



final architectural design studio

MAGELANG COMMUNITY CENTER

Design of Community Center to Re-Activate The Urban Redundant Space in Magelang Through Inclusive Design Approach

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DESIGN OF COMMUNITY CENTER TO RE- ACTIVATE THE URBAN REDUNDANT SPACE IN MAGELANG THROUGH INCLUSIVE DESIGN APPROACH



AUTHENTICATION SHEET

Final Architectural Design Studio entitled :

**Design Of Community Center To Re- Activate The Urban Redundant Space In
Magelang Through Inclusive Design Approach**

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STATEMENT OF AUTENTICITY

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Tittle : **Design Of Community Center To Re- Activate The Urban Redundant Space In Magelang Through Inclusive Design Approach**

I hereby declare that this design work is the result of my own work and is not the result of plagiarism and does not contain any work that has been submitted for a bachelor's degree at a university or has been published by another person, except in writing referred to in this manuscript and mentioned in the list reference.

Yogyakarta, 15 July 2021
Author



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FOREWORD

Praise and gratitude to Allah SWT for His mercy and grace so that the author can complete design and writing entitled "DESIGN OF COMMUNITY CENTER TO RE- ACTIVATE THE URBAN REDUNDANT SPACE IN MAGELANG THROUGH INCLUSIVE DESIGN APPROACH". This design work was written to fulfill part of the requirements to obtain a Bachelor of Architecture degree at the Faculty of Civil Engineering and Planning Universitas Islam Indonesia. This design work is expected to be useful for the development of architecture and community especially in the city of Magelang and the surroundings.

The writing of this design work would not have been possible without the help of many people. Therefore, the authors would like to thank to:

1. Mr. Henang Widayanto, Mrs. Susiana Suryandari and Titania Juwitasari for their support, attention, encouragement and love for the author every day.
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8. All parties who have helped the design work process that the author cannot mention one by one

The author realizes that there are still many shortcomings in the writing of this writing and is open to criticism and suggestions that are useful in developing this writing.

Yogyakarta, 15 July 2021
Author



Vanidia Vegantara
17512157

design premis

Begins with the issue of limited land and the high price of land in urban areas, causing social neighboring conflicts. Take a case on Tentara Pelajar crossroad in

Magelang it cannot be denied that the density in urban areas can result in neglected or underused areas which give the impression of being slum and not in accordance with the principle of appropriate land use. Oddly enough this invites the appeal of street vendors to sell in a sidewalk area intended for road users.

Closed pathway, the surrounding environment becomes crowded and spatial conflict cannot be avoided This abandoned place should be able to be converted into a space function that is beneficial to the surrounding community, in fact this potential area continues to be bankrupt and neglected.

Magelang square area is a unique part where various communities are mixed in one area. the importance of unity and tolerance between communities, especially religious communities, can strengthen cultural diversity, however, the government's lack of attention has an impact on the perspective of each community. How to provide a place that can unite the community so that they can get to know each other and carry out religious events. this needs attention to strengthen tolerance between communities.

Responding to the above problems, it is hoped that designing Community Center in redundant space with inclusive design approach can contribute to managing abandoned space, activate unused space in urban and also can be used by everyone (design for everyone).

Keyword : Redundat Space, Urban, Public Space, Community Center, Inclusive Design

list of content.

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chapter

01

Pleriminary.

1.1.1 LAND COST ISSUES

According to the Director of Investment Deregulation, the Coordinating and Investment Board (BKPM), land prices in Indonesia are the highest in ASEAN countries, especially in urban areas. This shows that land in Indonesia has the potential for high investment. (21/7/2020). The potential land rise up the demand of land use. Using the land for commercial area, public or government facility even housing, the issues come from the impact of using the land ineffectively. The reduction of land in urban areas has recently triggered neighboring conflicts to fight over land both in residential and commercial areas in urban areas due to higher land prices. (Sunyoto, 27/9/2018)

1.1.2 REDUNDANT SPACE IN URBAN CONSEQUENCES ON DENSITY AND SLUMNESS

Limited land in cities has consequences on density and slumness in various urban environments. From the development of the slum area, various problems have arisen, such as limited public space to accommodate social activities like community gatherings, public rooms, and space for children to play and learn with the nature and surrounding.

In a very large urban area with various infrastructure or facilities and all activities in it, it cannot be denied that several areas in an area can become abandoned areas or called negative space. This happened due to public interest turn to a more comfortable or attractive space, or that place is not in demand due to environmental factors such as their exposed to pollution, arid region or even buildings that are not made in accordance with what users expected and so on. The result is wasted space in the area. Meanwhile we know the land prices are quite high in the urban area. One of the challenges with the lack of land is by carrying re-activate "Redundant Space".

This case also occurred in several points of the city in Magelang with high density. as in the area between Chinatown and Magelang Square, the area behind the Artos Mall, the area of the road connecting the Abu Bakrim stadium and UMM, and there are many other areas that have the same case. the existence of abandoned spaces around densely populated areas or popular areas which in fact should be sites that are potential and targeted because they have high business opportunities.

1.1.3 CONTEXT OF MAGELANG CITY

Mayor of Magelang, Sigit Widyonindito have said Magelang is a satellite city and asked the community to participate in regional development in Magelang (March, 2019). With the development of Borobudur, Kulon Progo Airport, toll roads, and it's strategic location between big cities such as Yogyakarta and Semarang, coupled with the many regional tradition that still well preserved, Magelang has potential to grow in the future.

Talking about the context of Magelang city, Alun- Alun Kota Magelang as the center of the city showing diversity of the community. As the heart of the city, Alun-Alun Kota Magelang become point of unity between differences, one of them come from major religion community. There are three major religion community. Islam, Protestant Christianity, and Kong Hu Chu which their worship facilities are facing to each other. Although having close worship building, the perception of tolerance among religious communities is still low. This can be proven from the separation of regular classes for students who are non-Muslim in the same class at several public junior high schools in the city of Magelang, on the Chinese New Year pagoda which is supposed to worship and is closed to the public, but local tourists still enter it, or some areas in Magelang "claimed" only for the community of a certain religion.

Magelang also known as retired city because it's strategic location and safety. Kepala Dinas Sosial (Dinsos) Magelang City, Wulandari Wahyuningsih propose empowerment of the elderly program. (February, 2020) This program is a form of concern of the City Government of Magelang in fulfilling the rights of the elderly to be able to develop themselves, refunctionalization and development to enable someone to be able to carry out their social functions fairly in community life. But a place or supporting facilities devoted to the elderly in Magelang still need development.



Figure 1.2 Magelang city street view. Source : Google Street View



Figure 1.1 View around Sigaluh Street
Source : Google Street View

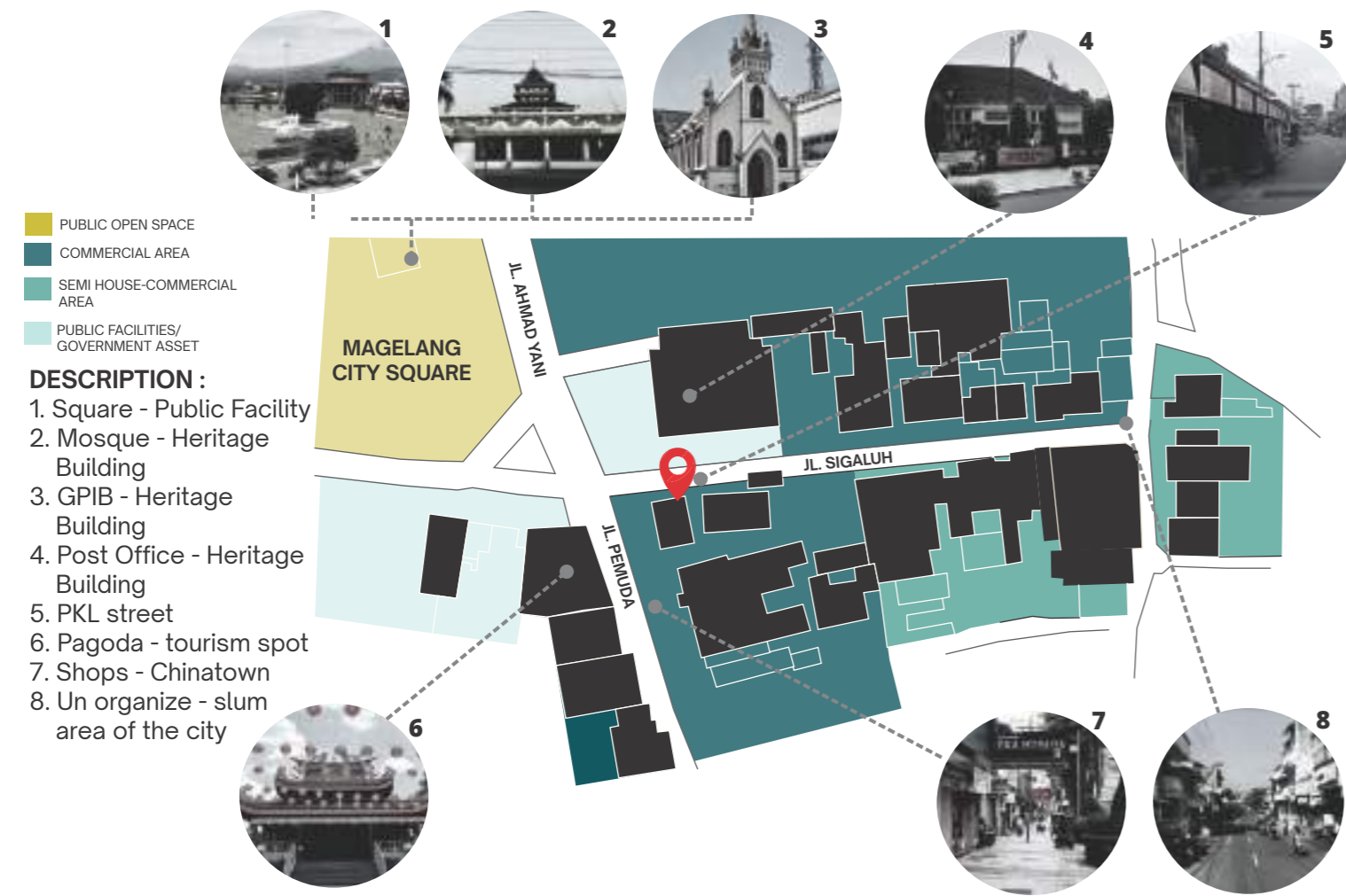


Figure 1.3 Public and Community Area around Alun-Alun Magelang area. Source : author



Figure 1.4 Redundant space and Sigaluh Culinary in Magelang. Source : author

1.1.4 SPATIAL CONFLICT

The location is on the corner of the Pemuda and Sigaluh street which often experiences traffic jams. Pemuda street are notorious for frequent traffic jams, especially during office hours and major events. This road becomes the main access of the 3 main routes to form a bottle neck creating dense flow between the vehicle without any alternative way to exit once they passes. On the other hand, street vendors along Sigaluh street do not have a parking space, making visitors forced to park and fill this 2-way street. The most affected are pedestrians and people who use public facilities around . The aspects of accessibility, comfort, and safety are low.

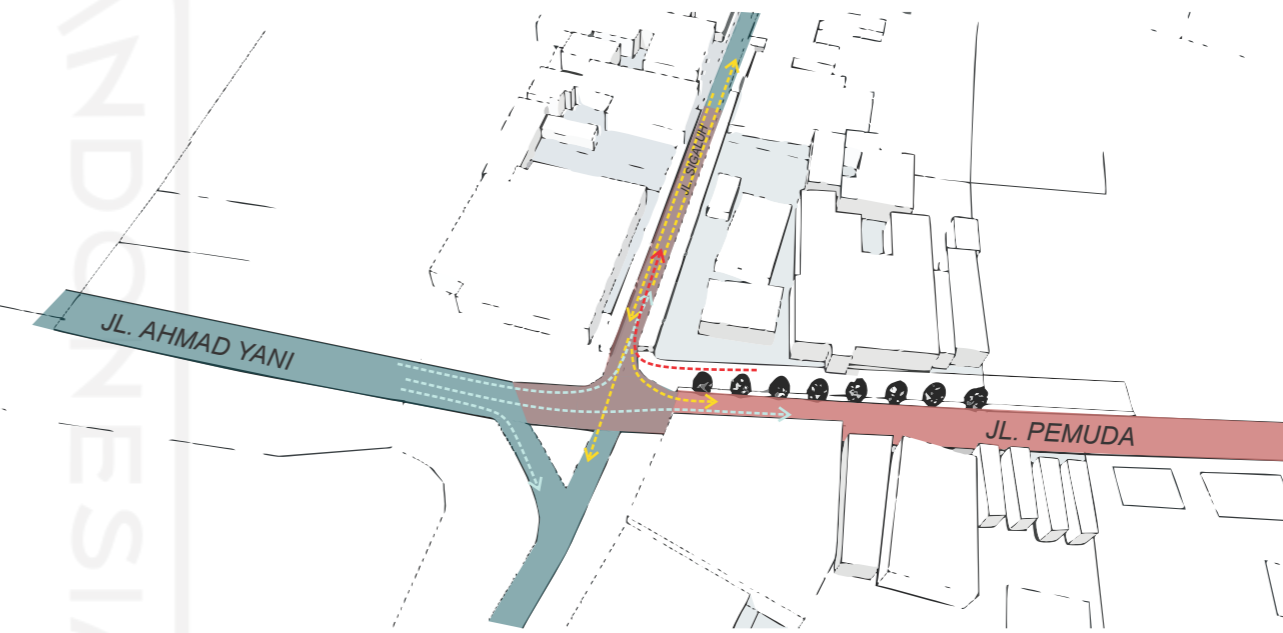


Figure 1.5 Vehicle route and traffic zone in Jl. Pemuda. Source : author



Figure 1.6 Spatial Conflict in between pedestrian, commercial actors and vehicles. Source : author

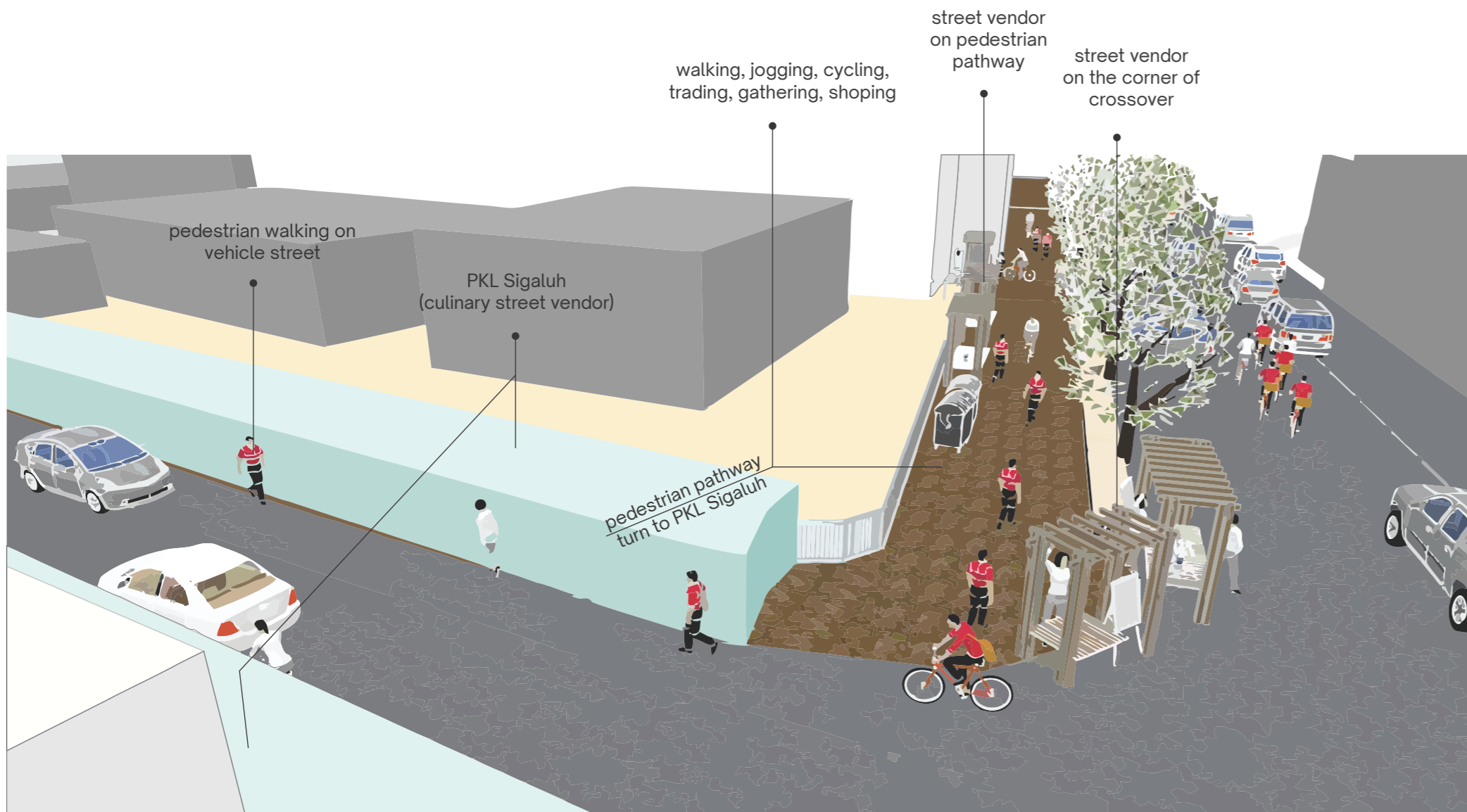


Figure 1.7 Neighborhood activity in between Jl. Pemuda and Jl. Sigaluh. Source : author

Sidewalks are built for pedestrian use. In several cases, this path is misused its original function. For example, the pathway provides by the government at the location of Jalan Tentara Pelajar Magelang. The pathway was renovated intended for pedestrians, bicycles, and (becak). Due to a very strategic location as the center of a profitable commercial area the use of this pathway no longer can be defined. The street vendor started to fulfill half of the pathway for trading. It is questioned whether the legal enough Some motorcycles who broke the rule passing this pedestrian pathway without looking at the safety for people are walking there. New spatial space functions are formed because a variety of everyday activities happened.

The other side of the crossroad was pedestrian way but turned to Sigaluh Culinary and blocked the access. This street vendor culinary area initially only passed around the area. Seeing a large number of consumers they finally settled and the government facilitated the

street vendors who are now contributing to the culinary program around the Magelang city square area. This street vendor dining area takes up the pedestrian side of the road on two sides. whereas Jalan Sigaluh is a very active main road. Due to this change, pedestrian have to walk in the street.

