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INSTAGRAMMABLE TRANSIT OF KUALA LUMPUR SENTRAL

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ABSTRACT

Social media has noted a wide range of users throughout the world. One of the famous social media platforms to share unlimited photos and videos is Instagram. Instagram offers great ideas and inspiration based on an eye-catching Instagrammable setting that serves as a backdrop for a perfect photo. The term 'Instagrammable' is frequently defined as visually attractive or interesting such that it lends itself to being photographed and posted on social media. For architecture-based and design-based, the term is a new adjective that is used to describe a scenic or visually attractive urban design. In Malaysia, one of the potential sites to be developed as an Instagrammable area is KL Sentral. KL Sentral was chosen because of its strategic location as a hub of global connectivity that is surrounded by various types of dthat can enhance urban lifestyle with unrivalled accessibility. KL Sentral also ntral also was chosen based on three issues which are wear and tear, visual al character, and walkability. Therefore, a project titled Instagrammable Transit of KL Sentral is proposed to enhance KL Sentral as the state-of-the-art transportation hub.

Keywords: *Instagrammable, Insta-worthy, Urban Design, KL Sentral.*

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INTRODUCTION

KL Sentral is located at the nucleus of Kuala Lumpur with a City-within-a-City concept. . It is an exclusive urban centre built around Malaysia's largest transit hub that offers global connectivity, excellent investment opportunities, business convenience, and an international lifestyle. KL Sentral spread over 72 acres of land bordered by Jalan Travers, Jalan Damansara, and Jalan Tun Sambathan. This area is comprised of Sentral Station, corporate offices towers, 5-star international hotels, a luxury condominium, and a shopping mall. The area was chosen due to its strategic location, unrivaled accessibility, the hub of global connectivity, and being surrounded by various developments that can enhance urban lifestyle (Figure 1). However, the area facing several issues which are:

1. Wear and tear – The 19-years-old KL Sentral is in urgent need to upgrade its facilities and amenities
2. Visual character – Beautification needs to be done to bring colours to the surrounding landscape
3. Walkability – Visitors and users feel discouraged to travel from one place to another due to lack of connectivity.

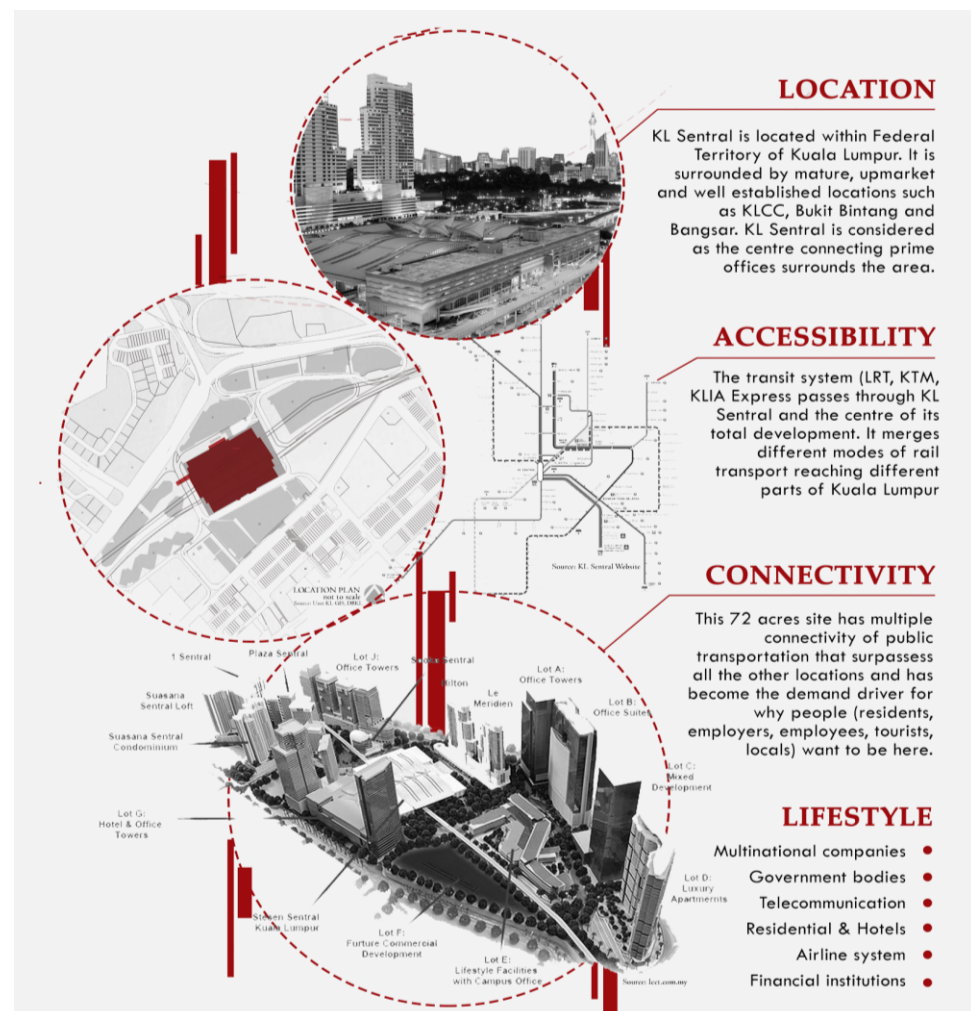


Figure 1: Values of KL Sentral

Therefore, this project of Instagrammable Transit of Kuala Lumpur Sentral is proposed that aims to enhance KL Sentral as the state-of-the-art transportation hub. To achieve this, three objectives are needed which are:

1. To provide a modern and interactive urban design that is sustainable and can be used by every type of user
2. To showcase liveliness of the area with are-driven design to be experienced by pedestrian and vehicle users
3. To create an environmental-art setting by integrating natural art and urban art

LITERATURE REVIEW

Figure 2 shows the six definitions that are related with the project are explained which include definition of social media, Instagrammable, Insta-worthy, natural art, urban art, and natural + urban art (Figure 2).

