. (2015). The challenge of rural life nostalgia: barriers in redevelopment of Malay Reserve Land (MRL) in Klang Valley. *City, Territory and Architecture*, 2(1).
- Kuala Lumpur, C. H. (2020). *KI Structure Plan 2020*. <https://fdocuments.net/reader/full/kl-structure-plan-2020>
- Manual Laporan Cadangan Pemajuan Edisi Kedua. (2011). Jabatan Perancangan Bandar Dan Desa Semenanjung Malaysia, Kementerian Perumahan Dan Kerajaan Tempatan. Pelan Banda Raya Kuala Lumpur 2020. (2018).
- Omar, I., & Yusof, A. M. (2002). Indigenous land rights and dynamics of the land market in Kuala Lumpur, Malaysia. *Habitat International*, 26(4), 507–521.