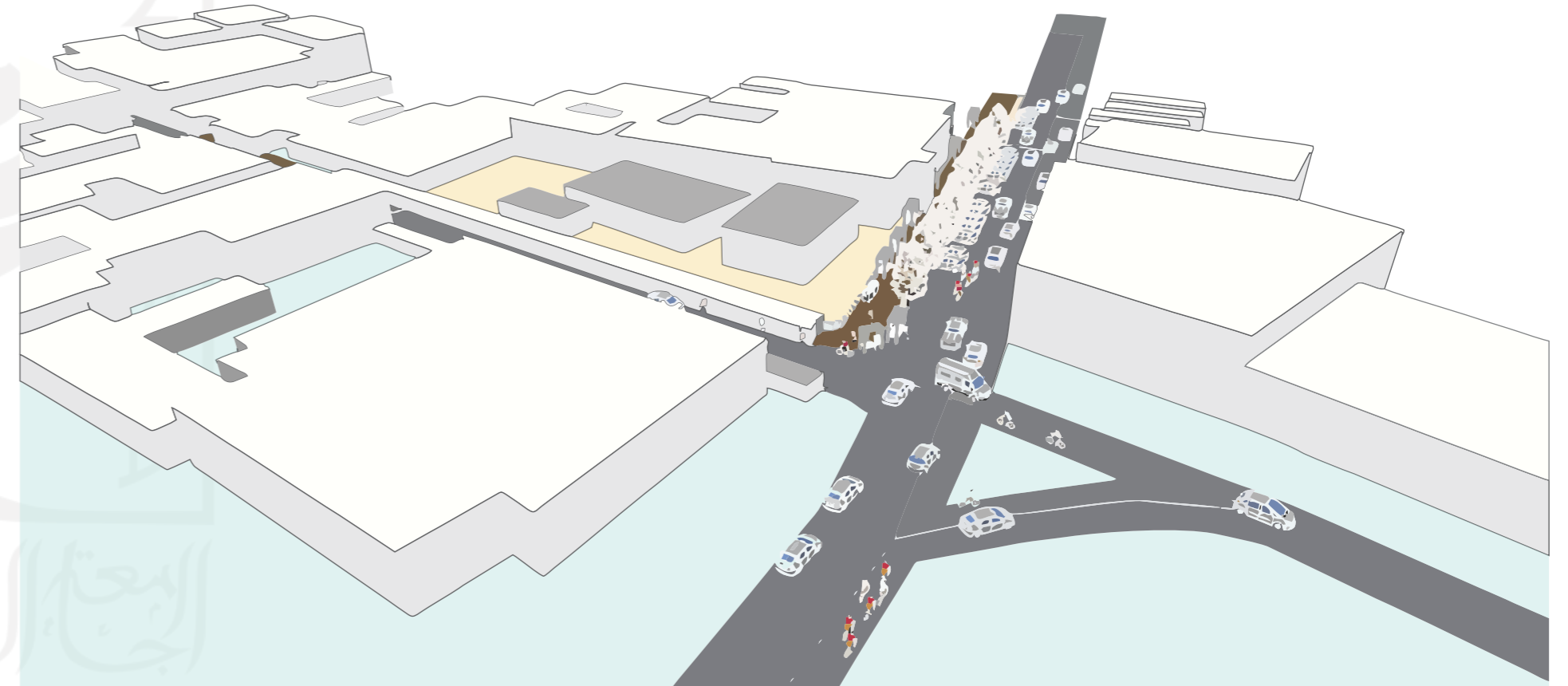


Figure 1.8 Neighborhood circulation. Source : author

1.1.5 LOCATION

The design will be located in Jl. Sigaluh, Panjang, Kec. Magelang Tengah, Magelang City, Central Java. The location is in the center of the city, easy to access by any vehicle. The site facing 2 main street : Jl. Pemuda and Jl. Sigaluh. Around the Jl. Sigaluh street occupy by street vendors.



Figure 1.9 Current Situation Of The Site. Source : author

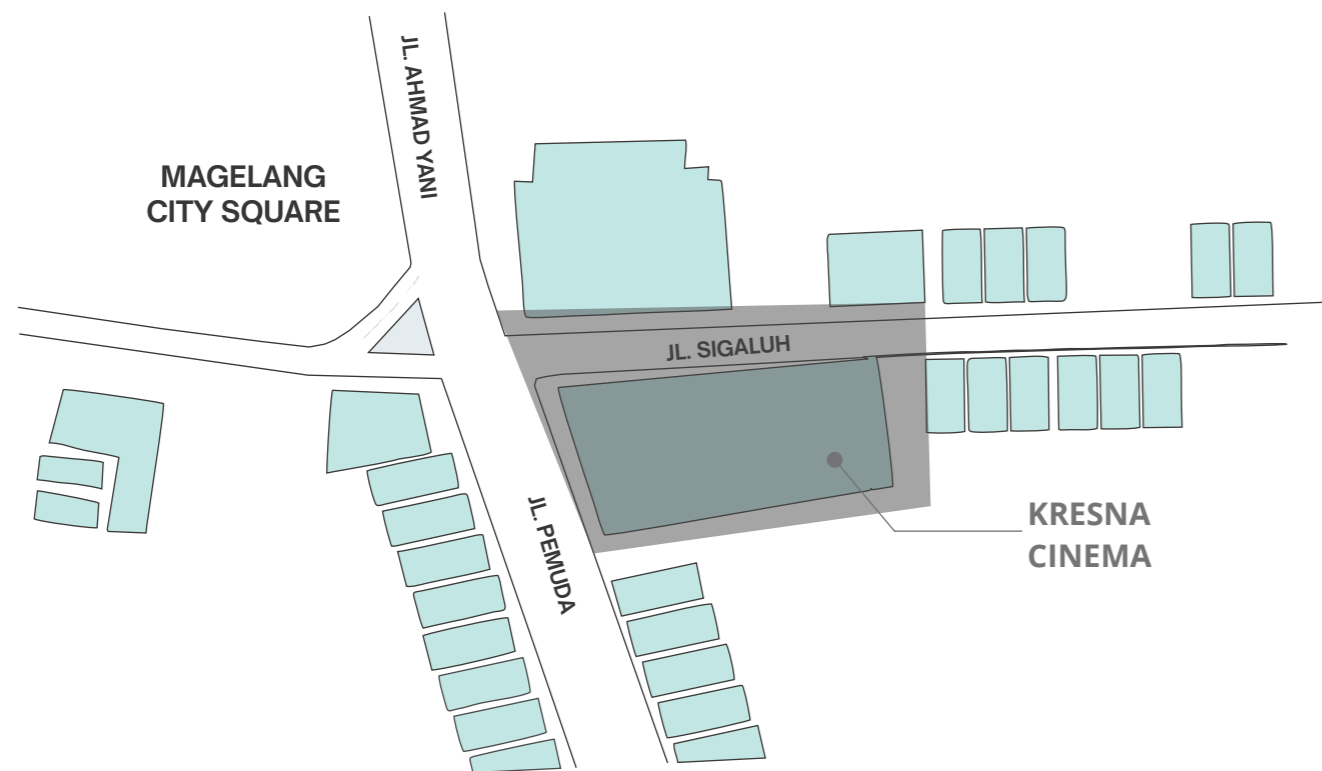


Figure 1.10 Site Situation on 1995. Source : author

a. Site Area

Total area : 3.865,98 m²

The calculated area is the site area, Sigaluh culinary area and Sigaluh street

b. Site Identity

KRESNA CINEMA

1955 - 1995

Formerly this place was a very famous cinema in Magelang. the location was a popular spot in Magelang in the past. Based on interviews with local residents, the building was demolished because the building and facilities were too old and there was no renovation effort (a new cinema will be built elsewhere). after that there was no attempt by the government to develop this area.

SHOP

1996 - 2017

From year to year this place is occupied by various shops but it does not last long / goes bankrupt. Until 2017 it remains unchanged, becoming a **redundant space**

Abandoned

2017 - now

Existing buildings were destroyed and only the front facade was left. the site is not used and gives the impression of being rundown in the area around the square

c. Sigaluh Culinary

One of the government programs to organize the city and improve the culinary economy of Magelang. 26 street vendors line the sidewalk of Jalan Sigaluh

KRESNA
CINEMA

1955 - 1995

SHOP

1996 - 2017

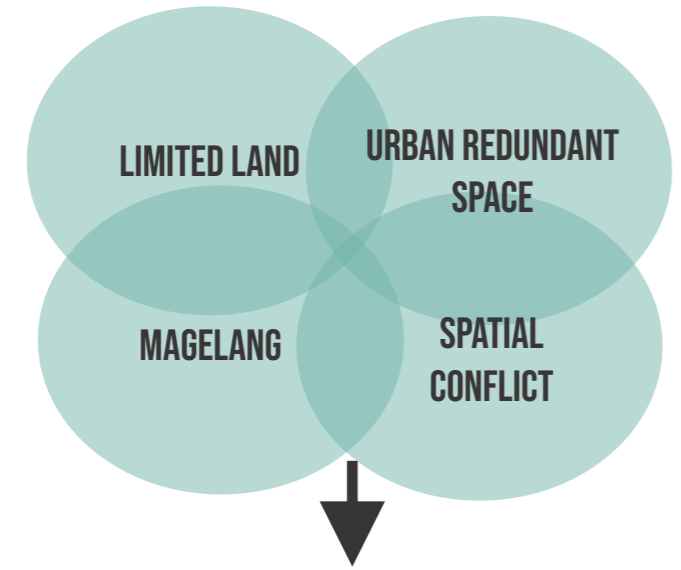
ABANDONED

2017 - now



Figure 1.11 History of the Site. Source: Google & Author

MAP OF PROBLEMATICS



non architectural issues

<p>Unused space in urban areas is one of the waste of land and create slum area raises, while land is getting less and more expensive</p>	<p>Space needed for religious communities that can be used for all kinds of users</p>	<p>Imbalance between the unused space in the land and the bustling culinary environment beside it</p>
---	---	---

architectural issues

<p>Variable of Public Redundant Space to activate the unused space to attracting place in urban</p>	<p>Lack of elderly and children environment in the city of Magelang</p>	<p>Design Community Center from redundant area in the urban to host the surrounding community</p>
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Figure 1.12 Map of Problematic. Source : author

General

1. How to design Community Center and public space in urban redundant space to re-activate underused urban space in Magelang?

Specific

1. How to design a community center in a redundant space for children that provides safety of movement and accessibility?
2. How to design a community center in a redundant space for elderly that provides safety of movement and accessibility?
3. How to design a facilities for faith event to host religious communities in the city of Magelang (Muslim, Protestant Christianity, Kong Hu Chu) where the communities can mingle with each other?
4. How to integrate a community center with street vendors in Sigaluh culinary that can overcome spatial conflicts on Sigaluh street while maintaining the uniqueness of Sigaluh Culinary as urban characteristic of Sigaluh area ?

GOALS

General

1. Design Community Center and public space in urban redundant space to re- activate underused urban space in Magelang

Specific

1. Designing a community center in a redundant space for children that provides safety of movement and accessibility.
2. Designing a community center in a redundant space for elderly that provides safety of movement and accessibility.
3. Designing a facilities for faith event to host religious communities in the city of Magelang (Muslim, Protestant Christianity, Kong Hu Chu) where the communities can mingle with each other.
4. Integrate a community center with street vendors in Sigaluh culinary that can overcome spatial conflicts on Sigaluh street while maintaining the uniqueness of Sigaluh Culinary as urban characteristic of Sigaluh area.

1.3 design method

A. INCLUSIVE DESIGN METHOD

It is assumed that design is a configuration of various aspects. Design considerations can have "entrances" for each person in different contexts. Likewise designs can have different "handles" for each person and each context on each purpose. The design constraints of Inclusive Design are very different from the Universal Design concept. While Universal Design is about creating a general design that fits everyone, the inclusive design method has the freedom to create designs that can adapt, change, or expand to meet every design need for each individual. In this case, the design boundaries are not individuals but communities.

The empathise applied in the method is by looking at the exclusive elements of the perspective user community. Understand the special needs or behavior of the community and how comfortable the user will feel (user experience). Inclusive design is about empowering users, not imposing personal assumptions.

Inclusive design aims to achieve accessibility by providing a framework for the safety, health, productivity, enjoyment and autonomy of site and building occupants. Evaluating alternative strategies for site design, spatial organization and pathfinding, individual space design, and selection of environmental controls and furnishings.

B. SYSTEMATIC METHOD BY ARCHER

The design method that will be used is a systematic method :

- A. **Programming**; Process of determining a frame of mind and determining important issues.
- B. **Data Collection**; Collecting the data, classifying and storing data related to typology and design themes
- C. **Analysis**; The analysis identifies sub problem, provides performance specifications (or draft), re-tax the proposed program and estimate
- D. **Synthesis**; Synthesis prepares an outline of the design proposal
- E. **Development**; Design development, after that prepare and run design tests by simulation
- F. **Communication**; Communication prepares production documents such as DED, RAB, RKS, report book and other documents. But in this case, the documents product will be show limited to DED or drawing.

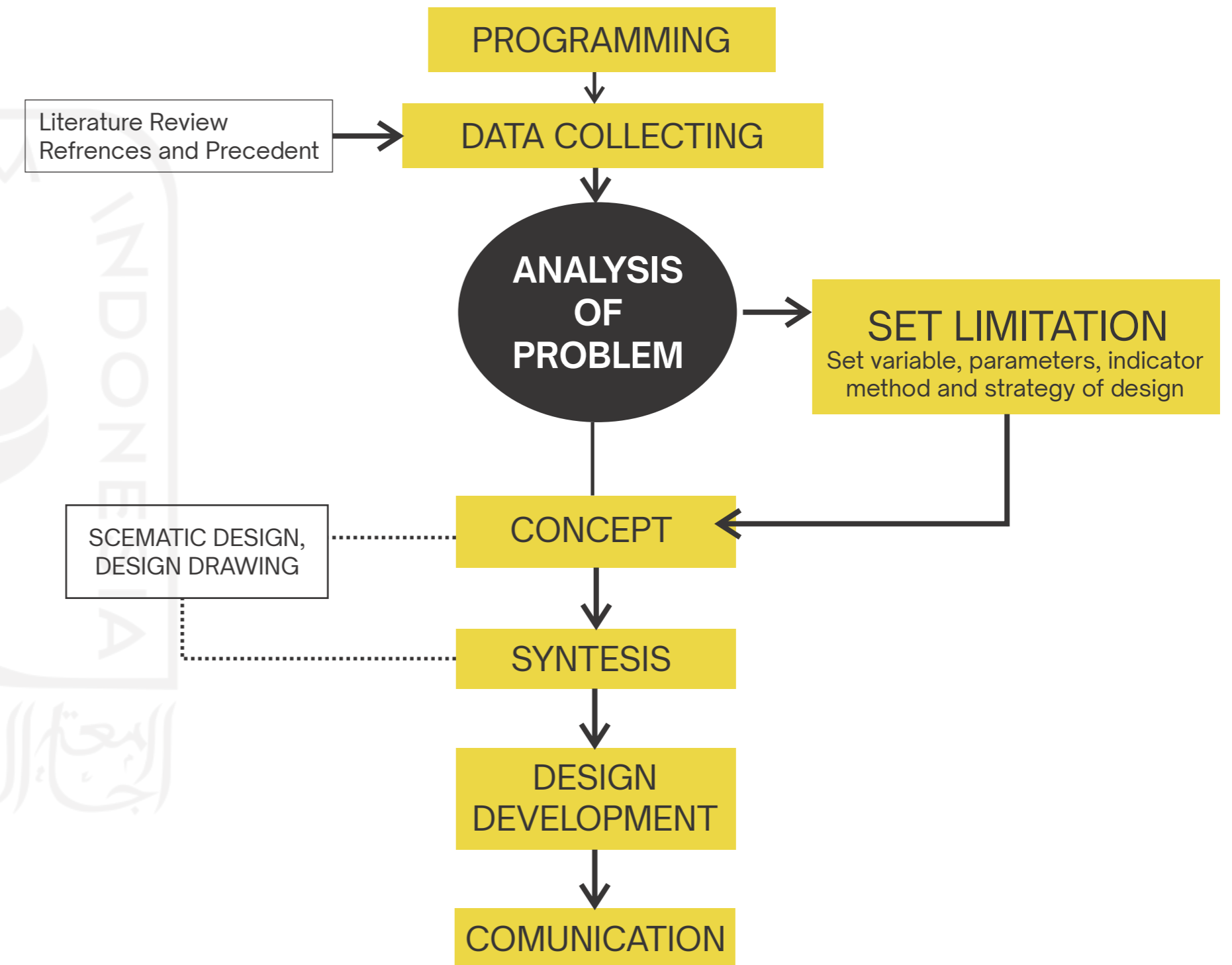


Figure 1.14 Design Method Diagram by Archer

C. DESIGN SHCEME

The design process starts from the description of issues and determined the most crucial problem or happen or needs in the society. Formulate problems and define design boundaries. Then determine the indicators and parameters as well as the design strategy based on the studies and typology that have been studied. To achieve the indicator the strategy in making design and deal with the context should be formulated.

The next stage is to make a pre-design of the related analyzes. The design is evaluated by design tests to see the success of the design can solve the problem. The evaluation method is using simulation to show how the design work. Design development is carried out to improve the design.