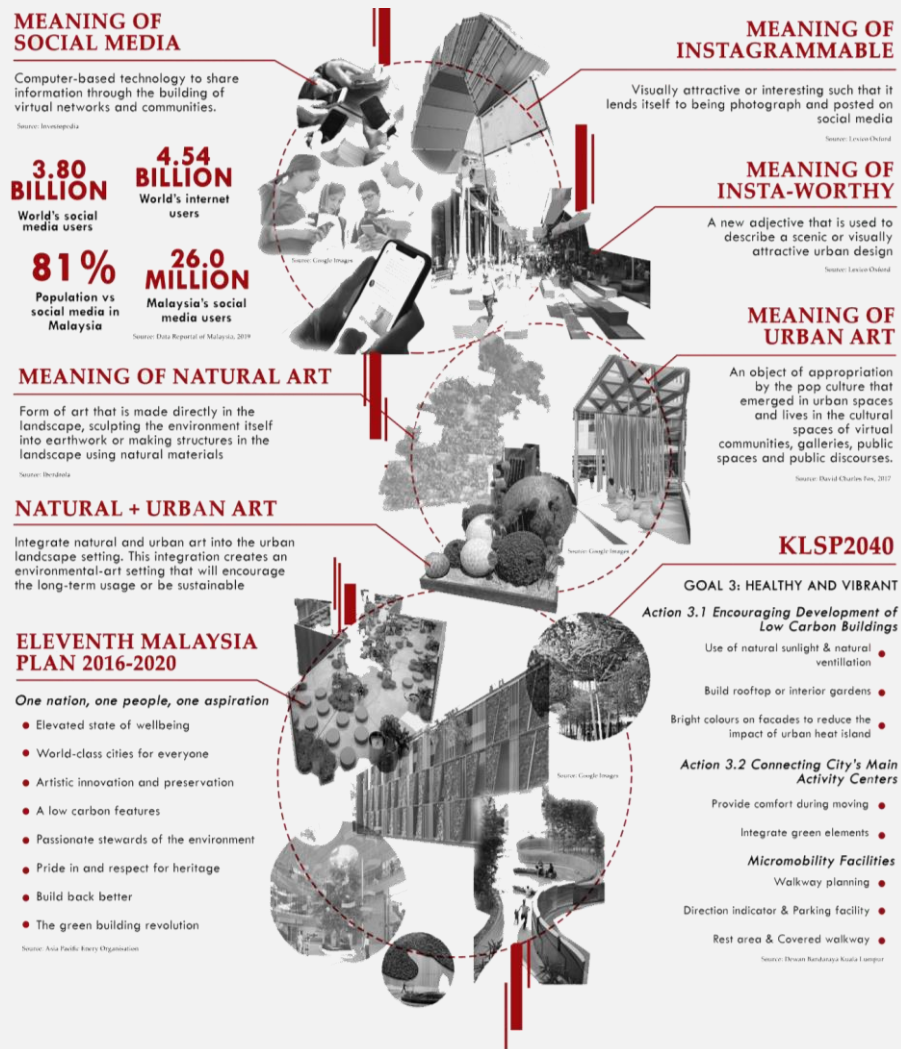


Figure 2: Definitions of six keywords related to the topic and related plans that suits to the project.

METHOD / PROCEDURE

CHECKLIST AND OBSERVATION

This project conducted the checklist for site inventory and observation as the methodology for data collection. This method is done by mapping the existing site condition and taking pictures of the site condition.

INVENTORY AND ANALYSIS

1. Development History

Figure 3 shows the development history of KL Sentral that includes the evolution of transportation and the evolution of the main railway station in Kuala Lumpur, starting from 1857 where Kuala Lumpur used rickshaws, bulls, and elephants as main transportations until 2001 where Kuala Lumpur was introduced with an integrated railway system of KL Sentral.

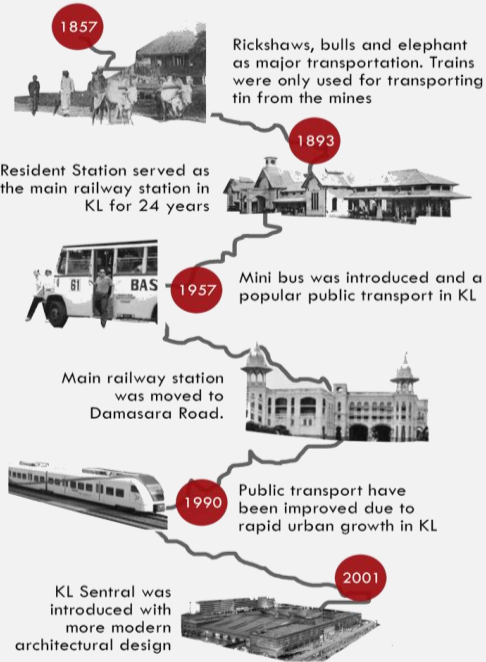


Figure 3: The development history.

2. Facilities, utilities and cultural services

There are numerous facilities, utilities, and cultural services at KL Sentral that are associated with social and economic benefits that tie together existing heritage assets, cultural attractions, and creative enterprises.

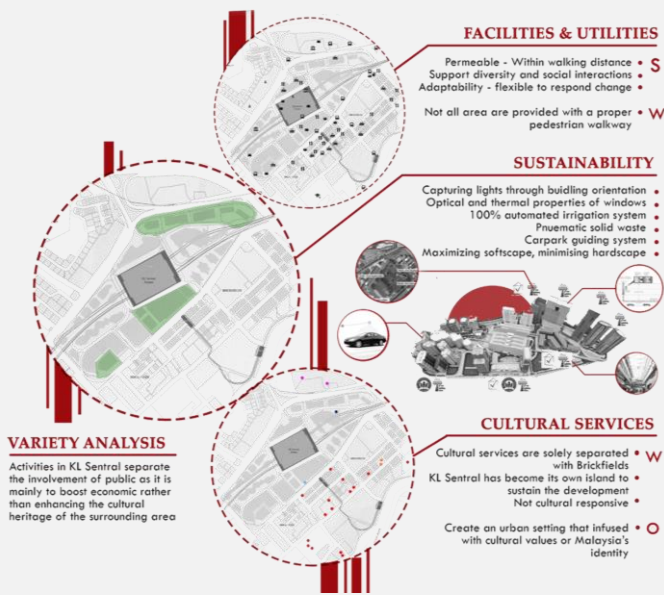


Figure 4: Variety analysis that is based on facilities & utilities map and cultural services map.

3. Existing Structure

There are many landmarks at macro and micro scales that have outstanding features and can be recognized immediately by the locals and even the foreigners. Figure 5 shows the existing structures that include macro and micro landmarks that are needed to form the legibility analysis.

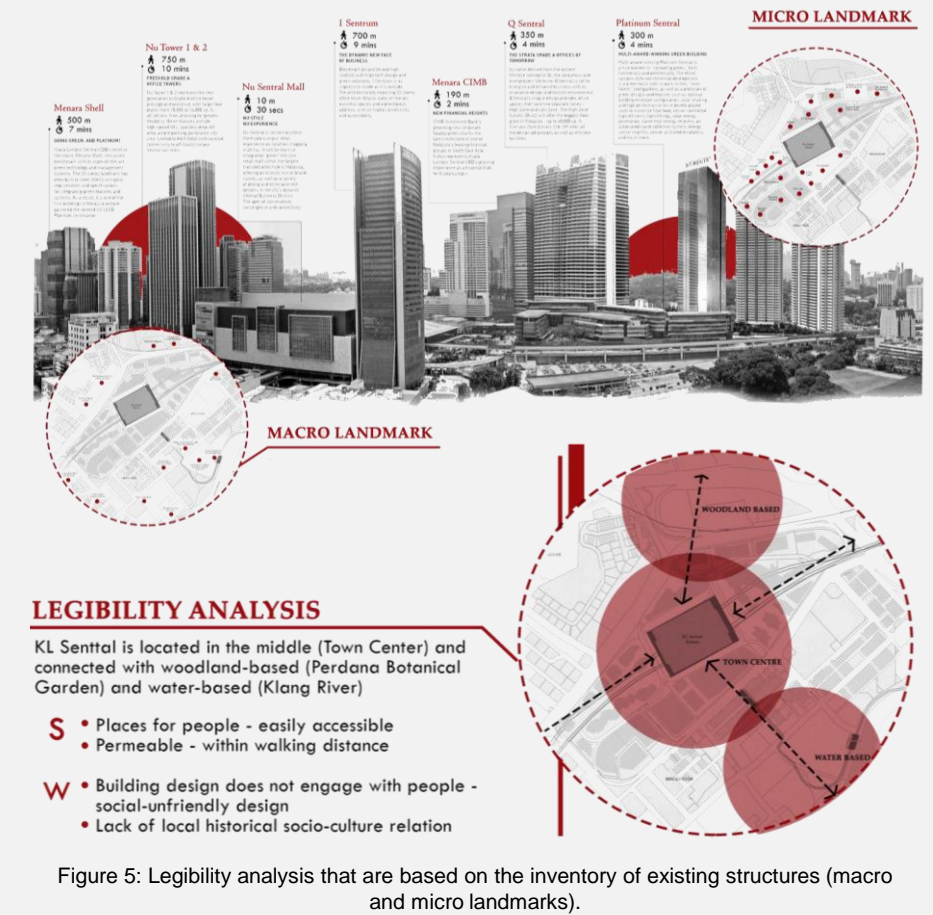


Figure 5: Legibility analysis that are based on the inventory of existing structures (macro and micro landmarks).

4. Land use

Figure 6 shows different types of land uses in KL Sentral that includes public facilities, open space and recreational, residential, commercial, vacant lots and many more.

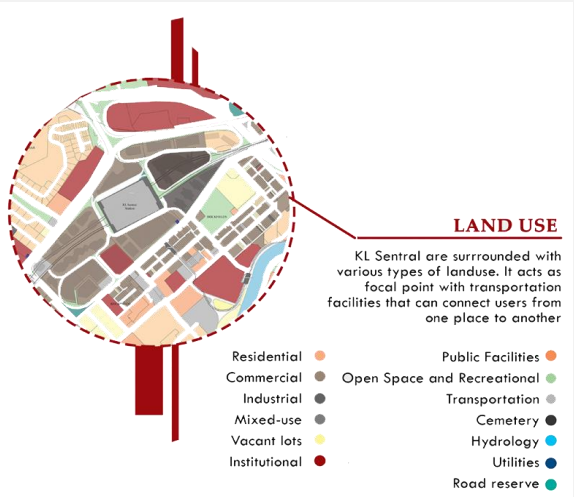


Figure 6: Various types of land uses in KL Sentral

5. Visual and Senses

Figure 7 shows the inventory of visuals and senses includes noise and odours and visual appropriateness that is based on the feeling and character of the users on the site (Figure 7).

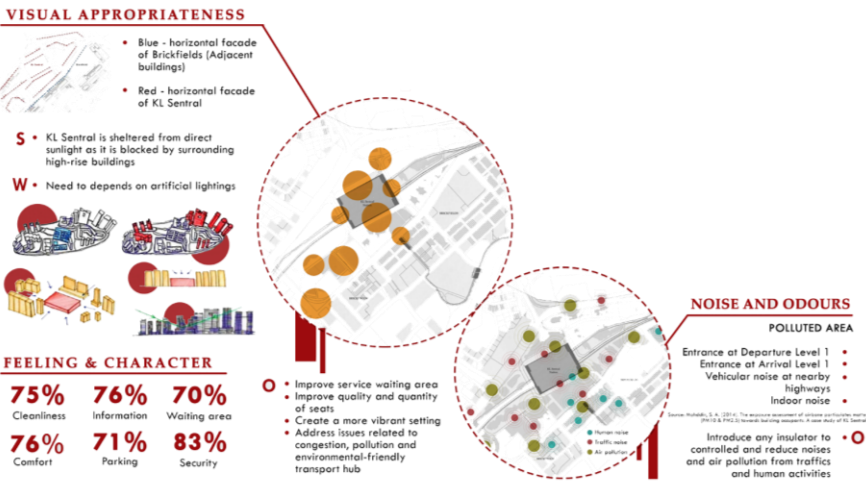


Figure 7: Visual appropriateness, noise and odour elements

6. Circulation

As for circulation, it is divided into two which are pedestrian movement and vehicular circulation. Figure 8 shows the pedestrian movement that is divided into 3 routes which are the residents' route, workers' route and tourists' route. On the other hand, figure 9 shows the vehicular circulation that explained on traffic density, traffic controls and public transportation in the area. All of this route and inventory on circulation are very important and needed to form the permeability analysis of the area.