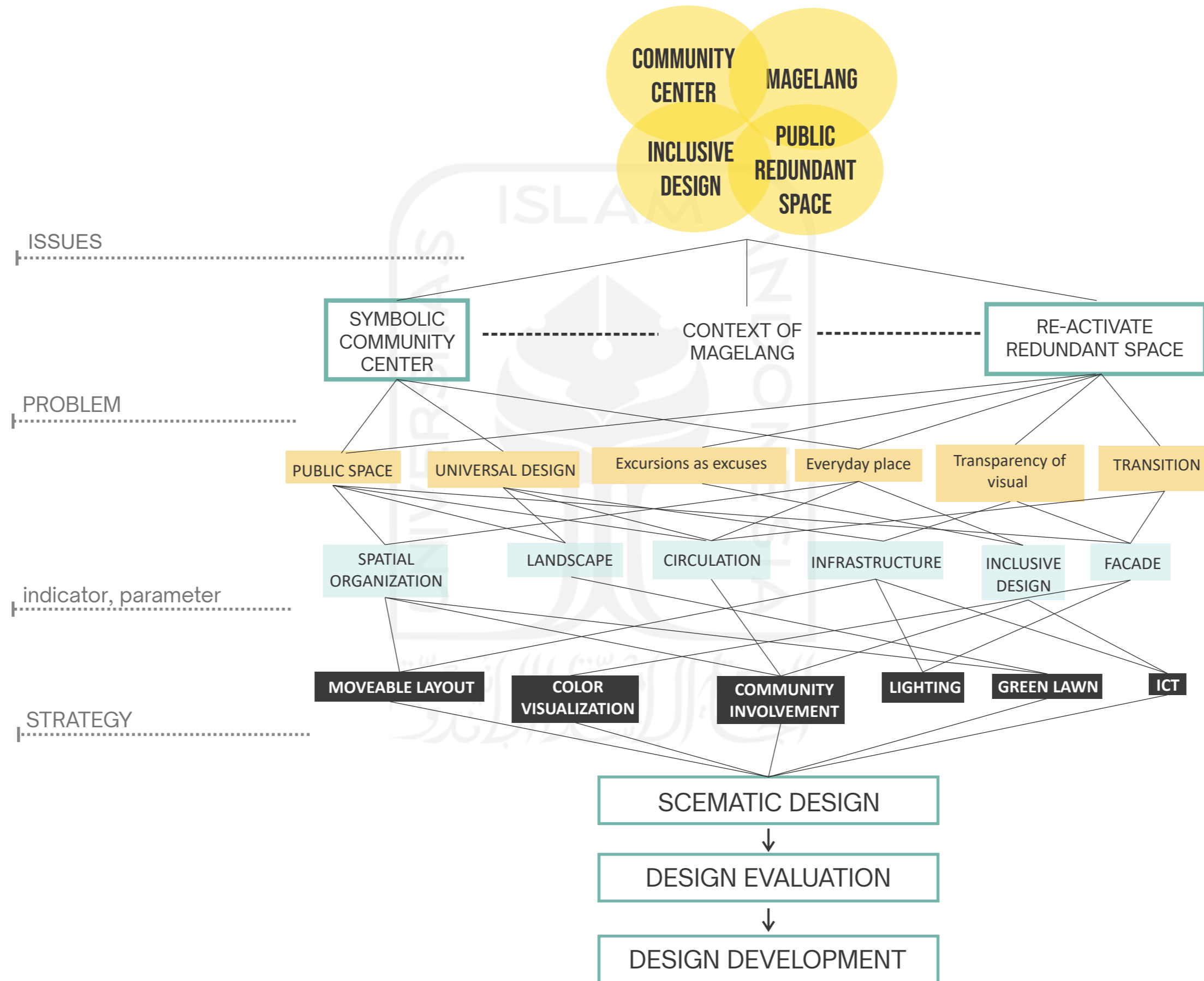


Figure 1.15 Design Scheme. Source : author

1.4 design framework

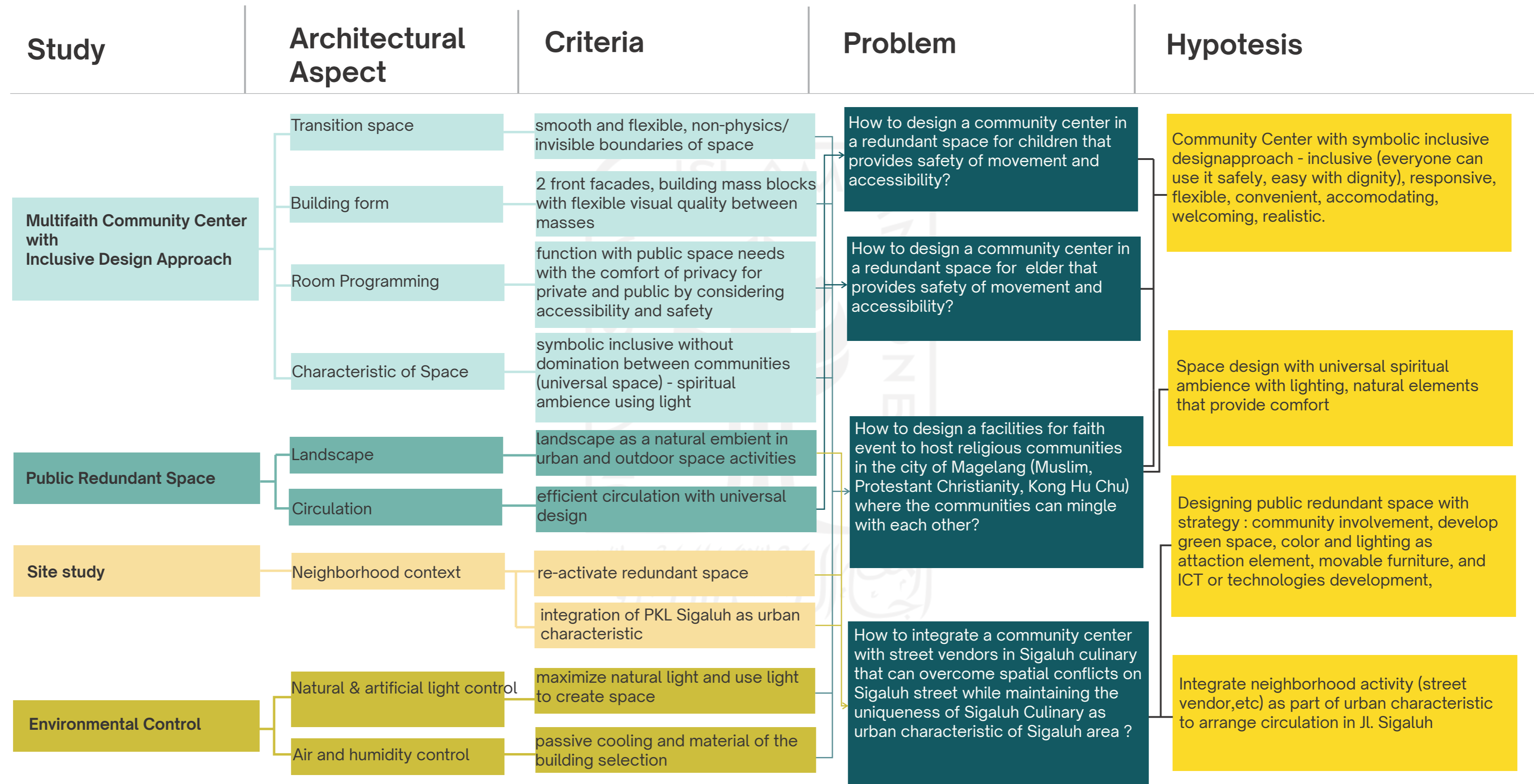


Figure 1.16 Design Framework of Magelang Community Center. Source : author

1.5 originality & novelty

The following is a community center design work with a different approach to show that the work that will be carried out through this proposal has originality or has never existed before

Table 1.2 Originality and Novelty by Author

NO	NAME	TITLE	APPROACH	TIPOLOGY	LOCATION	YEAR	DIFFERENCES
1	Riesky Destryawan Purnama	Sukoharjo Community and Creative Center	Creative Economy Architecture	Community and Creative Center	Sukoharjo	2019	Building facade that can reflect the function
2	Mita Kumalawati	GENENGADAL COMMUNITY CENTER (Sebagai Pusat Kegiatan Belajar Masyarakat dengan Pendekatan Desain Arsitektur	Vernacular Architecture	Community Center	Genengadal, Kabupaten Grobogan	2017	Design focusing on Vernacular Architecture approach
3	Juniawan Adhari	Penerapan Konsep Ruang Luar Pada Desain Community Center Di Kota Tangerang	Spatial Impact Concept	Community Center	Tangerang Selatan	2017	Designing with Spatial Impact Concept
4	Risya Agus Arifah	YOUTH CENTER DENGAN PENDEKATAN ARSITEKTUR REGIONALISME DI KABUPATEN MAGELANG	Regionalism Architecture	Youth Centre	Kabupaten Magelang	2015	Designing with regionalism Architecture approach
5	Fahry Adam	SEMARANG YOUTH AND COMMUNITY CENTRE	High Tech based on Charles Jenks	Youth Centre	Semarang	2014	Designing with High Tech concept based on Charles Jenks
6	Putri Sabrina Vrata	PERANCANGAN PUSAT LANSIA (SENIOR COMMUNITY CENTER)DI YOGYAKARTA DENGAN	Semioyic Method	Community Center	Yogyakarta	2014	Designing with Semiotic method approach
7	Almesa Yuli Hasyati	COMMUNITY CENTER DI BSD CITY	Green Architecture	Community Center	Tangerang Selatan (BSD)	2012	Designing with Green Architecture

chapter

02

Study Of
Design Problem

2.1 design study pleriminary essay

A. Redundant Space

According to Collins dictionary, redundant means no longer needed. Redundant can also means things that are unnecessary or could be left out. The concept of Redundant Space is an idea of repeated use of space, which prioritizes land that has more potential to be reused as a public space with multi-functional characteristics (Chih-Hung Chen, 2015).

Redundant Space Serving as Transition Medium. To harmonize two sides, neutral elements, so called medium space in architecture area, are commonly added to make them move towards positive direction. Architects usually focus on the location of spatial entities despite of the space among entities. The non-utility space, in a sense, is equal to medium space which skillfully connect entities and utility space (Lin,2013).

There are two different kinds of outdoor spaces, negative space and positive space (Alexander,1997). The specific shape of a room determines the quality of the room, so the shape of the outdoor space between buildings is as important as the shape of the buildings that surround it. So, when we talk about it's redundant space, that means we also have to pay attention to the "in-between space" around it.

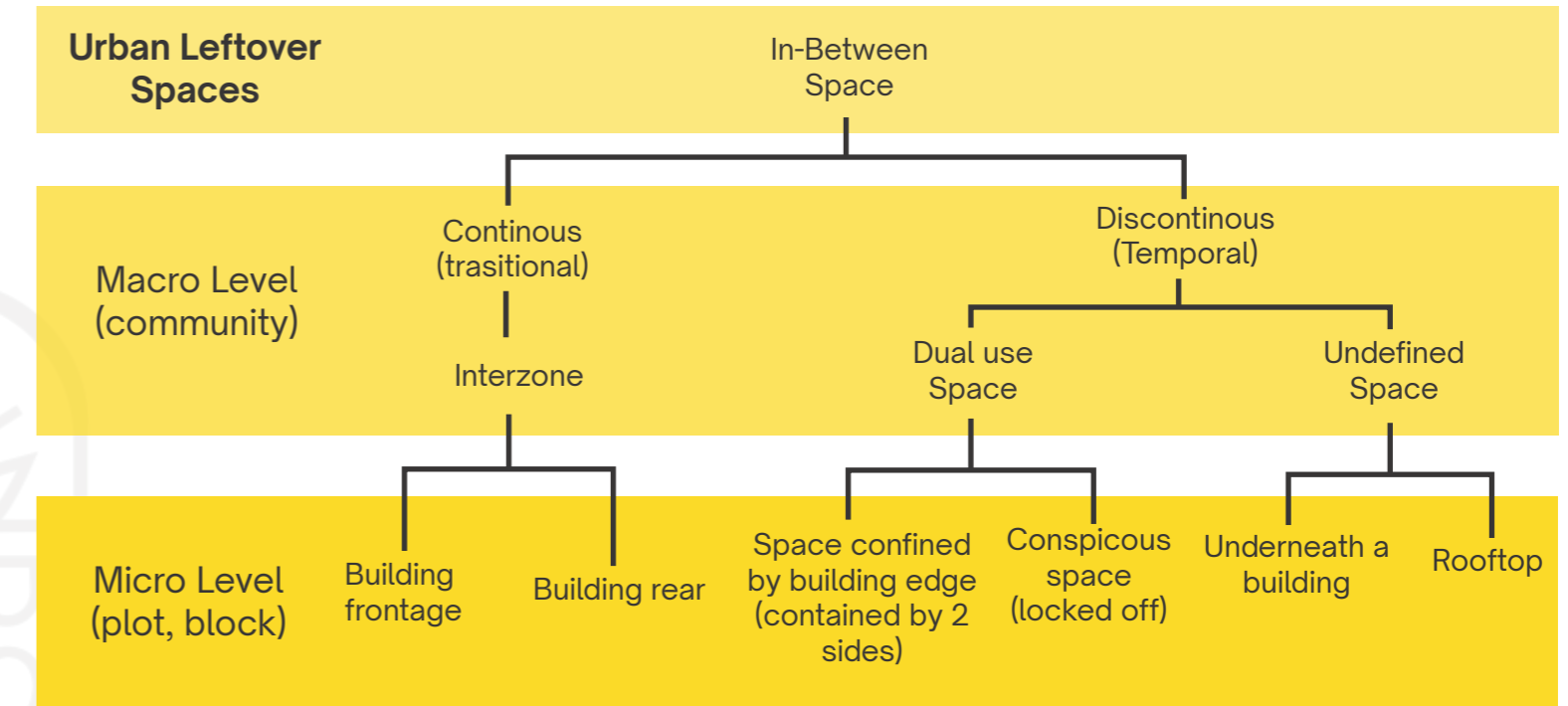
The term in-between space can refer to spaces of absences, voids, and gaps between object forms (Piccinno and Lega n.d.). They are the edges and the leftover space, which is always present in urban design and architecture and that tend to unintentionally collide or create divisions that are not profitable. The in-between spaces within urban areas divided into two qualitative categories; space, continuous spaces (those in transition where dimensions of time), and other circumstances are relevant.

Kleinsasser describes how transitional space can provide certain qualities of providing space for various activities, events and phenomena and inducing strong responses in users, leading to potential uses and give them opportunity for:

1. Retreat, withdrawal, and pause without invasion or force.
2. Interaction in spontaneous.
3. Detached participation and interaction.
4. Either uniting or separating appose spaces.
5. Spatial clarification and sequences, strengthening definition of adjacent spaces.
6. Connection, orientation, and transition-making,making it possible to shift attention between one place, spaces, or one occasion to another.

B. Everyday Place

The renowned humanistic geographer Tuan (1977) believed that the human experience, as both thought and feeling, transforms a relatively abstract notion of space into a relatively living and meaningful notion of place. Human experiences as well as human activity will create new space. In the context of this crossroad area in the urban area, the activities are come from trading by street vendors, activity in the commercial area around the site, the square as a public space and its activities, religious activities from mosques, temples, churches around the square, post offices, educational facilities, vehicle from road and pedestrian activities.



Classification for in-between spaces by Jazim Ashar

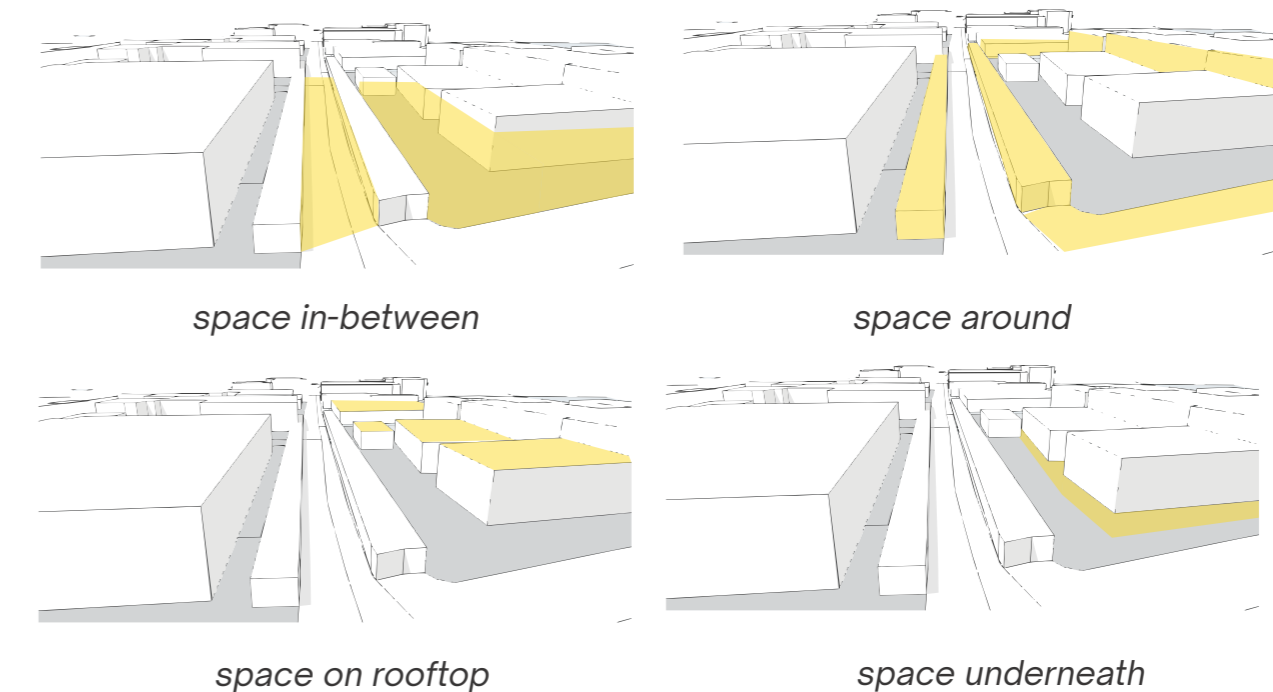


Figure 2.1 Different space found around the area. Source : Author



C. Inclusive Design

CABE, the government's advisor on architecture, urban design and public space mentioned *Inclusive design* is about making places everyone can use. Inclusive design considers the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference (Inclusive Design Research Centre). The aim of an inclusive design is to remove the barrier caused by the inequality of users with different background and needs. Create designs that everyone can participate equally in everyday activities. This inclusive approach design offers new insights of how we perceive the needs of our users and how we interact with the built environment

Principle	Description
Places people at the heart of the design process	Inclusive design seen as an essential component of sustainable communities.
Acknowledges diversity and difference	Recognises the wide diversity of different needs including wheelchair users, but also sensory impairments, learning difficulties, mental ill health, hidden impairments and the needs of children and parents.
Offers choice for users in acknowledgement that a single solution that fits all users is not possible.	Accommodating for all people regardless of their age, gender, mobility, ethnicity or circumstances.
Flexibility in use	Link to sustainable principles by acknowledgement of the need for adaptability in design to meet different needs at different stages.
Convenient and enjoyable places for everyone.	Well connected buildings and streets Understandable so that everyone knows where they are and can locate their destination.

Figure 2.2 Principle of Inclusive Design by CABE

Symbolic Inclusive Design

Symbolic inclusive design which refers to how to create a place where every religious community can carry out activities without feeling domination by other communities. Quoted from the Aeroville city design concept with a universal design concept for community diversity, the concept says that to create a religious place without the domination of one religion or it can be said that it can be used for all people is to eliminate religious elements in the form of certain symbols which become religious representation. using the strategy to create a sacred place that gives a feeling of being in a sacred place / place of worship is preferred.

Inclusive Design in Landscape

Several factors contribute to the use and function of space on the site, such as sensitivity to social context, continuity of circulation, sympathy with the local ecology and natural environment, and movement, and selection of suitable materials. Manipulating topography is one of the first acts, and one of the finishing actions, in the design process, inclusive site design comes from understanding the cultural context.

When modifying the topography of the site through assessment, the following three problems

1. Wayfinding

A continuous road that is designed spatially using a variety of materials, and provides a clear direction of the path can improve the quality of how the road provides guidance, especially among people with visual and cognitive impairments.

2. Ease of movement

Integration of the building function, area for rest and its circulation systems to manage steep sides and paths of travel

3. Safety and comfort

Mitigate extreme heat and cold, wind, humidity and rain by having well-designed site integrated with wayfinding. By planting shade trees or providing windbreaks. natural terracing and pathways that use their length to overcome slope differences, natural contours can be main tained and manipulation of topography is less drastic

Safety For Universal Design

Universal Design Principles were developed in 1997 by a working group consisting of architects, product designers, environmental design engineers and researchers, that is led by Ronald Mace from the North Carolina State University. Purpose of principle this is to guide environmental design, products and communications. According to the Center for Universal Design at NCSU, universal principles design can be applied to evaluate existing designs, guiding the design process and educating designers and consumers about more useful and product characteristics environment. The main principles are universal design, namely:

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

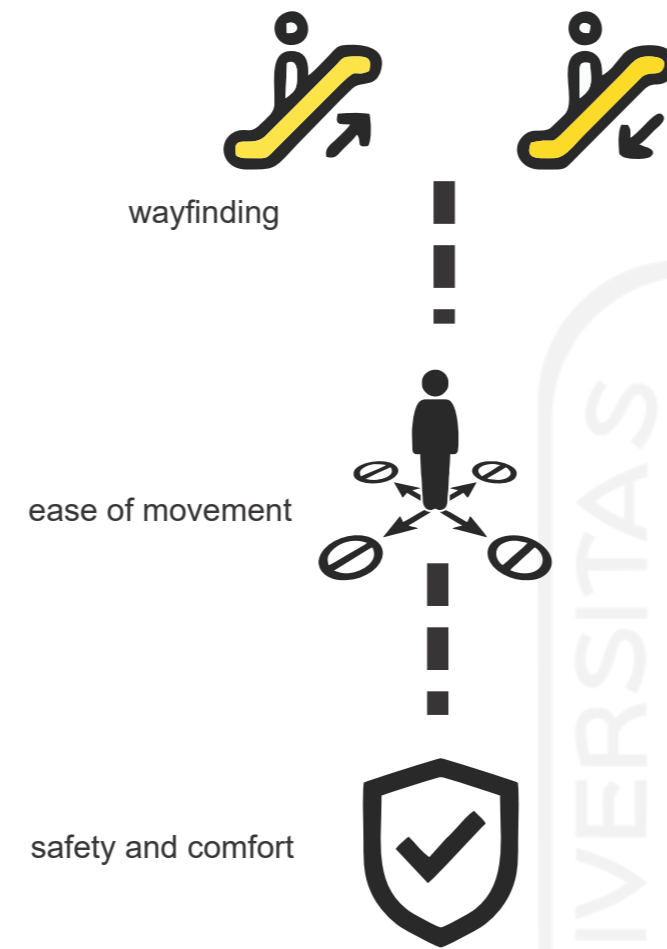


Figure 2.3 Inclusive Design In Landscape by Author

D. Multifaith Space

The main essence of a place of worship is the spiritual feeling that is given in that place making it a sacred place. Yiling Shen (2018) states that even a place of worship such as a mosque minaret can change its religious ownership to become a church and so on. the essence of a place of worship is not judged by ownership but by how it produces a spiritual sense.

Andrew Crompton, Head of the School of Architecture at the University of Liverpool conducting observations on multi faith spaces in public facilities, he described them as "mundane spaces without an aura", try to not mentioning meaningful symbol in the design, they avoid order and regularity, use common materials, and fit the architectural equivalent of noise ambience. Attempt to promote unity by cut away anything that symbolize the sacred, leaving us with nothing but equality. Then how to create a space to have a spiritual ambient? There is so many way of creating architectural conditions.

First, it can be learned from the structures of the past. Recreating an atmosphere of self-reflection and admiration without the need for religion. Through form, space, height, scale, and materiality. The role of spiritual space can begin to form a new typology of sacred place without showing any symbol of belief.

The second way is explain by Louis Kahn who believed that silence and light could created spiritual spaces. Shows in his projects, Salk Institute, where a program of religious worship was not essential to the creation of a sacred place but how the space can give the sense of spiritual it self. Playing with the light and shadow, his architectural works pertaining the philosophy of "even a space intended to be dark needs mysterious opening with enough light to show how dark it really is".

The third way is through the use of nature. The shadows cast by the branches of an ancient tree, the sound of wind whistle through the pine tree, the way the ocean laps gently against the shore, or all moments in nature from god's creation that create a sense of tranquillity, working to uplift the human spirit to god or to living creatures.