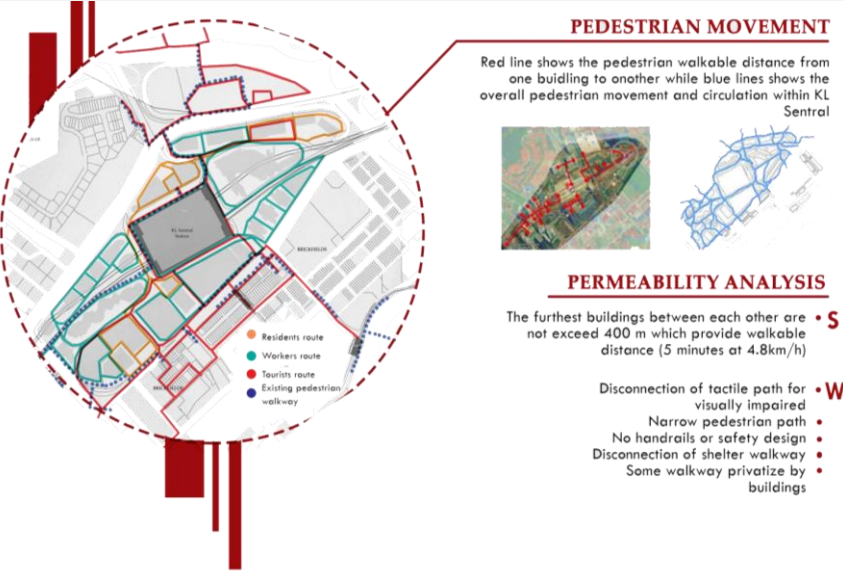


Figure 8: Pedestrian movement and permeability movement

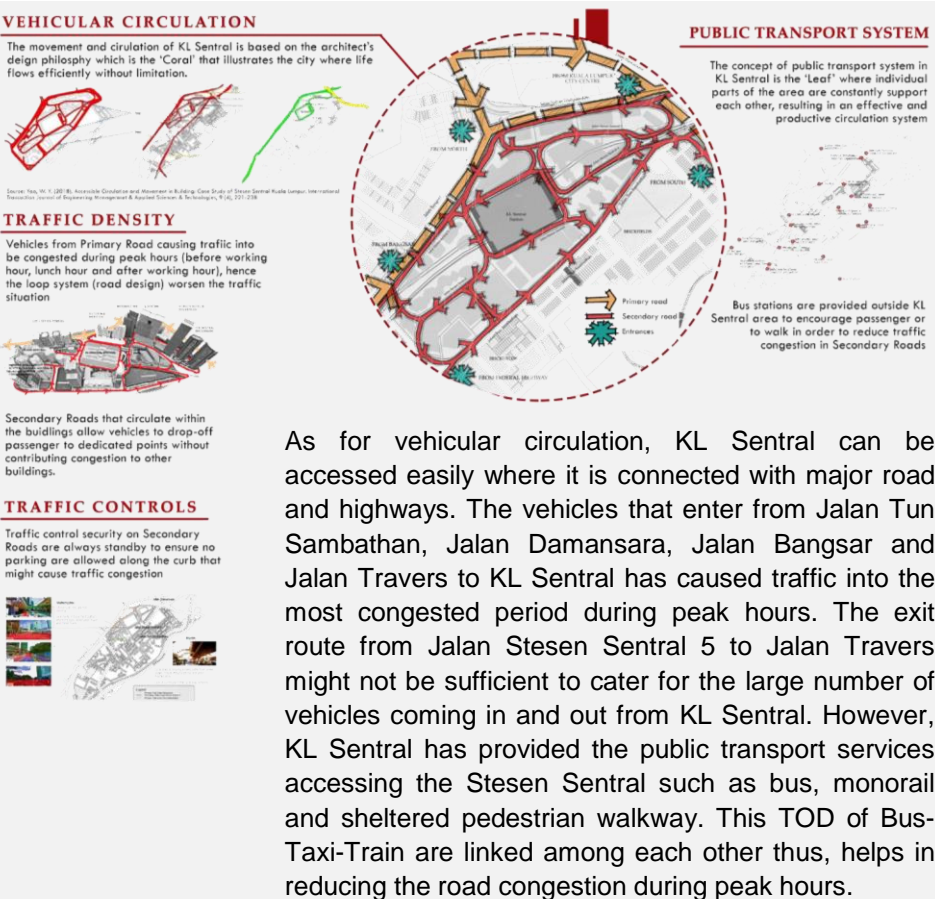


Figure 9: Site inventory and analysis for circulation that focuses on vehicular circulation.

7. Climatic Factors

Climatic factors are observed and analyzed based on macroclimate context, focuses on Kuala Lumpur monthly climate average from 2019-2020.

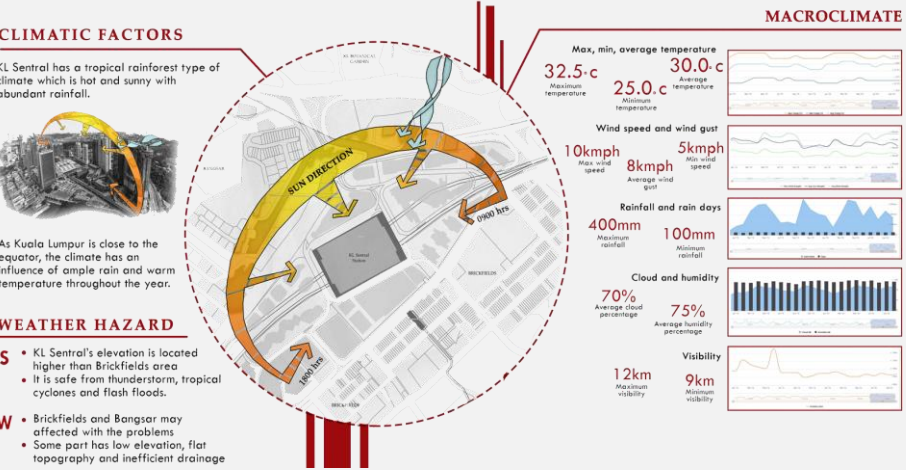


Figure 10: Climatic factors, macroclimate and weather hazard in Kuala Lumpur.

8. Existing Vegetation

Figure 11 and Figure 12 show existing vegetation and potential green area within KL Sentral.

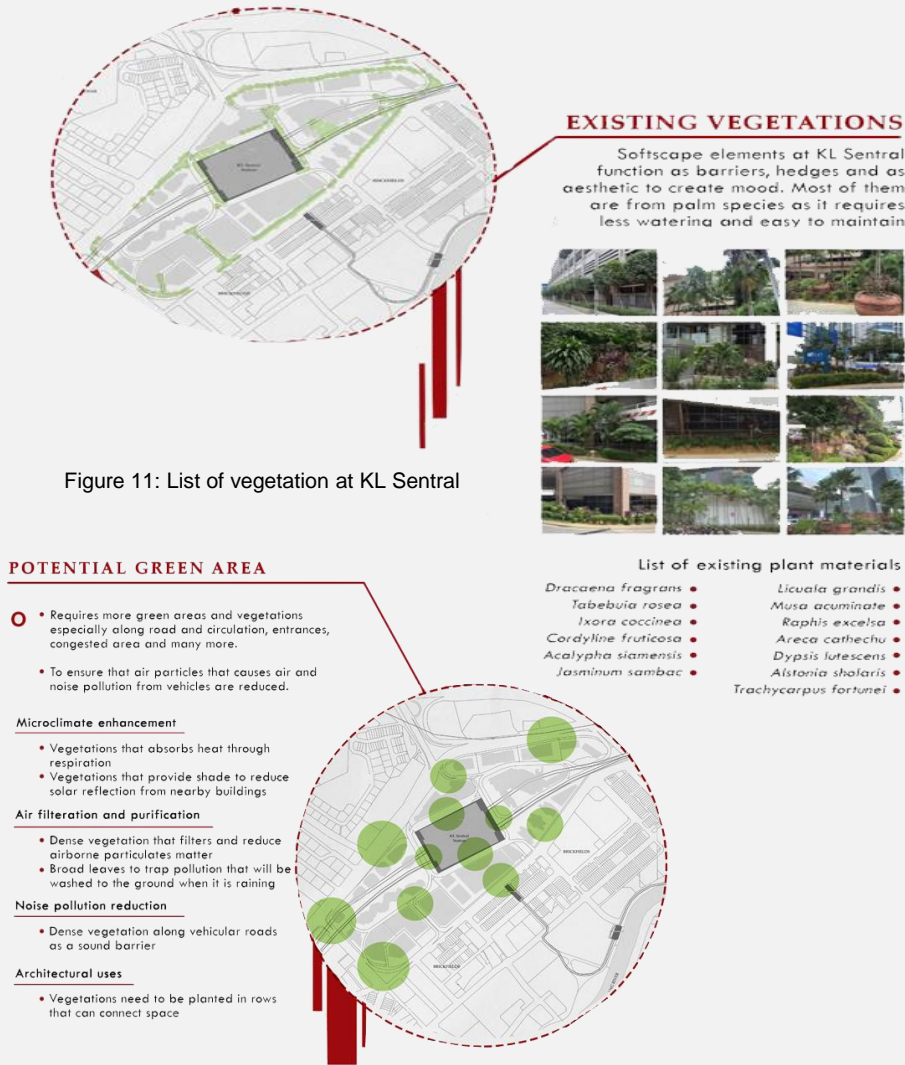


Figure 12: Potential green area

9. Hydrology

Kolam Takungan Banjir Jalan Travers

- Under supervision of Dewan Bandaraya Kuala Lumpur
- Categorised as 'Kolam Takungan Kering'
- Longitude 101,40'57.73"E Latitude 3,8'2.34"N

Klang River

- Located behind Masjid Jamek and flows south-west through Brickfields, bangsar and Lembah Pantai
- Approx. 120km and a basin about 1288km2
- Considerably polluted because of deep siltation caused by human waste from informal settlers of the riverbank