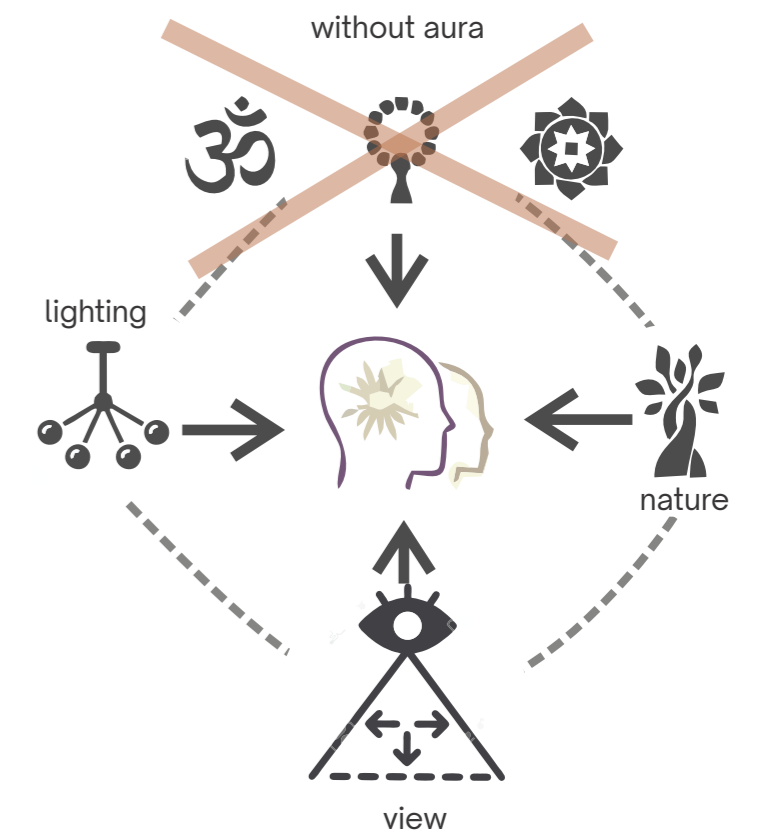


Figure 2.4 Spiritual Multifaith Space by Author



AUROVILLE - city of dawn

Designed by French architect Roger Anger, Auroville is a universal city dedicated to the spirit of human unity based on the ideas of Sri Aurobindo. Wants to show the world that future realizations in all fields of work will allow us to build beautiful cities where people sincerely looking towards a more harmonious future will want to live. the most remarkable concepts of Auroville is its master plan, where all the branch of the city will centralized to one point which resemble 'arms' or Lines of Force seem to unwind from a central region.

At the centre stands the Matrimandir, the "soul of Auroville", a place for individual silent concentration.

Radiation out beyond the Matrimandir Gardens are four Zones, each focusing on an important aspect the township's life:

- o Industrial (north)
- o Cultural (north east)
- o Residential (south/south west)
- o International (west)

Surrounding the city area is a Green Belt consisting of forested areas, farms and sanctuaries with scattered settlements for those involved in green work.



Figure 2.5 Auroville landscape by auroville.org

In its multiplicity of styles and typologies is an expression of its core values and reflect the socio-economic, cultural, ideological, ecological and climatic factors of the location. The role of technology cannot be ruled out in the pursuit for sustainable living. The word is commonly misunderstood as engineering and advanced materials learned from the past, using basic materials with innovative solutions and building structures that are long-term and user-friendly rather than becoming iconic buildings that have no relevance to the context, natural environment and behavior of users.

martimandir

Matrimandir giving meaning to auroville where a place can describe diversity by becoming a symbol without giving certain dominance to a people or culture. Images made of it are different in different faiths. Using the most important core philosophy where every religion worships its god even though the way is different. The most important thing is the relationship between individuals and their god. The concept of Matrimandir, namely universal or so-called "universal mother", focuses on how a place can be used universally by every individual to worship. Architecture has an important role in carrying out this extraordinary concept. How to place an atmosphere that reflects the experience of a sacred place, meditation, and giving **sincerity, humility, gratitude, perseverance, aspiration, receptivity, progress, courage, goodness, generosity, equality, peace**

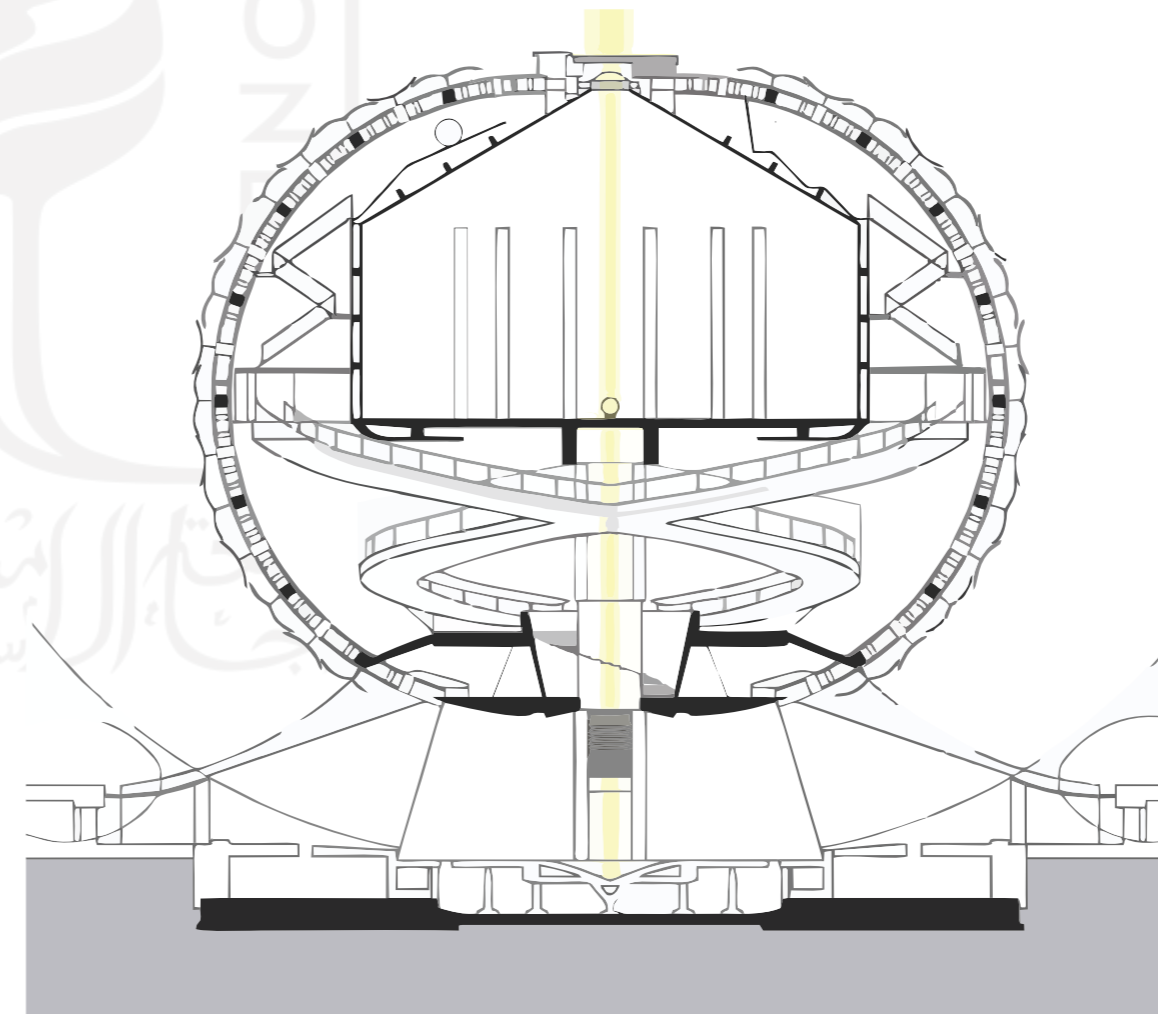


Figure 2.6 Matrimandir section by auroville.org

**"The most important thing is this:
the play of the sun on the centre.
Because that becomes the
symbol, the symbol of future
realisations."**

**"Sacred Geometry by forming
Golden Section giving new symbol
and expressed special place "**

2.2 typology and precedent essay

There is various speculation about abandoned building currently vacant. Owner hopes this will raise a high score, but in fact leaving the building unnoticed can lead to vandalism or looting. To create positive impact, enhance the image of the environment and the space itself can be overcome with temporary use of the empty building. Buildings tend to look more attractive with a lively appearance, and tend to be more cared for by users

Inequality in cities can be used in various ways depending on the needs of individual neighborhoods. Buildings can contribute to improving the environment. If the former vacant space acquires a previously unfulfilled purpose in the environment, it increases the occupancy of the area as a whole (Anja Graner, 2017).

A. Community Center

Community Center is a space in the form of a building or complex that unites various functions (multi-use) by adjusting the character of the area, the needs of the population and the behavior of certain community groups (Almesa, 2012). Community Center has the meaning of a special space, or a place that accommodates a certain activity for the community. Community center is a public place or location where community members tend to gather for group activities, social support, public information, and other purposes for certain groups or community.

According to Crow and Allan (Wenger, 2002: 4), the Community Center can be divided into 3 components, there are :

- Based on the *location of the place*, formed by the interaction between several groups in the same roof or neighboring areas
- Based on *interest*, formed by the presence of a particular interest or interest, for example: the music community, the art community, the nature lover community and so on which will produce certain spatial functions
- Based on *Communion*, formed based on certain ideas which are the foundation of the community itself, for example: a silat college, a political party and others.

B. Public Space

Public spaces can provide people with many opportunities to meet each other and interact between communities. The success of public space can be seen if the public space is inclusive of the different groups that exist in an area and can create social space for everyone in the area (Jagannath 2016).

Public space is a container that can accommodate certain activities of the community, both individually and in groups, where the form of this public space is highly dependent on the pattern and composition of the building mass (Rustam Hakim 1987). Typology of public space emphasizes the character of its activities, the location and processes of its formation. Carr et al divided the typology of public spaces including: roads, playgrounds, green lanes, indoor shopping, spontaneous spaces in residential areas, community open spaces, squares and plazas, markets, waterfronts. there is passive engagement (passive engagement) and active (active engagement) in the use of public space.

C. Flexibility By Spatial Redundancy & Open Plan

An architectural work is said to be flexible if it has different values according to different levels of the surrounding environment (De Gory, 1998). Flexibility is achieved by creating a large space, flexibility by spatial redundancy, namely the presence of a large area of space as it is done based on how in a certain period of time. the room can be changed according to the demands of the desired function.

D. Public Redundant Space in Urban

Design Criteria of applied to the design object in order to achieve the goal of public redundant space in urban areas based on Magelang city community user targets are :

Table 2.1 Design Criteria to achieve goals of public redundant space in urban

Design Criteria / Community Characteristic	Smooth transitions between public and private areas	Transparency of visual	Everyday Place	Excursion as excuse (Be able to provide destination of physical needs, such as eating, drinking, sleeping, and so on)	Universal Design
General user/average	having open public spaces with shape or distance providing specific clusters or zones for each group / individual	can see in all directions	Gathering, eating, audience of performance, shopping, walking	Public Space, Exhibition Hall, Culinary area, Community Activities room	Function of space for all user
Children	open space with an eye-catching form and facade with playful color mix or lighting	easily supervised by parents	Playing	Playground, Culinary area, Public Space	
Elder	having open public spaces with shape or distance providing specific clusters or zones for each group / individual, easy access	can see in all directions	Gathering, eating, audience of performance, shopping, walking	Public Space, Exhibition Hall, Culinary area, Community Activities room	
Students or office worker	tend to prefer private spaces for small work groups	can see in all directions but public can't see	working, meeting	Co-working space, F&B Corner	
Local artist	fully open space, accessible to all users	can see in all directions	painting exhibitions, shadow puppet shows, art performances or corner music	Public Space, Stage, Exhibition Hall, shops	
PKL and trader	fully open space, accessible to all users	can see in all directions	sell food by cart or warung	Public Space, Culinary area, shops	

D. Universal Space

Mies van der Rohe first bring the term of “universal space” to describe a kind of long-span single-volume flexible enclosure. Universal space can be said to be a space that can accommodate various uses and activities, ranging from uses for industry, economy, transportation, sports, recreational activities and so on. In addition, the tipology of universal space is the massive space with the highest flexible space, which can be modeled or adapted to suit almost any user need.

Theory of Mies van der Rohe also mention about how the structure play a big part to create universal space. With the key is “less is more”, which means the simple the structure will give bigger flexibility for universal space. There are several method to develop universal space with clear structure. The first one is considered minimal structure with free flowing open space. The structure are mainly simple structure but it gives the transition of space for the user by it's structure.

Movable textured vertical wall planes in different materials. instead of using fixed walls, it is better to use partition walls that can be moved and shaped as needed. Partition walls can be distinguished using textures. Apart from differentiating boundaries, different textures can provide different experiences for the user.

Regularity, columnar or modular will give simplicity of the space. The highlight of the space will be on the activities held by the user. The modular grid will can devide space equally and symetrically. Modular structure also give efficiency in the term of structure, utilities and cost.

Integration with nature and surrounding. Not only structure necessary but the space should show how it's mingle and adapt the nature and surrounding condition. The context will give characteristic to the space as every surrounding have their uniqueness. The elements that exist in the environment can create universal space by accident. for example an alleyway whose original function was only for main access, but because of its strategic location people tend to go there to gather, play or even trade. These factors explain how important it is to respond to and integrate structure with its nature and surroundings

less is more

open and adaptable
“universal” spaces with a
clear structure

minimal structure in a
free-flowing open
space

movable textured
vertical and horizontal
wall planes in different
materials

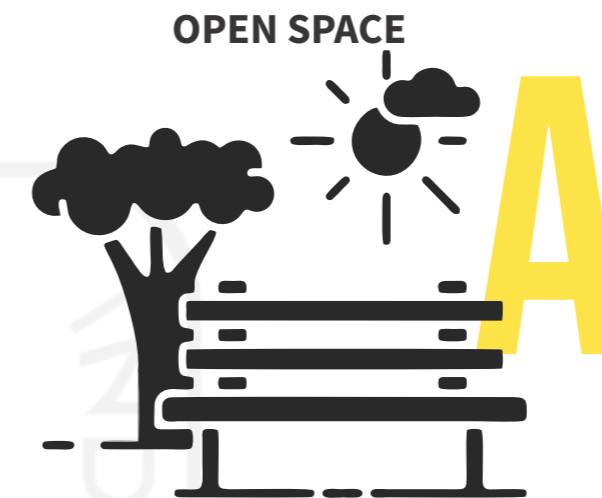
regularity, coloumnar
grids, modular

integration with nature
and surroundings

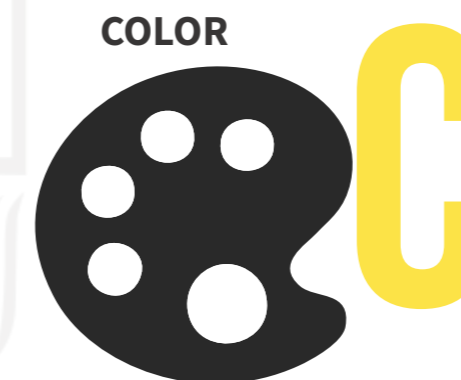
Figure 2.7 Universal space with clear structure by Mies van der Rohe

F. Experience Method to Comfort Quality of Space

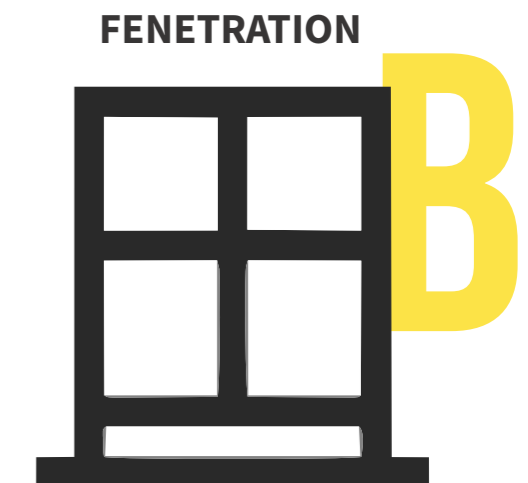
Public spaces must have a comfort quality so that they can be used comfortably. Here are some points that show how the method of making room quality with experience is chosen specifically for elderly and children :



The need for outdoor exposure can have a positive effect, namely eliminating distractions from stress and anxiety levels. sounds that nature produces, seeing sights can soothe the mind and eyes and is universally accepted. Views of hills, groves of trees, sunsets, and things that are in nature improve the performance of nerve cells. this effect gives calm.



Colors aim to encourage activity, while other colors promote passive behavior. Color has the ability to influence human thought patterns including emotions, mental states, moods and energy levels. Color can also provide attention, namely attracting attention or giving directions, zoning and so on.



Ulrich's 'the power of windows' has scientifically proven the effect of a building with a direct view of the natural environment with bare walls. a person feels more alive when he has a view to the natural environment. Someone who can see and feel the natural surroundings can increase activity productivity and increase enthusiasm



Materials also give influence on the overall sense of the environment. The ability to affect the thermal heat gain, sound environment, circulate movement, increase or decrease comfort and various other actions are the consideration of choosing the material wisely. Building materials used architecture should be carefully chosen - like natural materials if used in such spaces have not only a healing benefit but also an ecological one. Building with harmonious design and close to nature will produce positive effect on the environment and user's comfort.

G. The Children Environment

Space In Between

Space for children's activities require space to sleep, eat, play, work and move. this space must be able to meet the needs with high flexibility. Children also get stressed, anxious and not interested in things easily. The importance of in-between spaces is the transition between spaces or the interconnection of quality play spaces. Sense of great space which mentioned as environment that are stimulating, protective, comfortable and beautiful can be achieve architecturally with soaring lofty ceiling contrasted against smaller structures, by enhancing open spaces with natural light and adding elements to draw the eye from an upward, outward and outward vantage point, into the space outside the window or opening.

Relationship with Social Activity

The existence of a connection between children and the activities carried out by the community gives interest to children, namely wanting to see, or even participate in them. A space that accommodates various activities that are in it without a physical barrier create transition zone. this transitional space will have new meaning when developed with sensory use of material, light quality and color, provision f new props such as benches, blocks, hidey hole to encourage children to linger longer

Transparency and Nature

Sense of inclusiveness rather than enclosure by spatial extension, visual sense of the collective, and views out and beyond. Have visual connection with natural environment will create sense of calmness and normalcy.

Scale

Children are naturally attracted to microscopic elements such as small cubes and small-scale areas because they feel competent to tackle new challenges in equal proportions to their physique. Provide microcospic space and smaller component such as small-scale furniture and equipment, cubbies and hidey hole, or low level small window only they can use will give them sense of safety, control and the important things is feel of their "belonging".

H. The Elderly Environment

Inclusive gathering space

Elderly likes to gather, spending time with their friends or family where they can observe also enjoying the activity flow of other people Provide facilities for private and public according to the wants and needs of elderly. The space can be define into private and public. The differences is the connection of interaction between each space. For private space is more intimate for only 2-4 people and they cannot interact with other gathering spot. For public space it will have interconnection with other spot as it become one zone for gathering space with other activity included.