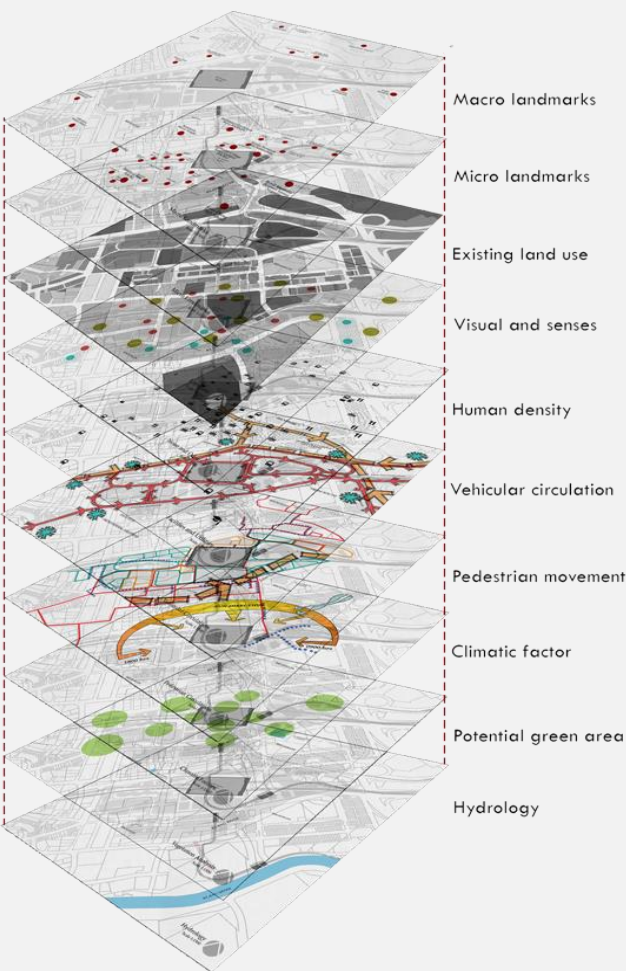


Figure 13: Layering maps of all attributes.

SYNTHESIS

Based on the collected data on-site inventory and analysis, layering maps of all attributes were produced with a cross-analysis table that further describes the inter-relation of each element (Figure 13 and Figure 14). Overall, there are six (6) main design potentials based on the challenges and weaknesses from site analysis which are; art-driven design, potential nodes, connectivity, air purification and filtration, universal design, and sustainable design. These six (6) main design potentials should have a natural-art urban design in creating Instagrammable Transit of KL Sentral (Figure 15).

CROSS ANALYSIS

	Existing structures	Land use	Visual and senses	Human density	Circulation	Climate	Vegetation	Hydrology
Existing structures		Buildings and developments surround KL Sentral are mainly to boost economic, rather than promoting cultural values	Modern design of the buildings makes the area lack in local / Malaysian's identity	Not cultural responsive as compared to Brickfields	Pedestrian path widening to some areas that not permit public access across their property boundaries, thus leaving narrow space for pedestrian movement	The usage of transparent materials like glass allows penetration of sunlight, thus improve the overall lighting of the buildings.	Surrounding buildings should imply vegetation that can modify ground, vertical and overhead plane	High elevation provides un-stagnant water run-off thus, create a good drainage system
Land uses	The development of KL Sentral has become its own island by itself to sustain the new transit-oriented development		Linear arrangement of buildings in pocket contributes to visual consistency	New developments around KL Sentral does not engage with people, thus make the area lacking in social interaction and local cultural identity.	Loop system bringing unnecessary traffic congestion during peak hours	Organized individual parts in pockets minimize sunlight penetrate to KL Sentral	Privatize landscape design in several buildings makes the landscape design of the whole area to be inconsistency	The availability of water source to cater massive flash flood are located near KL Sentral area
Visual and senses	Curvy shape of KL Sentral create a contrast and become focal point at the area	Public visual appreciation is increased due to the proper layout of 15 division high-rise building		Maximum surveillance and safety to the area are due to horizontal facade of the buildings	Comfort level by the users is decrease due to inconsistent walkability space that makes some area to be congested	Unpleasant feelings to the users as there are several non-continuous sheltered area	Traffic and human noise pollution should have more greenery with sound-barrier vegetation	Very minimal to none bad odour from drainage system as many buildings recycle rainwater for irrigation
Human density	Very minimum to none engagement between buildings as it is not a social-friendly design as compared to Brickfields	Human activities are being separated with area in Brickfields where the involvement of public at that area is more diverse and robust	Overcrowded area at each entrances causing pollution of human noise as well as traffic noise due to high numbers of vehicles at Pick-Up & Drop-Off points		Unsupported density of users at some areas as the pedestrian of walkway is too narrow	Overcrowded area can be changed through careful placement of vegetation to block from direct sunlight and heavy rainfall	Congested area especially entrances should have more greenery to help to reduce noise pollution	Minimize commercial waste resources to nearby water catchment area
Circulation	Consistent distance between nearby buildings provides walkable spaces	Easily accessible as KL Sentral is located near to major roads and highways	Inefficient loop system decrease level of satisfaction by the users	Limited usage of pedestrian linking bridge as it is not for public access and only beneficial for building users		Disconnection of sheltered walkway to shelter users against rain and sun	Redesign street pattern by planting more vegetation that can trap carbon monoxide, nitrogen oxide and other pollutants	Water circulation within KL Sentral area provide good water flow without make it stagnant
Climate	Reduce temperature of the area by using insulator materials rather than conductor which can absorb heat	Wind velocity and penetration of sun rays is minimized due to consistency distance with linear arrangement of land uses	High humidity with occasional rainfall throughout the year affect the visibility to the surrounding area	Heavy rainfall with risk of flooding reduces the number of tourists to utilise the area	Abundant rainfall and scorching hot weather causing existing walkway to be congested		Solar reflection from nearby buildings can be reduced using canopied vegetation	Heavy rainfall with risk of flooding will affect more towards Brickfields that have lower topography compared to KL Sentral
Vegetation	Plant selection that will create and link a sequence of space in an architectonic fashion	Maximise the usage of vegetation and green area to unsightly and vacant lots	Dense vegetation to reduce noise pollution and increase satisfaction level of the users	Special plantings of high visual interest or quality to dramatize certain views and alter users' perception of the area	Strong vertical and horizontal vegetation that reinforce linear movement along the road or pedestrian walkway	Introduce broader leaves to trap pollution that will be washed off to the ground when it is raining		Natural regenerative tendency of vegetation can stabilize eroded system river bank from excessive runoff, revitalize soils and strengthen wildlife habitat
Hydrology	Functional and well-maintained internal drainage circulation within KL Sentral	Most rainwater are stored using rainwater harvesting system, thus creating a good water cycle system	Minimal to none excessive rainwater run-off as it is collected by system that will later use for irrigation	Surface water run-off during heavy rainfall reduces the number of tourists and users to utilise the area	Linear form of Klang River provide comprehensible movement to vehicular circulation and pedestrian movement	Surface water run-off during heavy rainfall season are direct to internal drainage circulation, avoiding the area from flooding	Remediate source of hydrology with vegetation that can cater pollutions, heat and flood.	

Figure 14: Cross analysis table to identify the inter-relation of all elements

ART-DRIVEN DESIGN

Increase visual appreciation by the users through installation of art-driven design for urban regeneration



POTENTIAL NODES

Introduce a social-friendly design to create a new socio-cultural nodes



CONNECTIVITY

Create more accessible and continuous pedestrian walkway that infused with art-driven design



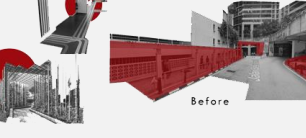
AIR PURIFICATION

Dense vegetation at congested area that filters and reduce airborne particulate matter



UNIVERSAL DESIGN

Add universal design to surrounding that can assists way-finding especially for PWDs



SUSTAINABLE DESIGN

Create a more sustainable design to existing structures such as green roof or vertical wall

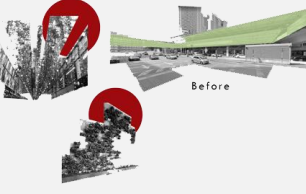


Figure 15: Six (6) main design potentials of KL Sentral

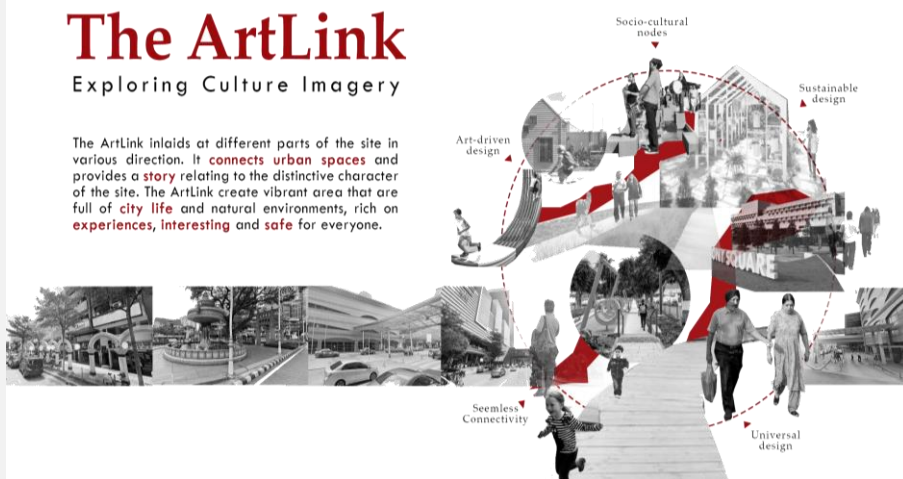
DESIGN DEVELOPMENT

DESIGN CONCEPT

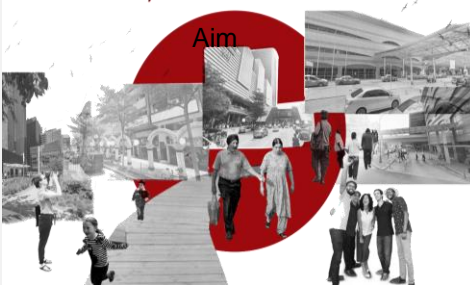
The ArtLink

Exploring Culture Imagery

The ArtLink inlaid at different parts of the site in various direction. It **connects urban spaces** and provides a **story** relating to the distinctive character of the site. The ArtLink create vibrant area that are full of **city life** and natural environments, rich on **experiences, interesting** and **safe** for everyone.



Making KL Sentral as an **attractive entrance** to the city of Kuala Lumpur that has unique **sense of place** and **authenticity of local community**



01

To create **fluid connections** of various function and routes that **capture imagination** of all ages

02

Objectives

To provide a **community-centric** program that integrate **social engagement** into the urban environment of KL Sentral

03

To create an urban design setting that offers **universal accessibility** and **art-grade urban spaces**

Objectives

Figure 16: Design Concept, objectives and aim

SPACE PROGRAMMING

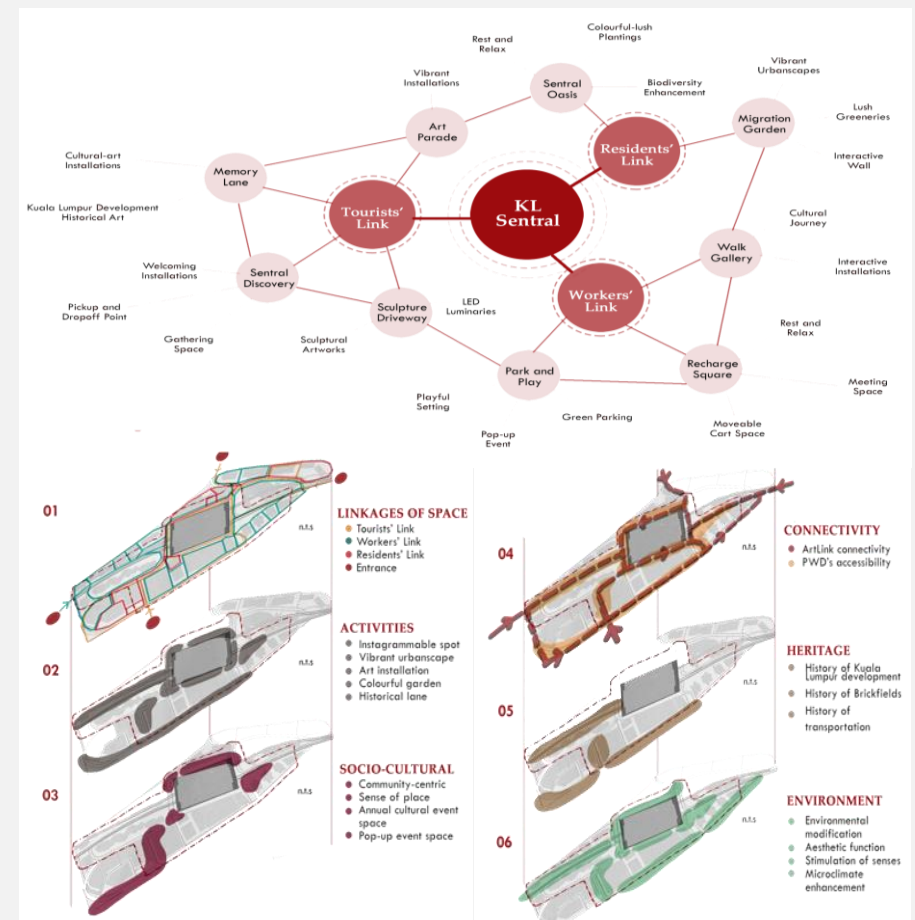


Figure 18: space programming

DESIGN STRATEGIES

DESIGN STRATEGIES



AIR PURIFICATION

- Dense vegetation at congested area that minimize heat reflection and reduce airborne particulates matter
- Creating a more sustainable design approach to existing structures such as green roof or vertical wall

COMMUNITY-CENTRIC

- Providing community-centric program that has **unique sense of place and authenticity of local community**
- Introducing more **social-friendly design** to create a new socio-cultural nodes to the surrounding area

ART-GRADE URBANSCAPE

- Installing art-grade urbanscapes that offers **universal accessibility to increase visual appreciation** by all users
- Creating **more accessible and continuous design program** that infused with art-driven design