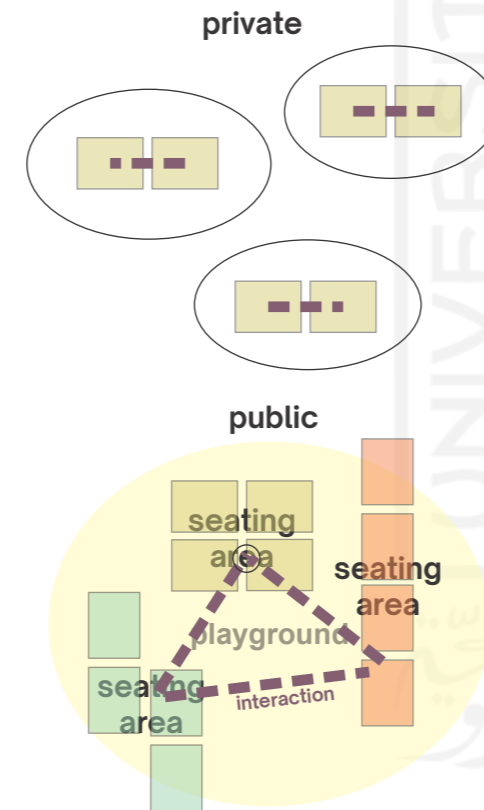


Figure 2.8 Inclusive gathering space concept by Author

Age- friendly access

Vertical circulation using universal design Wayfinding. Directions using design elements such as color / form

I. Community Target

This area is located in the city center where this area is a commercial center, tourism area, center of worship, education and part of the residential area for shophouses. This area also has the potential to become a center for the arts because Magelang has many large events and events centered on the town square which is located less than 200m. Most of the users of the area are public users, office workers / students, street vendors, and local artists. For this reason, the target users are from the general public / public users who will be divided into adults, children and parents. Then there are street vendors and local artists as commercial actors, and students / office workers

According to Jahn Gehl, the design criteria and parameters applied to the design object in order to achieve the goal of public redundant space in urban areas are:

- Smooth transitions between public and private areas
- Transparency of visual (To be able to see what is going on in public space)
- Everyday place (Have something to do / activities / function in the place from everyday activities between the community)
- Excursions as excuses (Be able to provide destination of physical needs, such as eating, drinking, sleeping, and so on)

Strategy for Activate Unused Urban Space, including:

- Moveable Furniture
- Bright Colors
- Additional Lighting
- Green Lawn
- Digital Elements (Information and Communication Technologies)
- Community Involvement



B. Chidori-Bunka - Osaka

It is a community centre, art space, a shop and bar - it is part of people's ordinary, everyday lives. This building was originally a residential building in which occupy by 90 years old lady lived there. Vacant in 2014, and after 3 years of renovated, they finally opened it for public. The architect tried to preserve as much as they can since the building was heritage building and started the design process by studying its original structure, as well as the history and culture of the neighborhood.

Toshikatsu Lenari said, old buildings that still have value in society should not be underestimated and simply destroyed. These buildings are tantamount to credible buildings and seem very valuable because they are definitely part of people's daily lives and have collective memory of the neighborhood. So shouldn't old buildings that have value in society be respected in the same way?



Figure 2.9 Qinhai Community Center by ArchDaily

A. Qinhai Neighborhood Community Center - Shanghai

This building originally was a food market that have "dirty and disordered" impression which the infrastructure cannot fulfill the demand of nowadays life, desire of everyday life to communicate and do interaction (Yushe, 2018). The concept of the design is Poetic life under one roof. It's aim was to create a comprehensive community center, while preserving the character of the food market with all of its hustle and bustle and chaotic nature. The design develop technologies but still provide traditional way for those middle-aged and elderly people who cannot enjoy the convenience.

"Central street" are used in interior design. Inside the limited space with different vendor stalls distributed on both sides, blurring the boundaries between indoor and outdoor. There are open shared space that created independent for each other, but in special cases the glass partitions to give flexibility. Shared space provides ample leisure and entertainment places for different functional needs of residents, such as children's playground, shared meeting rooms and kitchens.



Figure 2.9 Chidori Bunka by ArchDaily

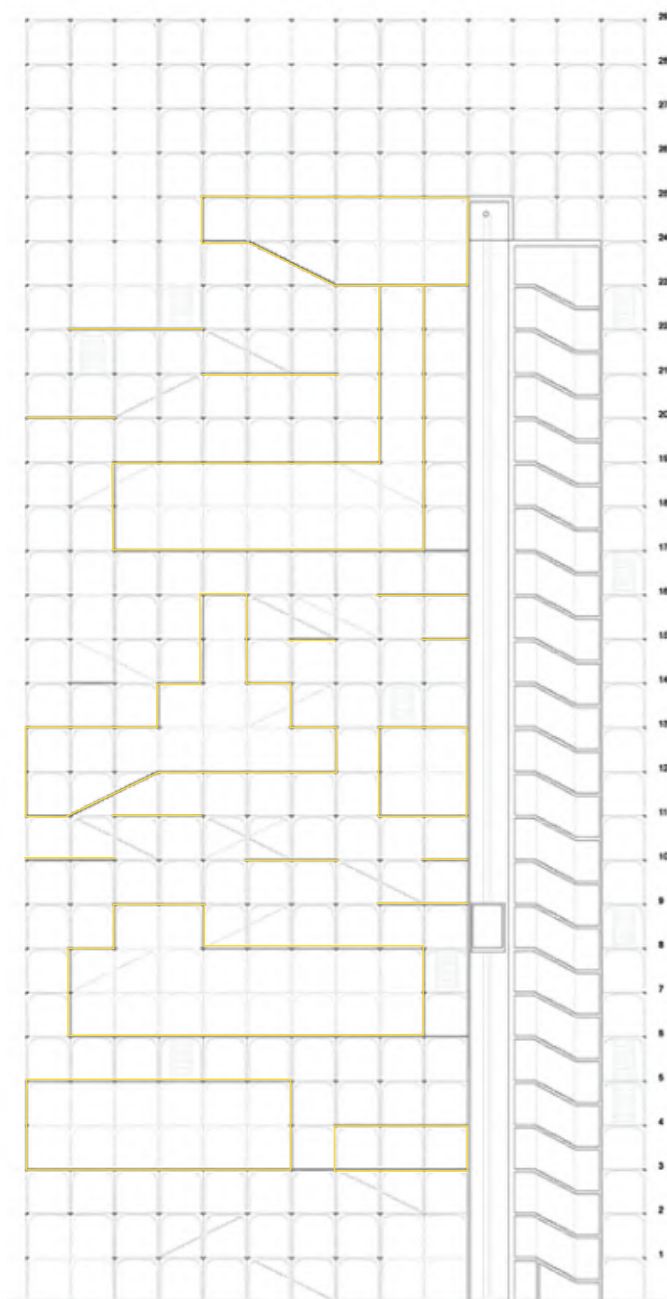


Figure 2.10 House of God Structure by Author

C. 'house of gods' - Singapore

Stems from the presence of a presentation of the existence of religious communities that reached more than 43% in Singapore which is thought to cause the lack of communication and understanding between people and more specifically between denominations, this project introduces a hub where places of worship are connected through a three-dimensional grid without disrupting each other's rituals.

Apart from just living side by side with each other, there is also mutual respect that is seen in daily interactions and lively celebrations at various events. It is an emblematic example of today's megalopolis and should be considered as a basis for future development aimed at reducing social crises in a multi-cultural environment. Innovative architectural approaches can drastically improve the current situation by bringing different religions closer together within one building, enabling people to meet, chat and learn from alternative ways of life and respect each other's beliefs. This idea was developed through innovation in the structure and layout of the space. Light and opaque structure covered with a large amount of glass which provides a calm experience.

This encourages visitors to meditate in peace and isolation with the perception that they are still connected to others around them. Meanwhile, privacy is still considered by providing an opening with available sheer curtains to soften visual continuity.



Figure 2.12 Kapor Center Outdoor Lounge by ArchDaily

D. Kapor Center for Social Impact - Oakland

The design of this building combines high technology and humanism to create modernism and harmony. Open spaces are designed to encourage collaboration, as well as flexibility with certain boundaries in each spot space. Minimalist and elegant interior design meets informal social spaces. Intended to invite interaction of staff, visitors and partners. Creating an operational space that uses human resources and technology wisely, efficiently and economically but aesthetic and innovative.



Figure 2.13 Punggol Neighbourhood by ArchDaily

E. Punggol Neighbourhood and Polyclinic - Singapore

This building developed landscape idea as a communal space with a green space approach that responds to the surrounding neighborhood. The participation of the neighborhood forms a function of space. The garden here does not only function as the lungs of the city, but people can use it as urban farming. The gardens are a collective horticultural project which brings residents together to plant, maintain and enjoy the greenery. The garden also help nourish community bonds. Not only for aesthetic the garden give value to the community.

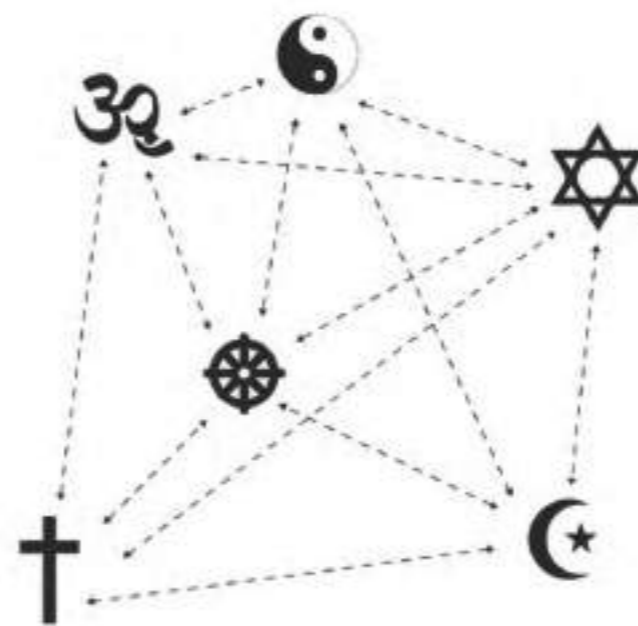


Figure 2.11 Religion Scheme by ArchDaily



Figure 2.14 Providence Neighbourhood Centre by ArchDaily

F. Providence Neighbourhood Centre - South Ripley, Australia

The design with the concept of an open plan of the building allows the space to be public or private. With flexibility in mind, the selection and placement of folding doors and walls that can be opened or closed to create a variety of room sizes. The design context features a natural vs industrial material palette. Design to adapt to future use is the essence of design with the placement and selection of sustainable structural elements and materials



07 initial design

COMMUNITY CENTER

Community center that will be designed by considering all the needs and backgrounds of the community that will be targeted by applying an inclusive design data search method. The communities that will be targeted are Muslim, Christian Protestant and Confucian communities with the function of space to facilitate religious events such as Eid, Christmas, or Chinese New Year. This community center is also designed to be friendly to the accessibility and movement of children and parents. The design will stick to the principle of inclusive design, namely inclusive (everyone can use it safely, easy with dignity), responsive, flexible, convenient, accomodating, welcoming, realistic.

PUBLIC REDUNDANT SPACE

The solution to creating a redundant space to be active in the case of Tentara Pelajar street cross-roads is to create a public space with the following design strategy :

Moveable Furniture

space have flexibility to adapt the needs

Community Involvement

PKL activity as community involvement creating form and space

Bright Colors

use color to attract user especially children

Digital Elements (ICT)

provide technology such as co-working space with Wi-Fi, etc

Green Lawn

gathering space in the form of green public space

Additional Lighting

use lighting to create space and attract user

INTERVENTION TO PKL SIGALUH

Intergrating PKL Sigaluh with Community Center Building. PKL activities as urban characteristic of Sigaluh street will be maintained. PKL Sigaluh will be slightly move inside the site to open the pedestrian street. Meanwhile the other side of PKL Sigaluh will move above the street. The goals are creating better circulation for Sigaluh street while maintaining PKL.

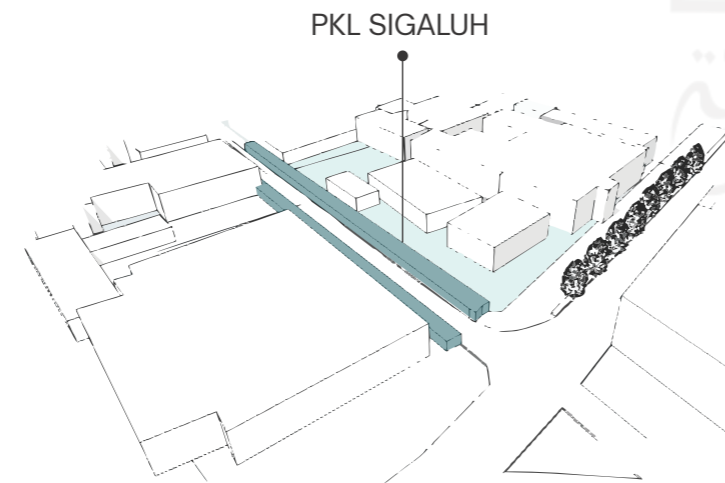


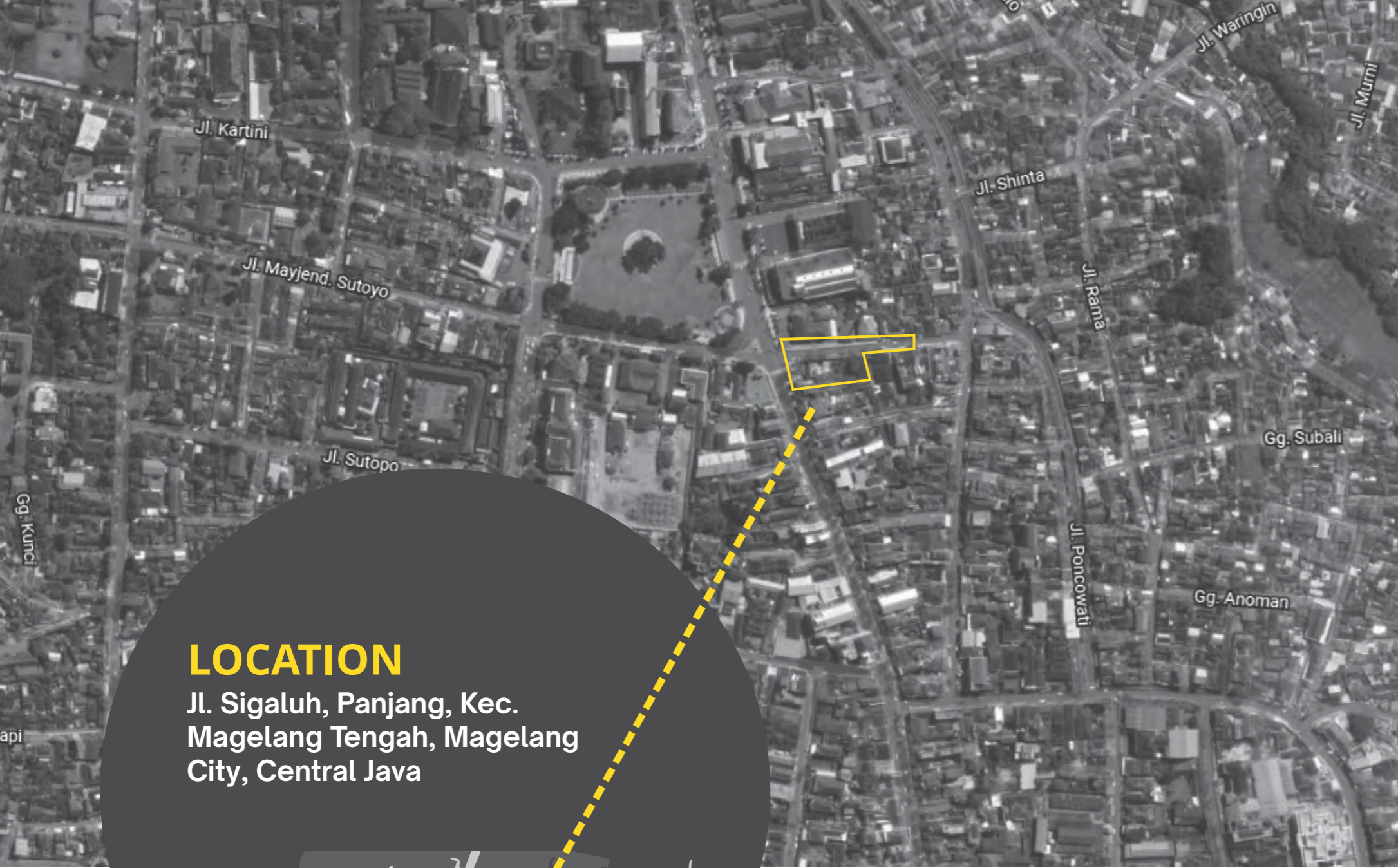
Figure 2.15 Sigaluh Culinary Location by Author

CLIENT

The client of this commercial center will be collaborate between the religion community around the area which is from muslim, protestant cristian and confusion. The community has their workshop area surrounding the Alun-alun. The main purpose of the community center is to accomodate faithfest for cross religion so they can participate in order to respect or gain knowledge without feeling burden. The other purpose is to mingle each community. The place itself directed for religion purpose which public can also participate in the activity

COMMUNITY USER

The main user of this community center are from muslim, protestant cristian, and confusion. From the general public / public users who will be divided into adults, children and parents. Then there are street vendors and local artists as commercial actors, and students / office workers



LOCATION

Jl. Sigaluh, Panjang, Kec. Magelang Tengah, Magelang City, Central Java

B. Macro Condition Maps

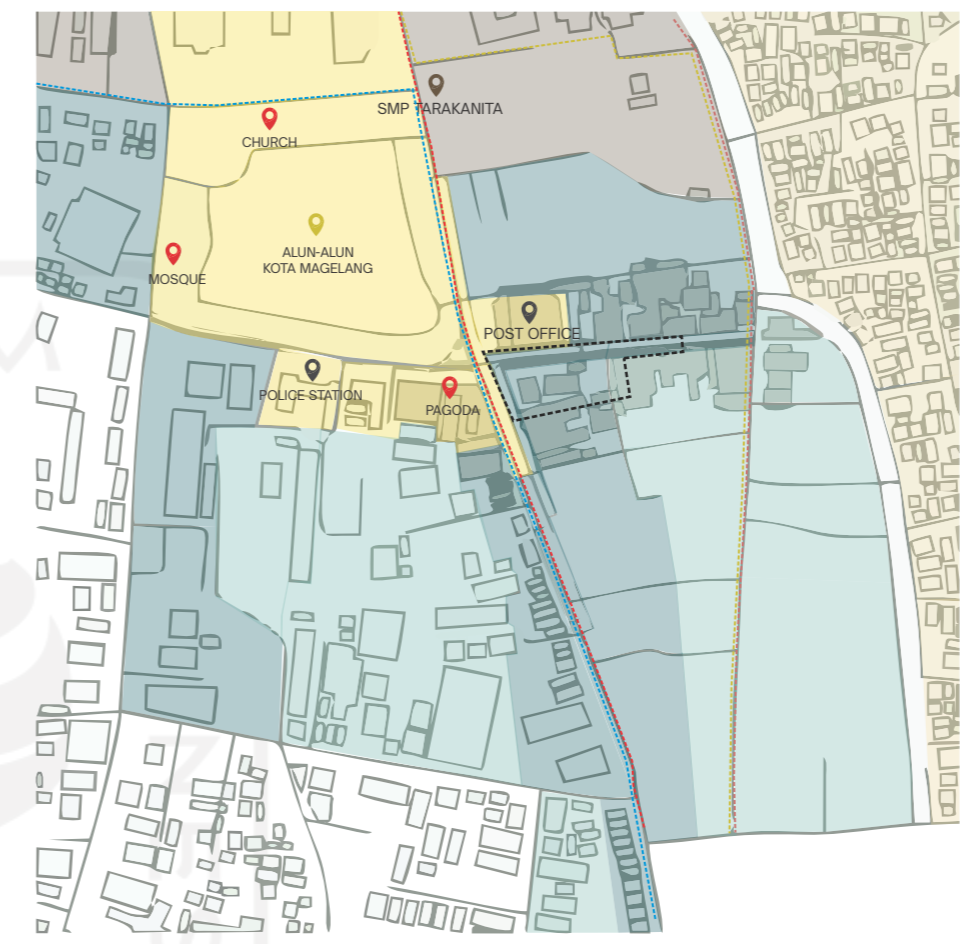


Figure 2.16 Site Macro Condition by Author

C. Micro Condition Maps



Figure 2.17 Site Micro Condition by Author

A. BUILDING CODES AND REGULATION

Based on the regulation from government article 81 verse 4 in commercial area in the city :

- Building Coverage Ratio (KDB) : 80 - 90%
- Building Floor Area Ration (KLB) : 5.0
- Building Height (KB) : max. 10 floor
- Green Coefficient (KDH) : 10%
- Basement Coefficient : 70%

The site located in the commercial area which have development status: land use rights for buildings. The surrounding existing are semi-house commercial, public facilities and government asset, education area and residential area across the river. The square is the center of the orbit of the activity, making this place a very strategic place. There are 4 public transportation routes, 2 of which go through direct locations

- EDUCATION AREA
- PUBLIC FACILITIES/ GOVERNMENT ASSET
- RESIDENTIAL AREA
- SEMI HOUSE-COMMERCIAL AREA
- COMMERCIAL AREA
- PUBLIC TRANSPORTATION ROUTE

The site is flanked by 2 main roads where traffic jams often occur during effective hours or during events or holidays. The redundant area is in the middle of a popular commercial spot among shophouses and Sigaluh Culinary. Street vendors are scattered in the pedestrian pathway in Pemuda street

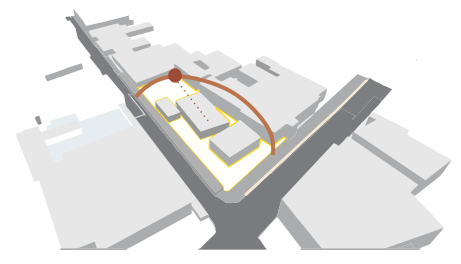


Figure 2.18 Sun Direction by Author

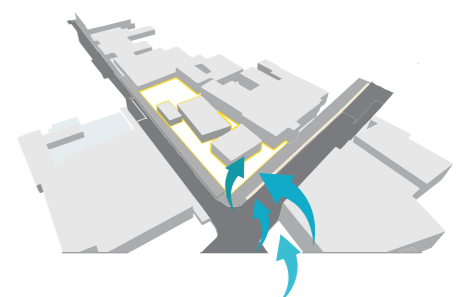


Figure 2.19 Wind Direction by Author

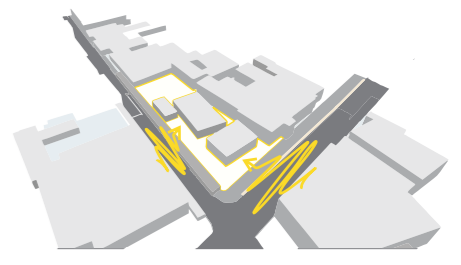


Figure 2.20 Noises by Author

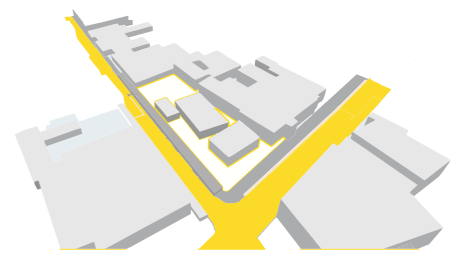


Figure 2.21 Main Access by Author

D. Vehicle Circulation

There are plenty of circumstances can create traffic in Jl. Tentara Pelajar since the street itself has bottle neck feature, while the trespasser cannot be avoided. The site will have big impact to this problem.