Figure 17: Design strategies

SCHEMATIC DIAGRAM

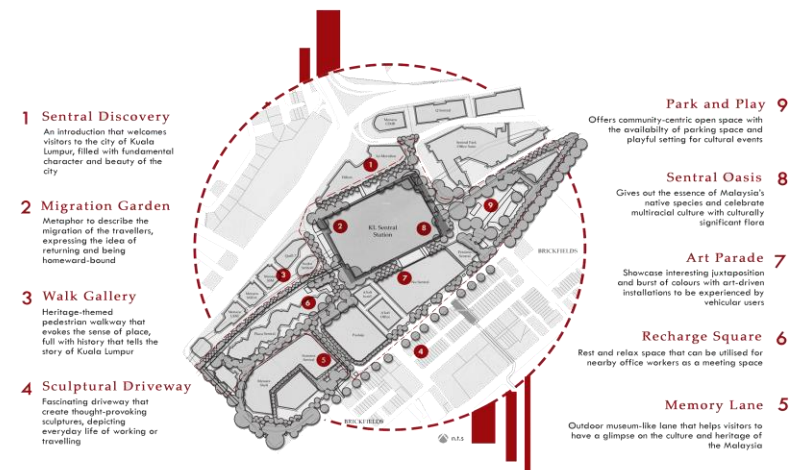
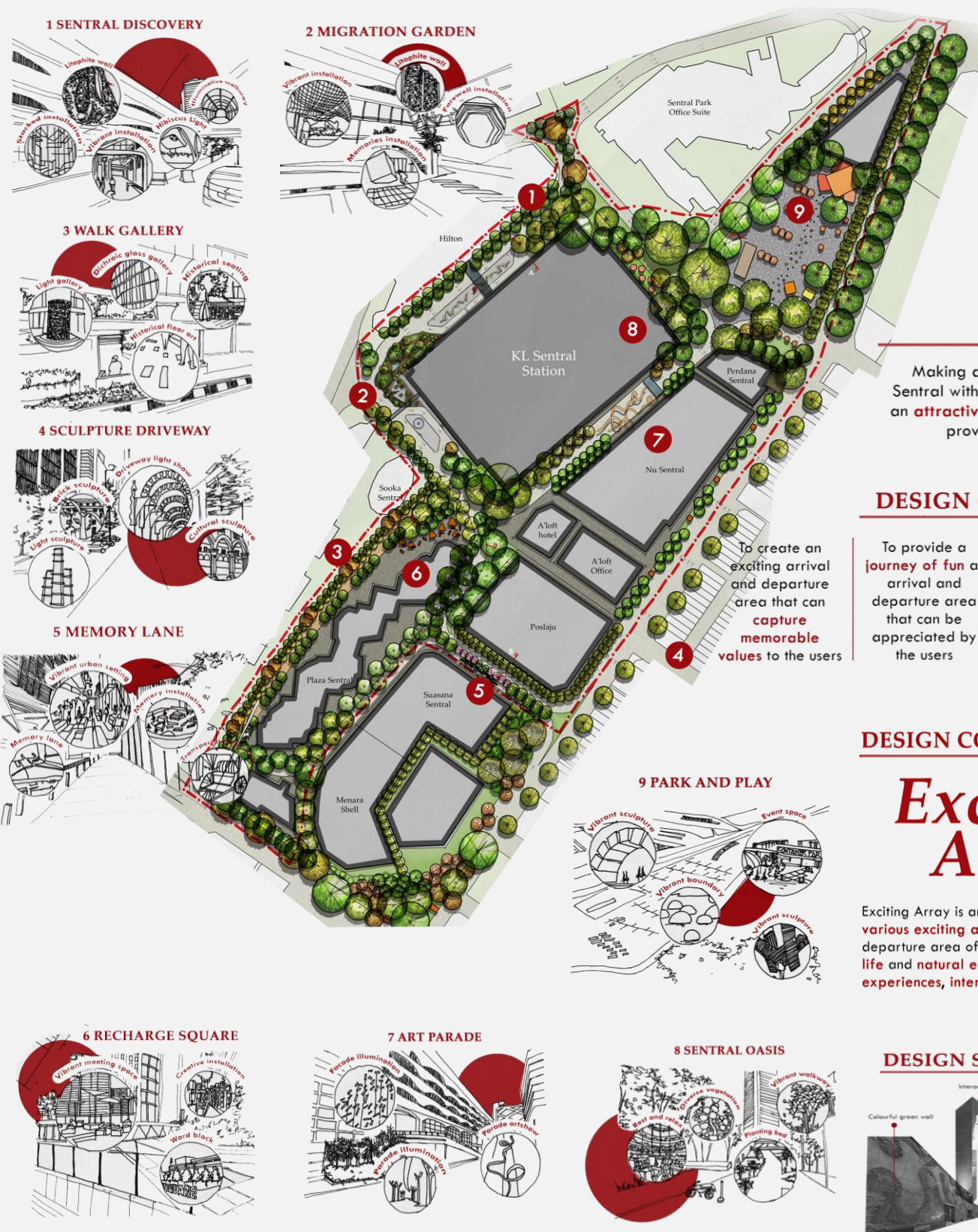


Figure 19: schematic design

MASTER PLAN



DETAIL DEVELOPMENT AREA

The arrival and departure area combines two spaces which are Sentral Discovery and Migration Garden. Sentral Discovery is an introduction that welcomes visitors to the city of Kuala Lumpur that is filled with fundamental character and beauty of the city while Migration Garden act as a metaphor that describes the migration of the travellers, expressing the idea of returning and being homeward-bound.

DESIGN AIM

Making arrival and departure area of KL Sentral with the concept of Exciting Array as an **attractive entrance** to Kuala Lumpur that provide a **journey of fun** and create **memorable values** to the users

DESIGN OBJECTIVES

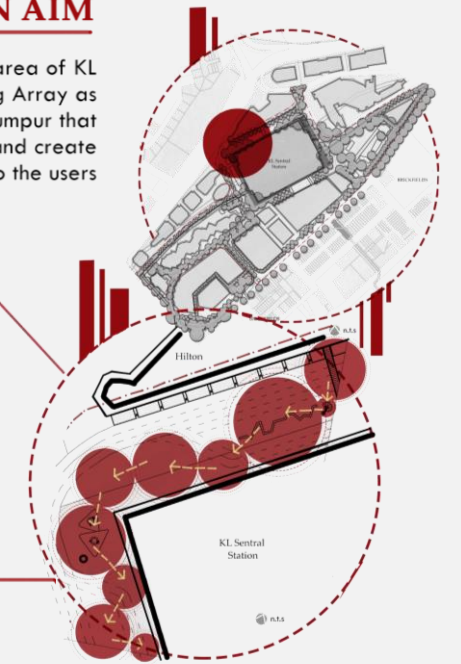
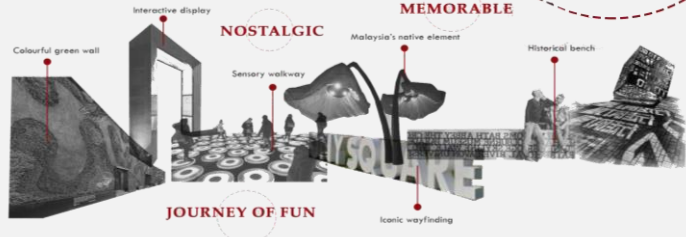
- To provide a **journey of fun** at arrival and departure area that can be appreciated by the users
- To provide various choices of **exciting space** that are **arrange in an array** to be enjoyed continuously by users

DESIGN CONCEPT

Exciting Array

Exciting Array is an **impressive display** that have **various exciting activities** at arrival and departure area of KL Sentral that are full of **city life** and **natural environments**, rich on **experiences, interesting and safe** for everyone