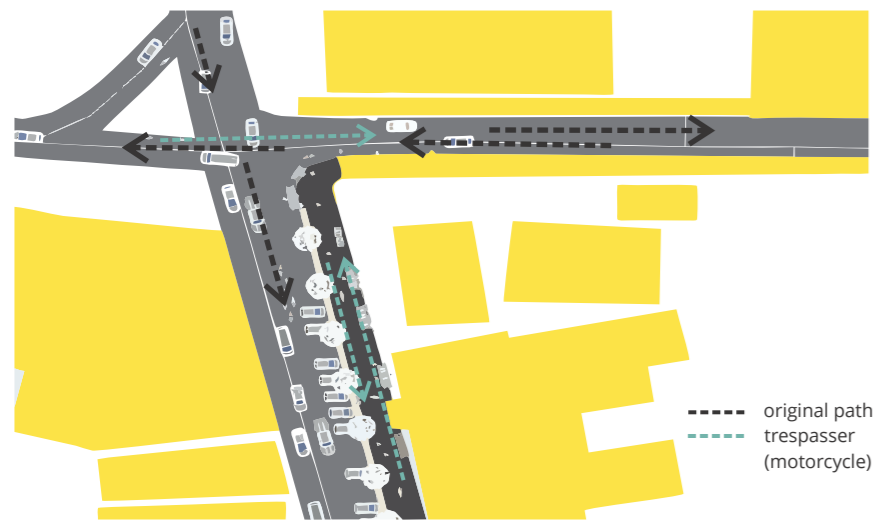


Figure 2.22 Vehicle Circulation by Author

E. Parking area distribution

The parking area available is only on the side of the student army road. Used for the public, visitors to shophouses on 2 sides of the road, and sigaluh culinary. Limited parking space causes visitors, especially Sigaluh culinary, to park on the side of the street and block the street causing congestion.



Figure 2.23 Parking Area Distribution by Author

F. Land Property Right

The land property right by the government regulation is classified in the building use. The land located in the commercial area in the city. It will be better if the building also have commercial aspect as the location of the site is strategic for commercial use.



Figure 2.24 Land Property Right by Author

G. Pedestrian & User Circulation

Pedestrian easily found anywhere around the site are. The government has renovated the pathway for pedestrian in Jl. Pemuda which give more space for pedestrian. But they don't have access in Jl. Sigaluh since the original pathway are blocking by the street vendors.

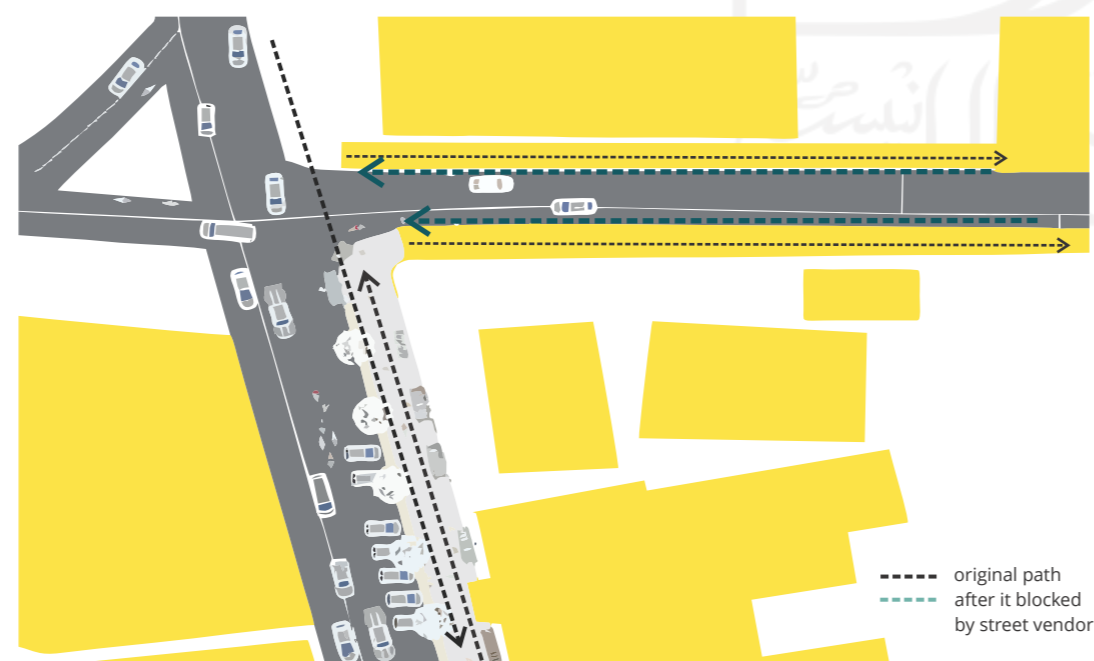


Figure 2.25 Pedestrian and User Circulation by Author

H. Site Area

total site area : 3.708,5 m²

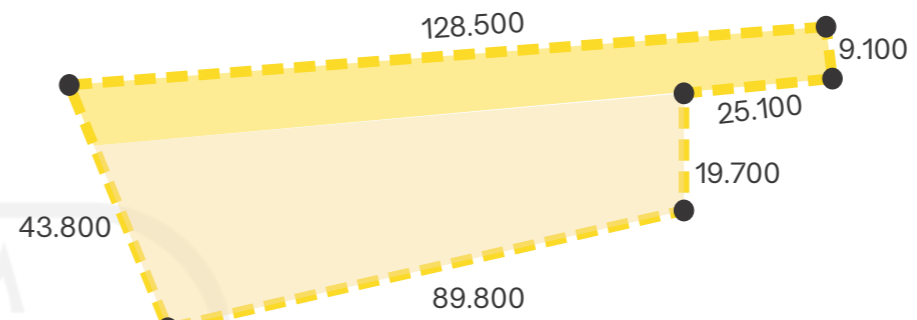


Figure 2.26 Site Dimension by Author

Site area divided by 2 type of function. The redundant space area and pedestrian area (Sigaluh Culinary) which split by the Sigaluh street. The area above the street can be build with provisions according to government regulation

I. Site Engineering

- Building Coverage Ratio (KDB) : 80%
= Total site area X KDB
= 3.708,5 X 80%
= 2.966,8 m²
- Building Floor Area Ration (KLB) : 5.00
for area kepadatan menengah
= Building coverage ratio X KLB
= 2.966,8 X 5
= 14.834 m²
- Green Coefficient (KDH) : 10% (minimum)
= Total site area X KDH
= 3.708,5 X 10%
= 370.85 m²
- Basement : 70%
= KLB X basement coefficient
= 2.966,8 X 70%
= 2.076 m²

Analysis of Visibility Using Space Syntax

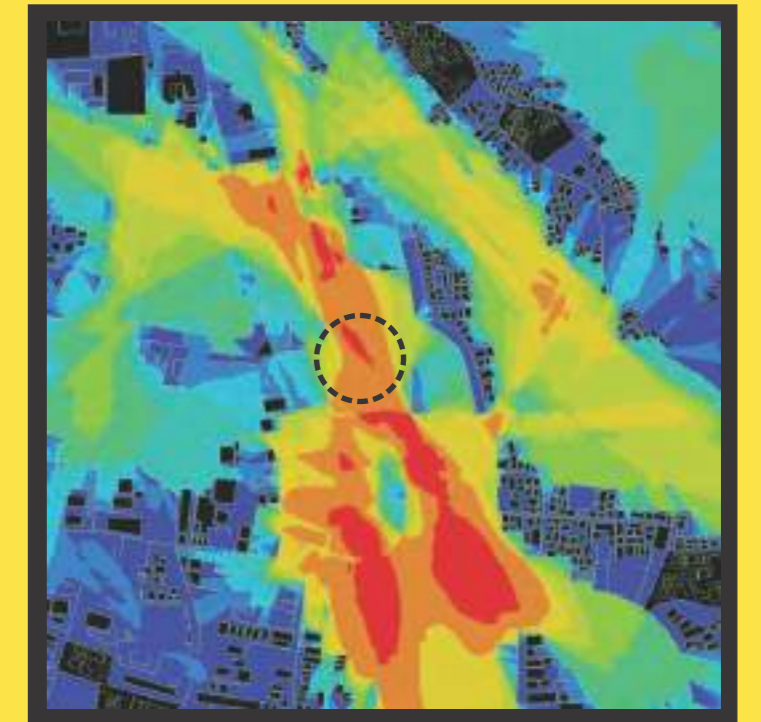


Figure 2.27 Visibility Diagram on Site Area by author

Visibility chart (VGA) analysis investigates the visibility graph properties derived from the spatial environment. It tells you how visually connected all spaces are in the footprint.

The site area is a very dense area so that it has unsanitary visibility for users. Especially in the area of Pemuda street.

The interconnection between the visibility network from the city can be seen that from along the Magelang city square road to passing the student army road area have connections and are connected to each other. Existing involvement can influence how we interpret the space in the building. Interconnected areas will need intervention from the surrounding or must adapt to the environment to produce quality space

2.5 design concept analysis

2.5.1 Accessibility

A. Pedestrian Access

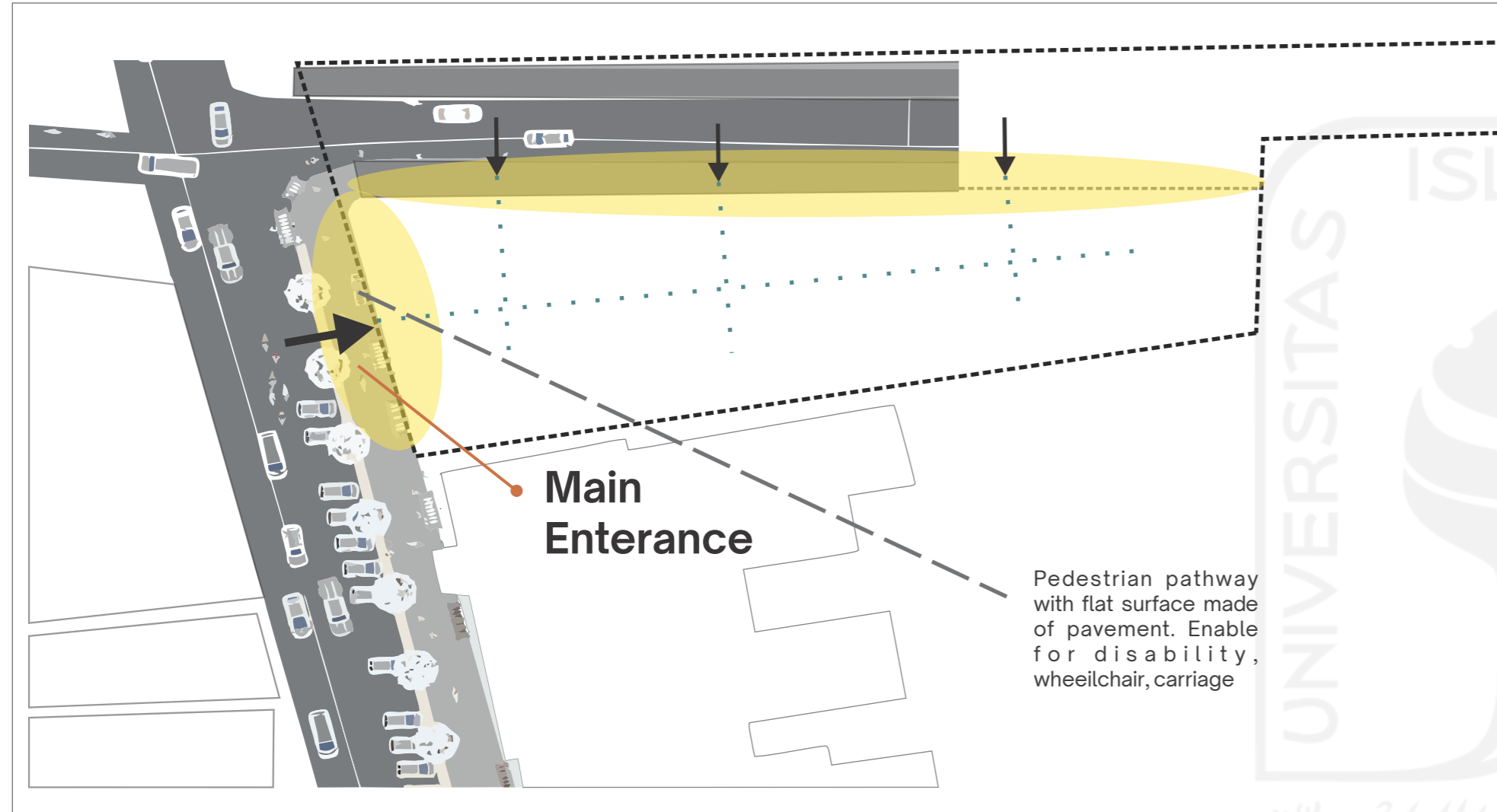


Figure 2.28 User access to the building by author

The site has 2 faces from the front and side and both can be accessed from the main road (Pemuda and Sigaluh street). The site area is a commercial area and is crowded with pedestrians. Especially from the front side, there is a sidewalk that has been developed by the Magelang City government to provide comfort for pedestrians. There are 2 main access for user, front and side access which can be reach directly from the main street. Main entrance will be face Pemuda street as it more safety for pedestrian by the existence of pedestrian pathway provided by government. The side access will be use flexible with Sigaluh Culinary as the user also can access the area. This planned to minimize the explode amount of crowd in the big event.

The main access route is from the public parking lot the user can cross the pedestrian-only sidewalk and go directly to the site. Meanwhile, for access from the side of the Sigaluh road, a road will be developed as a drop off area along most of the side. Users without a vehicle can access it flexibly, besides this will not prevent other users from using the road

B. Vehicle Access

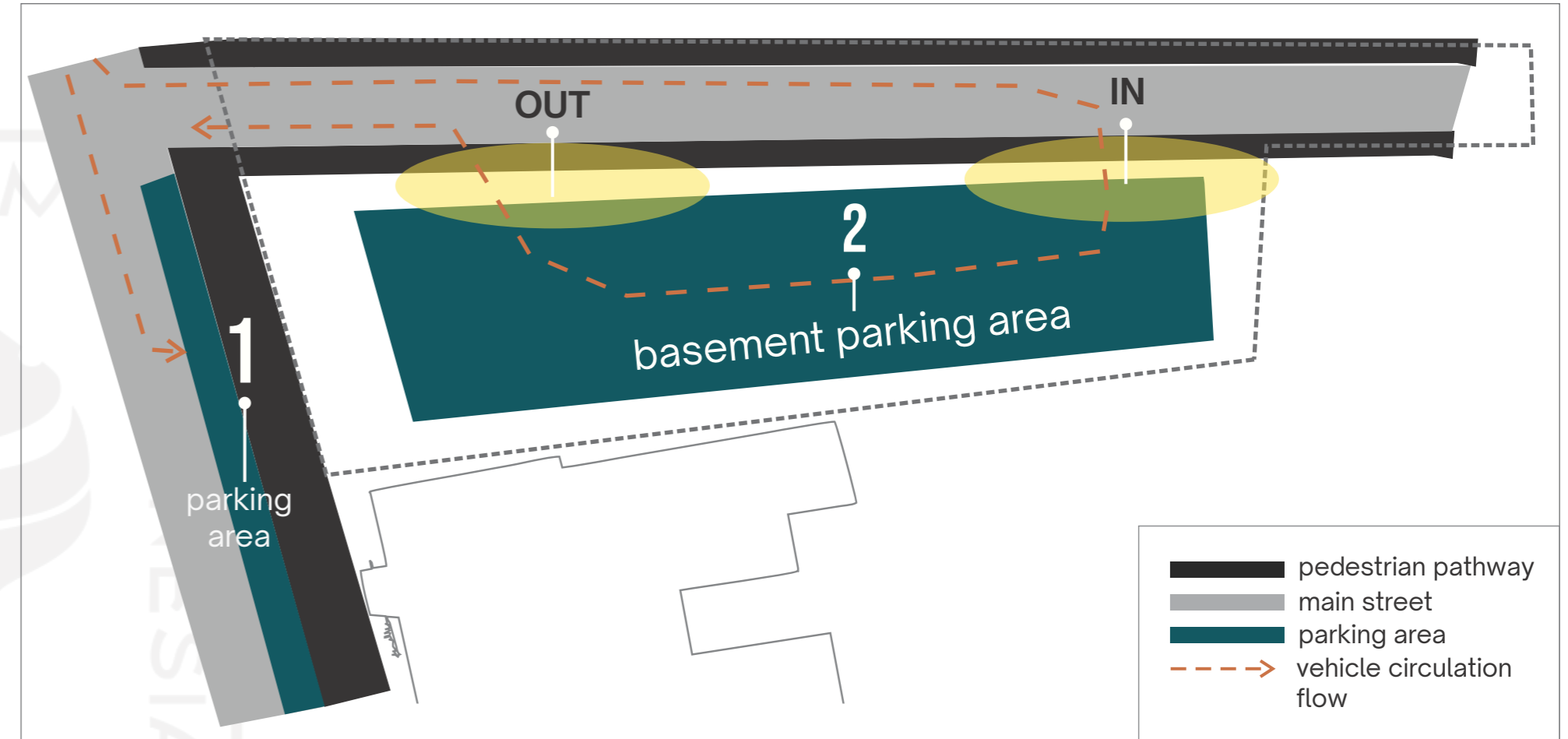


Figure 2.29 Vehicle access by author

The access for vehicle will be focused on two part, in Tentara Pelajar street where the parking area for the vehicle will use the public parking area provided by the government. And the second access (main access) will be on Sigaluh street. The parking entrance will be in the back of the building due to the direction of the street. The vehicle will follow the direction when they come out so it will more safe and not creating a traffic for crossing the street in the corner area.

C. Vehicle Access (Emergency)

Evacuation safety and emergency security follow SNI 03-1746-2000 standards. When looking at the position of the site which is at the end of 2 main roads, the site has advantages and disadvantages. The advantage is that the main city road can be used as the main access for fire fighting vehicles, thereby reducing the use of roads within the site which are less effective. The monitoring zone into the site as the shape of the site that extends along the road provides access for the fire brigade to extinguish the fire, so that even from the main road outside the site it can reach the buildings on the site. However this does not apply if the situation referred to here is not a fire. if the situation is not a fire, the support vehicle will not have access to the building.

The analysis carried out is based on these 2 situations. The results of the analysis on emergency vehicles are using 2 main roads as main access during the evacuation process. access to the site via entrance or exit roads

D. Safety For Children

Evacuation safety and emergency security follow SNI 03-1746-2000 standards. When looking at the position of the site which is at the end of 2 main roads, the site has advantages and disadvantages. The advantage is that the main city road can be used as the main access for fire fighting vehicles, thereby reducing the use of roads within the site which are less effective. The monitoring zone into the site as the shape of the site that extends along the road provides access for the fire brigade to extinguish the fire, so that even from the main road outside the site it can reach the buildings on the site. However this does not apply if the situation referred to here is not a fire. if the situation is not a fire, the support vehicle will not have access to the building.

The analysis carried out is based on these 2 situations. The results of the analysis on emergency vehicles are using 2 main roads as main access during the evacuation process. access to the site via entrance or exit roads

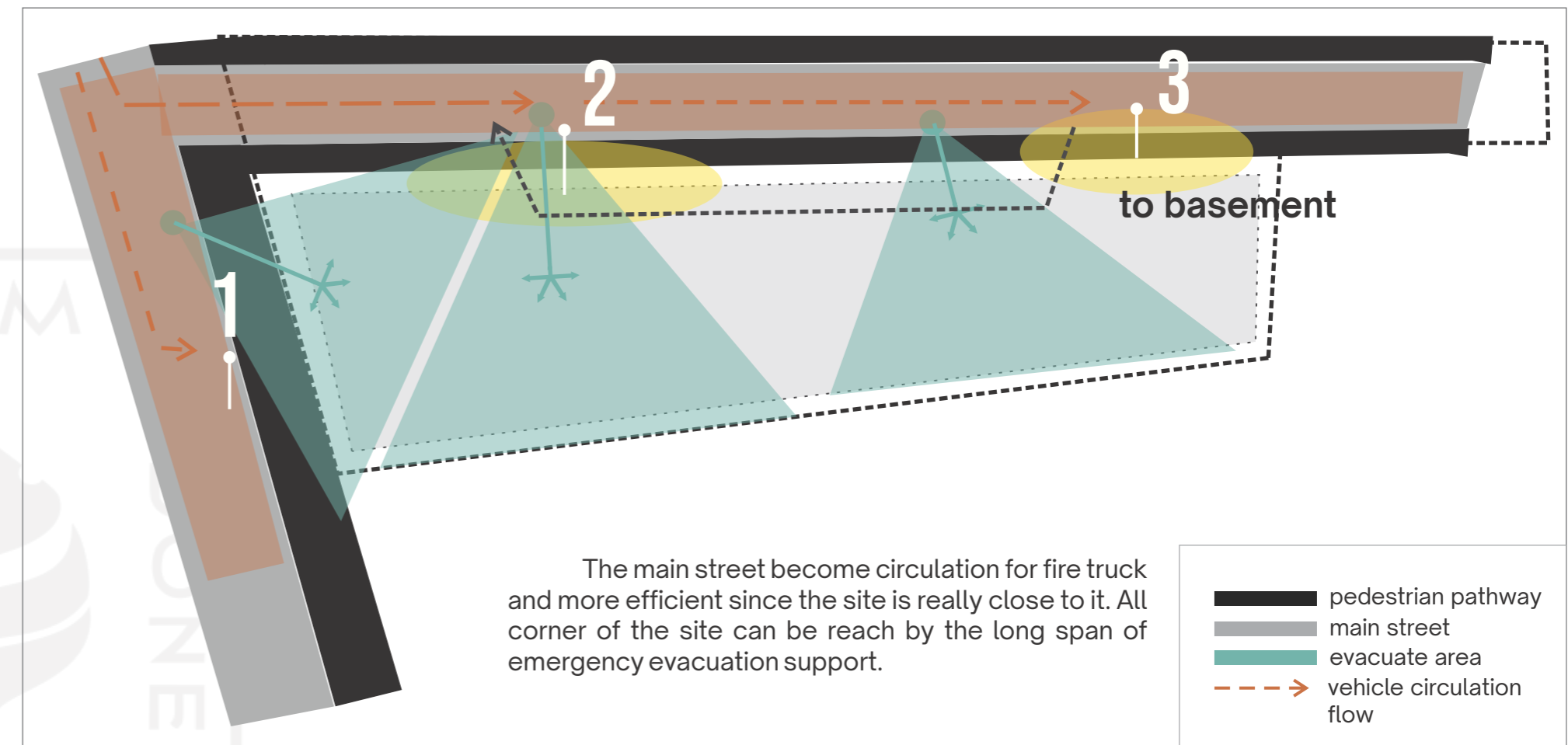


Figure 2.30 Access for emergency vehicle by author

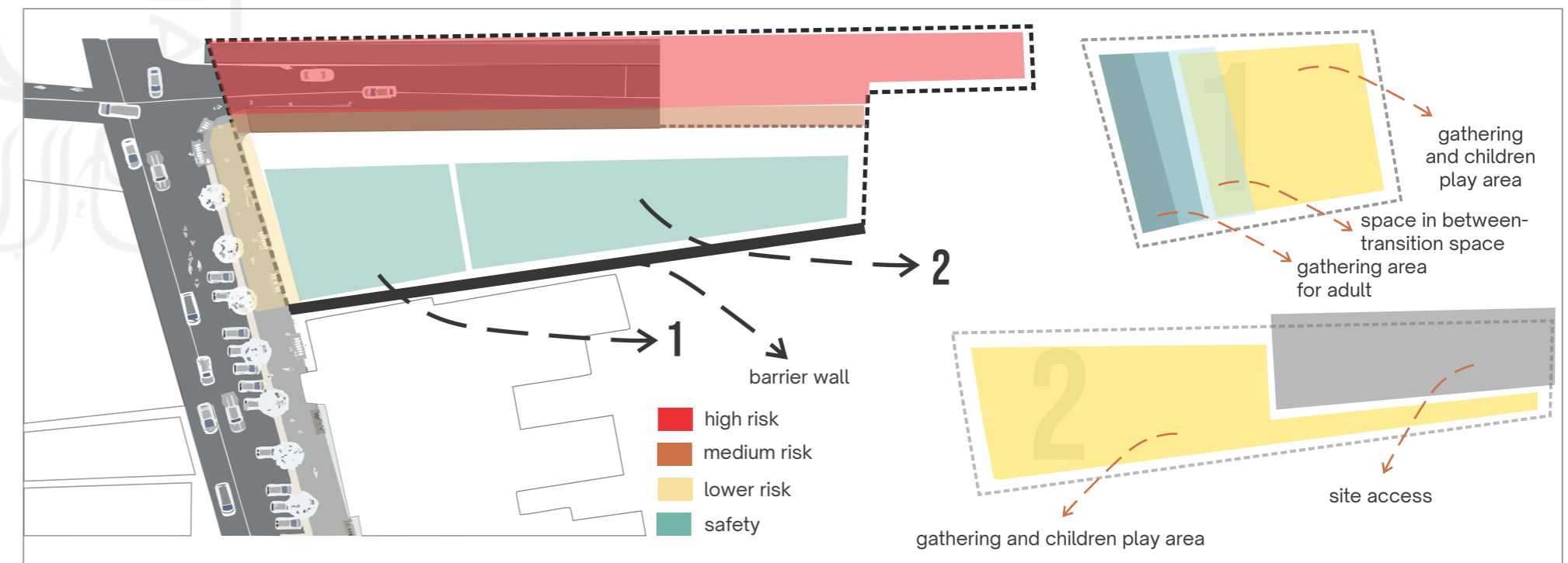


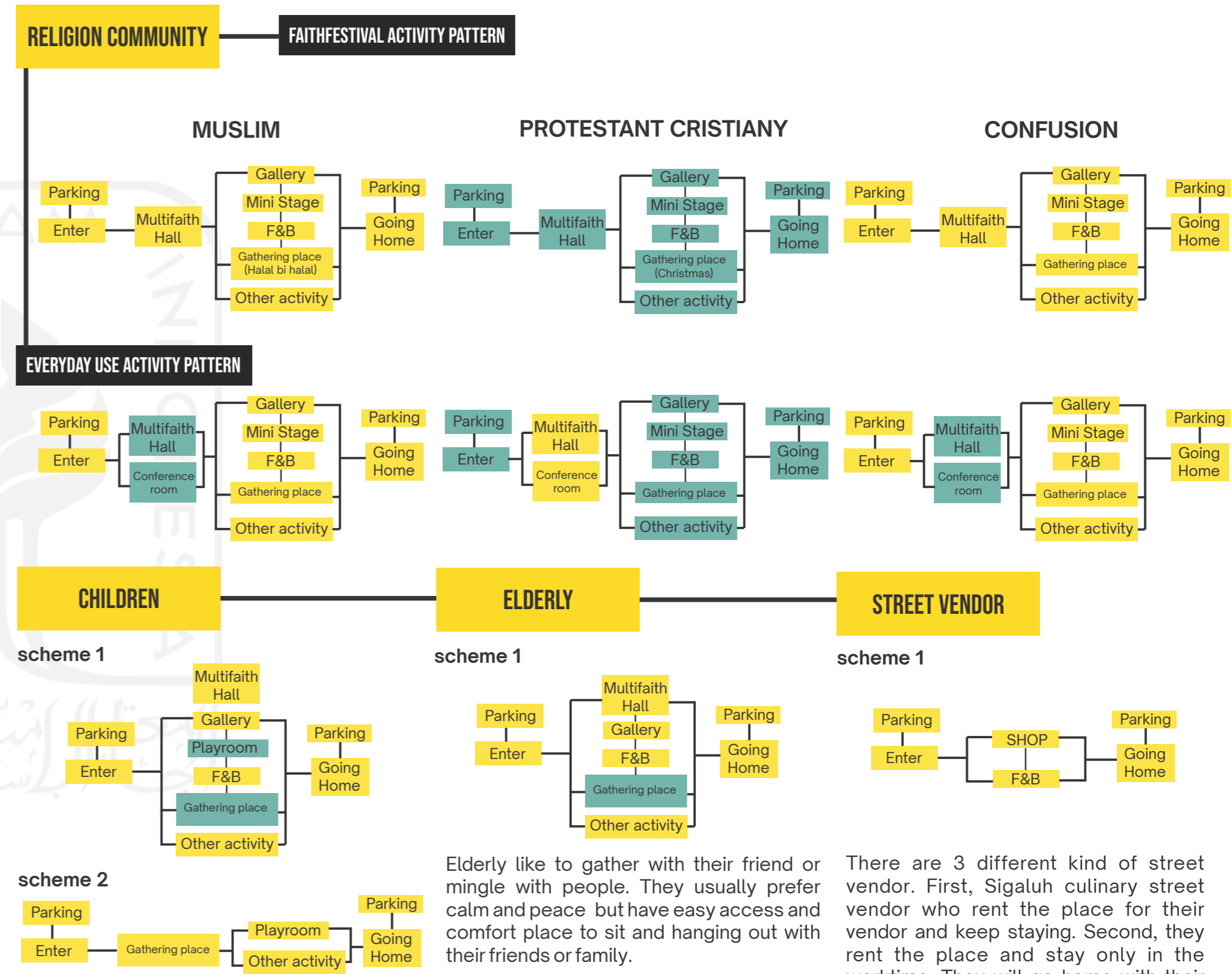
Figure 2.31 Safe zone for children in the site by author

2.5.6 Activity Pattern Analysis

The following table shows the analysis data of the target user activities, the space requirements and the characteristics of the space that support these activities. The data taken is from the data from observations, interviews with local at the location and the author's experiment.

Table 2.2. Activity Pattern Analysis by Author

MAIN USER TARGET	ACTIVITY	NEED OF SPACE	CHARACTER OF SPACE
Religion Community	faithfestival	symbolic inclusive hall, open space	giving sense of spiritual for universal
		office / administration room	
	art & performance	mini stage, gallery	giving sense of spiritual for universal
	trading	space for trading	
	eating	F&B corner	
Children	meeting / gathering	meeting room / conference room	giving sense of spiritual for universal
	playing	playroom indoor/outdoor	attracting with colorful space, visible by parent, safety
	gathering	gathering space	attracting with colorful space, visible by parent, safety
	eating	F&B corner	
Elderly	joining faithfest	flexible hall, open space	giving sense of spiritual for universal
	meeting / gathering	gathering space	provide activity, minimize boundaries between private place
	eating	F&B corner	
Street vendor	trading	flexible hall, open space	giving sense of spiritual for universal
		space for trading	neat arrangement of trade carts and provide sufficient space between visitor access and pedestrian



This sequence is where parents will just left the children in the playroom because they have something else to do. They still can watch their children without worrying.

Elderly like to gather with their friend or mingle with people. They usually prefer calm and peace but have easy access and comfort place to sit and hanging out with their friends or family.

There are 3 different kind of street vendor. First, Sigaluh culinary street vendor who rent the place for their vendor and keep staying. Second, they rent the place and stay only in the worktime. They will go home with their vendor with them. Third, nomaden street vendor who doesn't have certain place to stay or only visit the place when the they see chance in the crowd

2.5.7 The Diversity Of Faith Festivals In The City Of Magelang

The main activity in this center community is to facilitate the faith fest of the target community, namely the religious community. These data are important dates and festivals that are held annually based on the 2021 calendar. In its application, each year there will be a festival with the uniqueness and tradition of each multifaith room that will be used to facilitate it must be able to accommodate the activities of various kinds of festivals and their uniqueness.

If data from each religious festival date is collected and an annual matrix is made, it will be seen that even though the date was made from different calendar from each religion, not a single big day collides. This matrix will also show the symbolic use of this community center at the faith fest. There are at least 23 major festivals each year that are rotated.

Table 2.3 Matrix of FaithFest in 2021 by Author

MATRIX OF FAITHFEST IN A YEAR (2021)												
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1												
2				Friday Good								
3		Pagerwesi										
4				Paskah								
5				Cheng Beng								
6												
7												
8												
9								Islam New Year				
10												
11			Isra' Mikraj								Kathina	
12		Chinese New Year										
13					Idul Fitri							
14			Nyepi	Galungan			Peh Cu / Bakcan					
15												
16												
17												
18								Ashura/10 Muharram				
19				Saraswati			Arafah		Maulid Nabi Muhammad			
20							Idul Adha					
21												
22												
23					Pantekosta							
24							Asadha					
25												
26		Cap Go Meh			Waisak							
27												
28			Nisfu Syaban									
29												
30												
31												

DESCRIPTION

- Muslim faith fest
- Confusion faith fest
- Hindu faith fest
- Buddha faith fest
- Protestant Christian faith fest

Basically, even though they have the same religion, each region has a tradition that is adopted from regional culture to commemorate religious holidays. In the city of Magelang, several unique traditions can only be found in Magelang. As in Maulidan, the banana grebeg tradition is very characteristic. Or the existence of Borodur and Mendhut temples as the largest Buddhist places of worship in Indonesia, making the location of Magelang unique.

Liong Hok Bio Pagoda which is located in front of the site. Basically, this temple belongs to the Confusion religion community, but the place of worship is used by 2 religions, which is Confusion and Buddha especially during the Vesak celebration, the monks will pray at this pagoda (pidhapata tradision) and hold a parade around the Chinatown area.

From the table presented, several religious holidays were selected to be the main activities at the Magelang Community Center. Selection based on the activities carried out on that day. Events that are taken are those that have a faith fest where the public or all groups from various religions can participate

Table 2.4 Tabel of Faith Festival Activity In Magelang by Author

LIST OF BIG DAY	DATE	EVENT	FESTIVAL	TRADISI / CIRI KHAS
Islam	11-Mar-21	Isra' Mikraj	Prophet Muhammad's journey from the Grand Mosque to the Al-Aqsa Mosque to the Sidratil Muntaha 27 Rajab	Ambengan tradision - gathered for the Koran and continued with eating together as a form of thanksgiving to God. eat with rice and side dishes that are prepared on banana leaves that are lined lengthwise
	28-Mar-21	Nisfu Syaban		
	13 April 2021	1 Ramadan	entering the holy month of ramadan	padusan tradision before the date, breaking the fast together
	13-May-21	Eid Mubarak		Halal bi halal, tradition of sungkem, Ketupat and Opor Ayam, THR for children, special Eid cakes, takbiran, pilgrimage
	19-Jul-21	Arafah Day		
	20-Jul-21	Eid al-Adha	Sacrifice Day which is commemorated on the 10th of Dzulhijjah	sacrificial slaughter, sharing of meat, eating together
	9-Aug-21	Islamic New Year	Islamic New Year	tambourine performance
	18-Aug-21	Hari Ashura/10 Muharram		
	19-Oct-21	Maulid Nabi Muhammad	the birth of the Prophetyullah Muhammad SAW which is commemorated on the 12th of Rabi'ul Awwal	Grebeg Pisang (Bandongan) - Tradisi Grebeg Lenteng Agung - mountain of kerupuk lenteng, a maulidan art performance
Christian Protestant	25-Dec-21	Christmast Day	Christiany New Year	Christmast Tree, Cristmast Eve performance
	4 April 2021	Easter Day	Resurrection of Jesus Christ, the first Sunday after the full moon after the vernal equinox	Easter Eggs (crafting, decorating, egg finding games)
	23-May-21	Pantekosta		
	2 April 2021	Good Friday (Jumat Agung)	Death of Yesus	
Congfusion	12-Feb-21	Lunar New Year	The Spring Festival, welcoming the (farmers') planting season, is celebrated for 15 days, closing with a Cap Go Meh celebration	giving alms, giving writing to others. bartering between two groups of different social classes. Chinese New Year's typical lesah rice, longevity noodles, whole chicken duck, egg tea, basket cakes, Yhu Sheng
	26-Feb-21	Cap Go Meh	Lantern Festival atau Festival Lentera (Lampion), the birth of Siang Goan Thian Koan or the spirit that rules heaven and earth, the first full moon night in the new year	Lion Dance and Liong attractions, procession, basket cakes, Shiauw Goan Party, lanterns
	5 April 2021	Cheng Beng	Grave Pilgrimage, commemorating summer is coming	Kim ci - prayer papers and paper money to be burned to equip the spirits in the realm of steel according to beliefs
	14-Jun-21	Peh Cu / Bakcan	Dragon Boat Festival, Dumpling Festival	Eating bakcang, dragon boat races, hanging ai and changpu grass, erecting eggs,
Hindu	14-Mar-21	Nyepi	Saka new year anniversary based on Balinese calendar	Ogoh-ogoh parade (rute: sarwo street edi-artos mall-pura wira buana akml, sendratari)
	30-Jan-21	Saraswati	holidays to worship Sang Hyang Widhi Wasa	
	14-24 April 2021	Galungan	Dharma's victory against Adharma	Put Penjor up
	14 April 2021	Kuningan		
	3-Feb-21	Pagerwesi		
Buddha	26-May-21	Waisak	Birth of Siddharta Gautama	tradisi pindapata di kawasan Pecinan, ampaio, persembahyangan di dalam Kelenteng Liong Hook Bio, pradaksina dan meditasi di borobudur, pelepasan lampion, nasi lesah khas imlek,
	24-Jul-21	Asadha	delivery of the Buddha's first sermon at the Isipatana deer park in Benares	devotional puja by monks at Mendut and Pawon temples
	20 October - 19 November	Kathina	Celebrating gratitude to Sangha members	berdana tradision

2.5.8 Analysis of Room Programming

The table showing the needs of space for community center. Devide by public, commercial, community, management and support, circulation, mechanical, outdoors, utility room, and rooftop use. Located in which floor the room will plan from the basement up to rooftop.. The percentage is show the property size, how much the area will need from each fuction and in the end of the table showing the total area used in each floor.