DESIGN STRATEGIES



SPACE PROGRAMMING



Figure 20: Masterplan and design ideas

DETAIL DEVELOPMENT PLAN

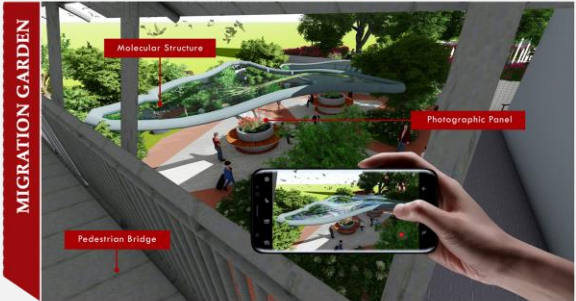
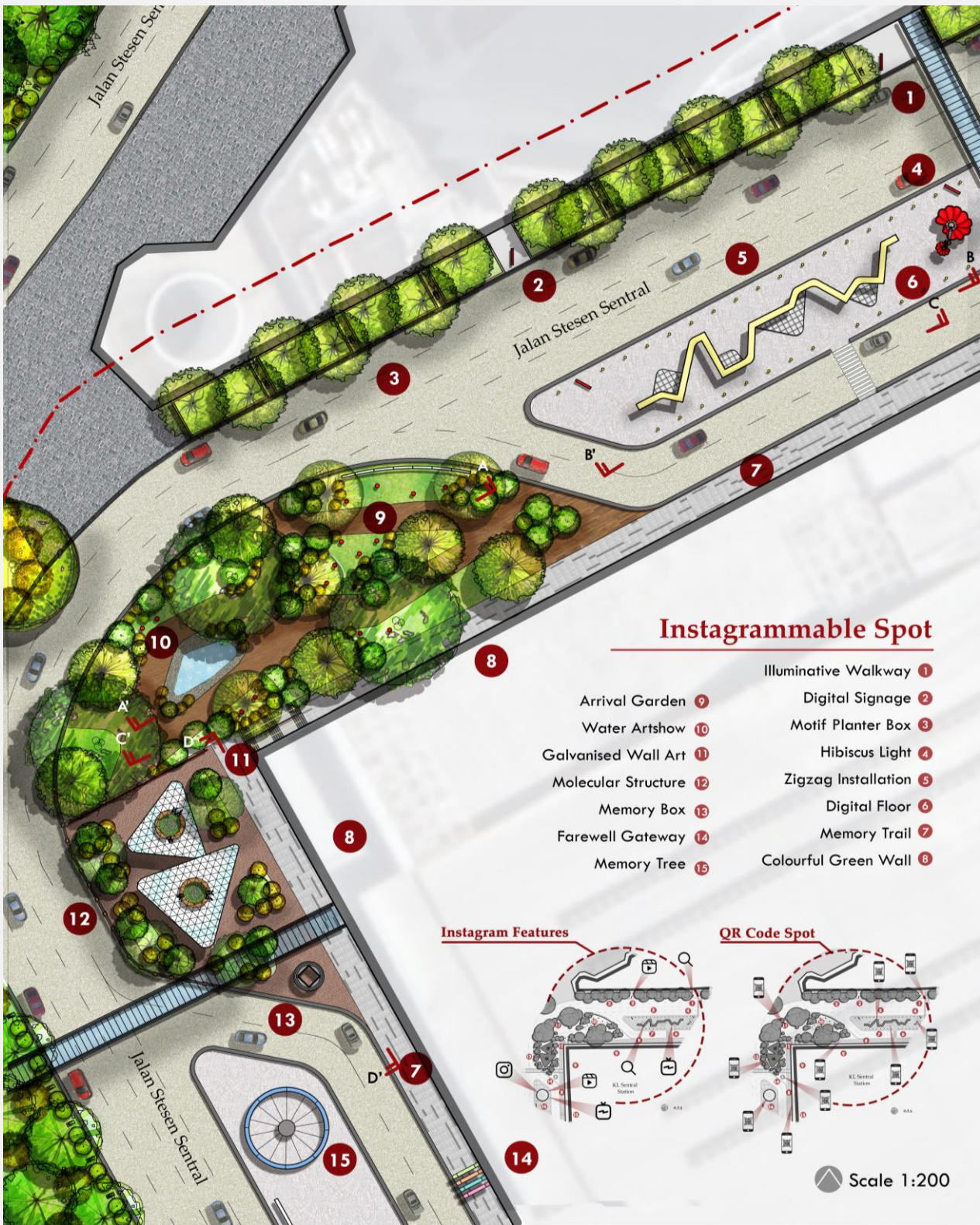


Figure 21: Instagrammable Spot in Exciting Array

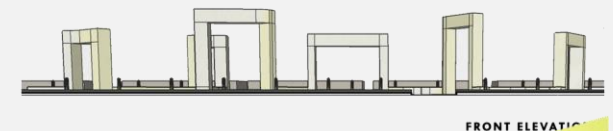
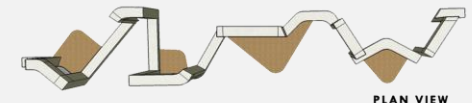
INNOVATIVE DESIGN ELEMENT

MULTIPURPOSE VIBRANT INSTALLATION

The freestanding zigzag installation marks the entrance to the Instagrammable Transit of KL Sentral. This piece of art comprises a series of interactive, architectural and visually appealing elements that invite users to not only use it as a waiting area, but also to enjoy the interactive program that is provided. It functions as a seating area, complete with an interactive digital board and interactive digital floor.

1. ZIGZAG STRUCTURE

- Potential to be a **new landmark**
- Act as **wayfinding** (vibrant colour)
- Provide sense of **urban excitement** with visually attractive element
- Material: **Continuous linear steel tube** and painted surface
- Pavement: Brick paving (considering the **comfortable and mobility** of PWDs)
- Painted with **graffiti resistant paint**
- Complete with **S.O.S button and intercom** that are integrated into the column
- With **seat dividers** as physical barrier to avoid people from lie down



2. DIGITAL FLOOR

- Slip resistance
- Waterproof and dustproof (IP65)
- Material: **Aluminium die casting** (high load per sqm up to 2000kg/sqm)
- The cover was made of high-strength PC engineering-plastics (high capability of **wearing-resistance, scratch resistance**)
- 16bit processing, brightness up to 3500cd/m2 (**high contrast design, clear playback**, high definition that are **not harm to the eyes**)

DIGITAL FLOOR CONSTRUCTION DETAILS



3. INTERACTIVE DIGITAL SIGNAGE

- Maximize **user engagement** with **durable structure**
- Material: **Toughened glass panel** and **anti-reflective glass**
- Top places locators**, interactive and directional **maps, advertising campaigns, 3D and flash animation**
- Door could be opened, convenient for **maintenance**
- Protected from weather and vandalism** through hidden controls and openings
- With great safety performance because of **anti-theft lock design**

Figure 22: Instagrammable innovative design

CONCLUSION

It is believed that the project of Instagrammable Transit of KL Sentral will give many impacts to on the surrounding landscape and urban imageability in KL Sentral that can overcome the issues that have been mentioned before. The proposed design will also achieve the aim and objectives so that KL Sentral will be enhanced as the state-of-the-art transportation hub.

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