Table 2.5 Tabel of Room Programming by Author

	ROOM PROGRAMMING COMMUNITY CENTER						
	CLASSIFICATION	FUNGSI	B1	GF	FL 1	FL 2	ROOFTOP
15%	PUBLIK	Hall/Lobby		✓			
		Information Desk		✓			
		Lift Lobby		✓			
		Rest room		✓			
10%	COMMERCIAL	F&B Culinary		✓	✓		
		Shops			✓	✓	
50%	COMMUNITY USE (FUNCTIONAL)	Multifaith Hall		✓			
		Conference room			✓		
		Garden / terrace / atrium		✓			
		Health Center/small clinic			✓		
		Public Gathering Place		✓	✓		✓
		Coworking Space			✓	✓	✓
		Gallery		✓			
		Kids Playroom		✓		✓	
5%	MANAGENT AND SUPPORT	Universal Prayer Rom			✓		
		Reception & Security		✓			
		Storage Space	✓				
		Meeting Point		✓			
		Rest room		✓	✓	✓	
15%	CIRCULATION SERVICE+PARKING	Children Playing Area		✓			
		Lift Lobby		✓			
		Corridors			✓	✓	
		Lift Room	✓	✓	✓	✓	
		Emergency stairs Room	✓	✓	✓	✓	✓
5%	MECHANICAL & ELECTRICAL SPACE	Indoor Parking Room	✓				
		ME System Operator's Room	✓	✓	✓	✓	✓
		HVAC room	✓				
		Central Communication System (CCTV, Soundsystem, PABX)	✓				
		Pump Room & GWT	✓				
	OUTDOORS	Genset Room	✓				
		Parking Area		✓			
	UTILITY ROOM	Drop Off Area		✓			
		Security		✓			
	ROOFTOP	Janitor room	✓	✓	✓	✓	✓
Toilet		✓	✓				
Rooftop Garden						✓	
Rooftank						✓	
Lift House						✓	
TOTAL							

TOTAL SITE AREA :3.708,5 M2

TOTAL AREA FOR COMMUNITY USE (FUNCTION):
14.834 X 50% = 7.417 M2

TOTAL AREA FOR CIRCULATION :
14.834 X 15% = 2.225,1 M2

TOTAL AREA FOR PUBLIC :
14.834 X 15% = 2.225,1 M2

TOTAL AREA FOR MANAGEMENT & SUPPORT :
14.834 X 5% = 741,7 M2

TOTAL AREA FOR COMMERCIAL :
14.834 X 10% = 1.483,4 M2

TOTAL AREA FOR MECHANICAL & ELECTRICAL SPACE, ETC :
14.834 X 5% = 741,7 M2

2.6.1 Space Requirement For Multi Faith Hall

The main activity in the multi faith hall is holding a religious festival with various activities such as performances, exhibitions, traditions and culinary delights. The space needed is a universal hall with flexibility that can be used for various needs. A flexible and smooth spatial transition is required in creating community involvement between the community and the public user.

Spaces that support the needs of the festival are a gallery, mini stage and culinary. As already mentioned that some festivals are synonymous with typical food, the public is interested in food, so providing a space for culinary delights that can directly interact or provide a visual festival atmosphere without disturbing activities can also add value to this place.

Creating a space with lighting, providing a sacred place atmosphere with natural features such as water or green area and universal space with modules that can be adjusted are the requirements for a multi faith hall

Table 2.5 Tabel of Multipurpose and Multifaitth Hall by Author

	MULTI PURPOSE HALL	MULTI FAITH HALL
ACTIVITIES	unlimited free activities according to user requirements (concerts, performances, exhibitions, etc.)	activities intended for various religious festival events in which space allow all faith groups to adapt spaces quickly to suit their particular needs. accommodating a wide range of religious demands on site
SPACE CHARACTERISTIC	flexible	sacred ambience/ spiritual ambience
	visibility for everyone	references the religious (such as numerology and geometries, structure of all faith)
		flexible
		visibility for everyone
		Connect with nature

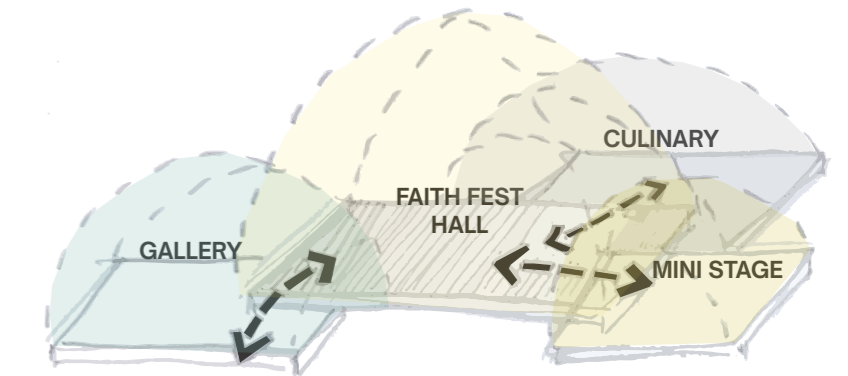


Figure 2.32 Space Connectivity by author

2.6.2 Space Requirement For Public Space

The goal is how to reactivate redundant public spaces that are not in demand into something that has new value and attracts the attention of users. The space needed for gathering places, benches, children's playgrounds can be created from the play of colors or light that forms the space. The transition from gathering places between private spaces to public use provides an experience to users. Visualization in all directions from one side to another so that activities from the public space are visible. Green area will have big outdoor impact since nature will give sense of calming and freshness. User activity is the main variable in the formation of space. The involvement of the community as the perpetrator of the activity will produce quality of the space and increase the user's curiosity as humans will be more interested in the crowd and find out what is happening. Activities resulting from these community activities can be supported by placing technology (ICT) in public spaces following trends in society

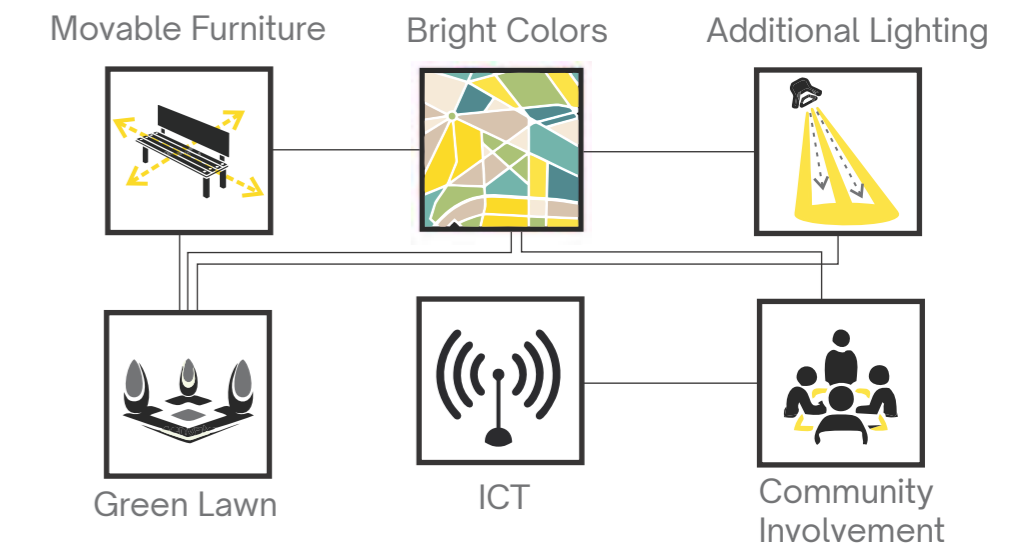


Figure 2.33 Activating Redundant Space into Public Space by author

SYMBOLIC ARCHITECTURAL CONCEPT

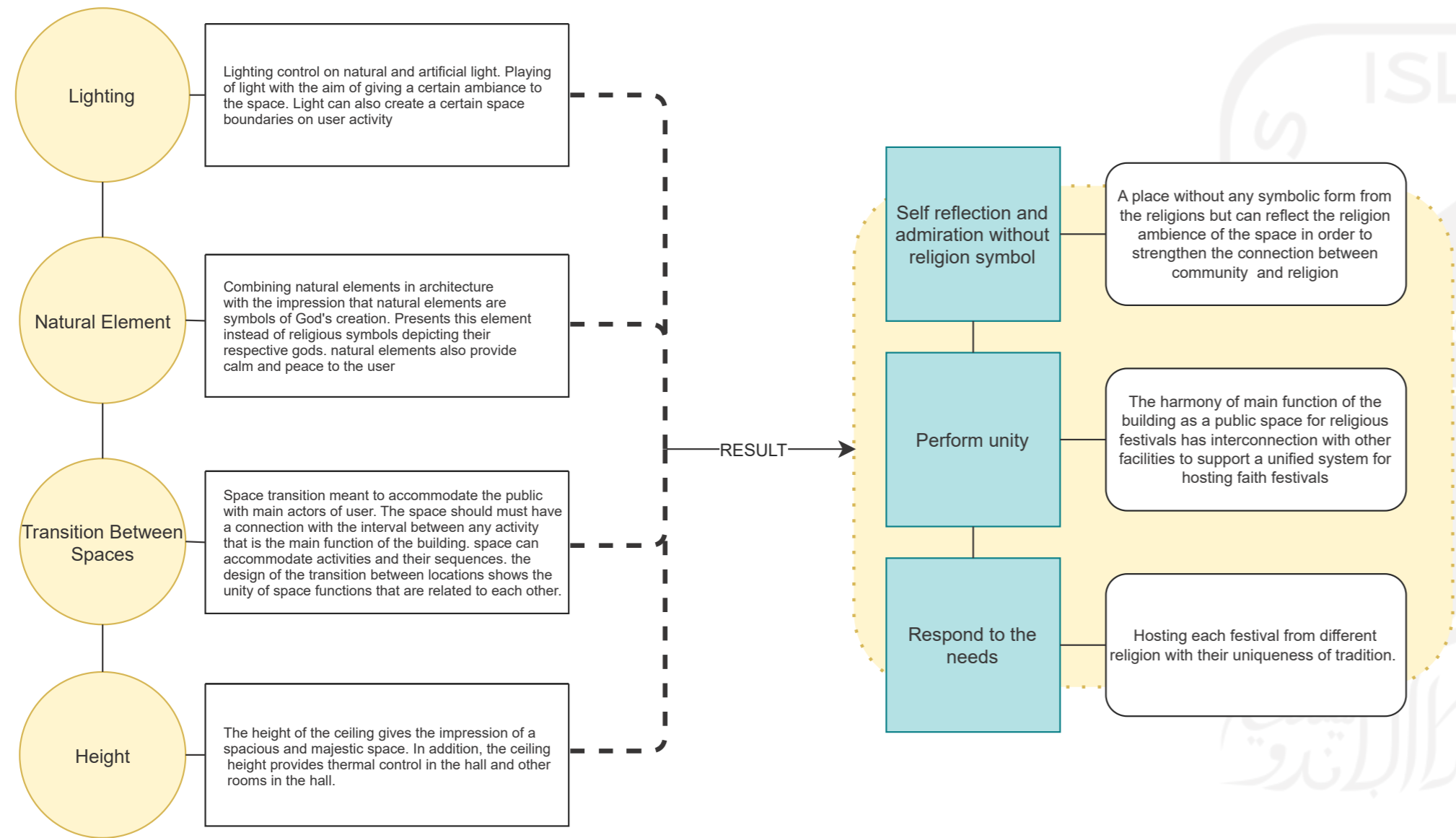


Figure 2.34 Symbolic Architectural Concept Diagram by author

2.6.3 Symbolic Architectural Concept

Symbolic in the sense that the inclusiveness of this community center is specific to religion. This concept is shown as a strategy on how elements of architecture can create an atmosphere with the goal where Magelang Community Center building to host religion community activities, namely creating a spiritual space that is created without any religious symbols in architectural forms. Describes the tolerance and purpose of this community center with inclusiveness on it.

Some of the strategies mentioned in the chart are taken from several reference journals, books, experts and architects who apply this strategy to their work. How to create symbolic architecture in spaces and buildings so that they have a religious impression is to consider and apply special designs to lighting, natural elements, transitions between spaces, and using the height of the building or space.

According to Louis Khan, light can create spiritual emotions when light is played properly. Like a dark room without light, if there is one small hole that emits light, the space will have a different ambience. light likens a focal point that can replace spiritual symbols. In various religions, light can also describe the creation or worship of God, so that many religious architectures use the illusion of light to convey religious messages in places of worship or buildings that have the ideology of a religion. Lighting can also create spaces from the reflection of light produced, the purpose of using lighting is to visually show architecture that will affect the emotions of the user.

The use of nature as an architectural element can psychologically provide peace, as well as relieve stress. It is the same with the concept of architecture in religion buildings which has one function to provide spiritual peace to its users. Natural elements such as the sound of the wind blowing tree branches and leaves, the waves crashing or the smell of flowers as symbolizing this creation from God can provide an ambience of calm and peace for users. Natural elements can be placed in the space in the form of duplication or implementation of architectural forms on interior elements of space or structures such as furniture, column or ceiling models which have shapes based on the embodiment of natural elements.

Different pathway will give different impressions. The experience gained from the many phases or transitions in a space can provide a different atmosphere that gives rise to different emotions for the user. If a building is like a street or a passageway, people will definitely prefer a road that attracts more attention than a monotonous one. Design transitions in buildings are needed to provide a different experience for users. Of course this space must meet the basic needs of the function of the building. But the transition that is created will affect how the sequence of the user. An example of the function of the Magelang Community center to host a faith fest is how Sigaluh Culinary transitions into a multifaith hall, how the multifaith hall space is arranged for religious activities when there are general users, and so on.

2.6.4 Horizontal Zonning

Alternative 1

Multifaith center as the heart of the community center where the main activity of the community take a place and connecting the other facilities



Figure 2.35 Room programming diagram alt.1 by author

Alternative 2

Space is present in a hierarchical level arrangement based on the importance of the main function of the community center activities. Hall as the center of activity has dominance and the most important point.

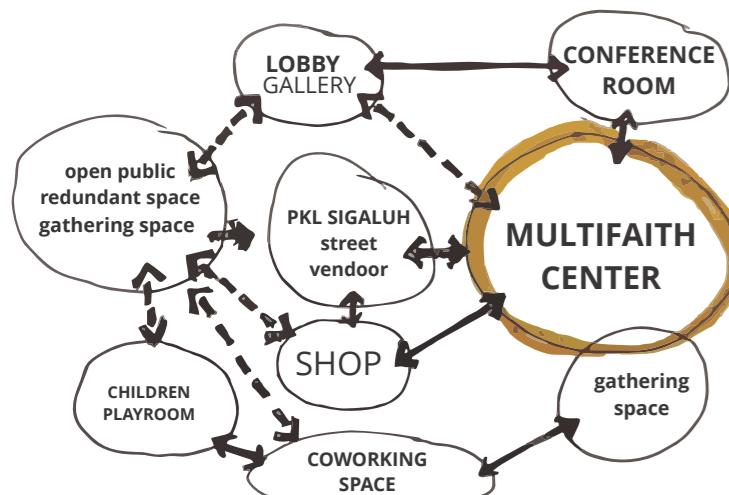


Figure 2.36 Room programming diagram alt.2 by author

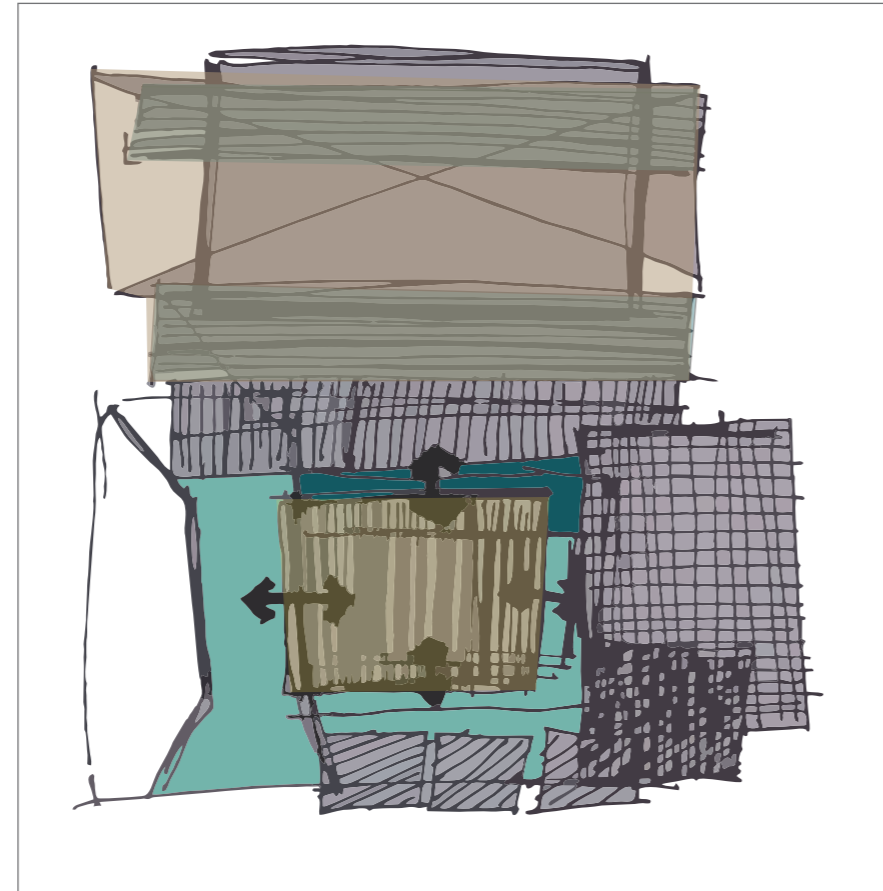


Figure 2.37 Implementation of room programming diagram alt.1 by author

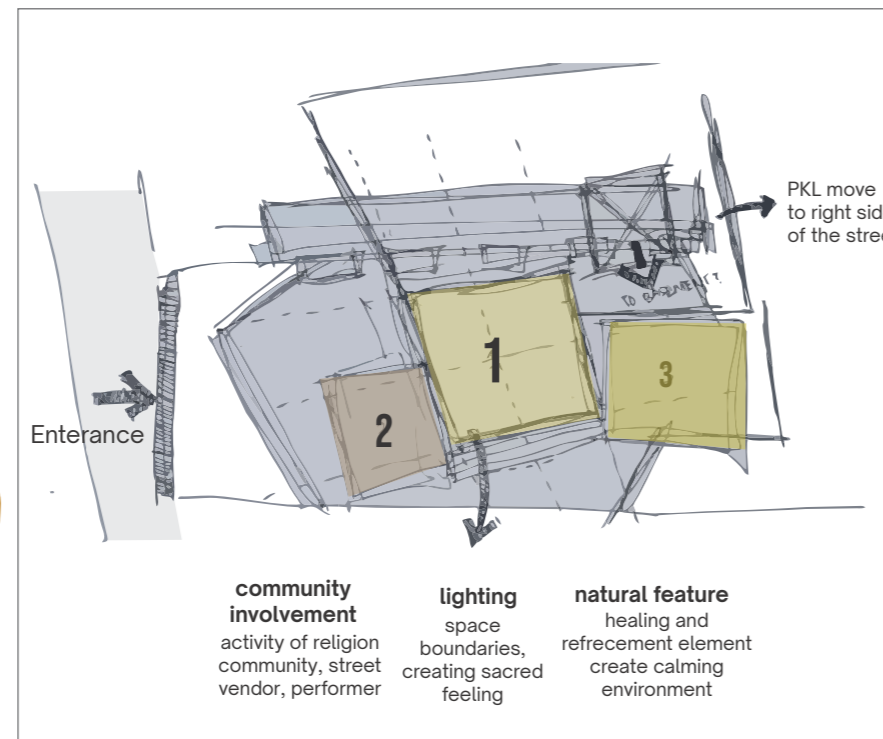


Figure 2.38 Implementation of room programming diagram alt.2 by author

Multifaith hall, as a center directly connected to the public areas on both sides of the building. other space functions surround the core composition. Activity will be centered in the central area. flexibility by using an open plan and utilizing public space for outdoor events in addition to using it as a gathering space. The drawback is that the view out of the hall is not optimal because it is surrounded by many other spaces, activities that are centered in the middle can cause a mass explosion so that circulation when entering and leaving is less efficient

The composition is divided into 3. Multifaith hall is placed in the middle. The facilities for other activities are at different mass compositions with linear flow. The hierarchical level starts from the special needs of the activities where the multifaith hall take a place as number 1. The second arrangement of space is the activities that have been existing from the context. Sigaluh culinary placed on number 2. The third activities are the supported activities to re-activate and accommodate the mass such as public spaces

2.6.7 Vertical Zonning

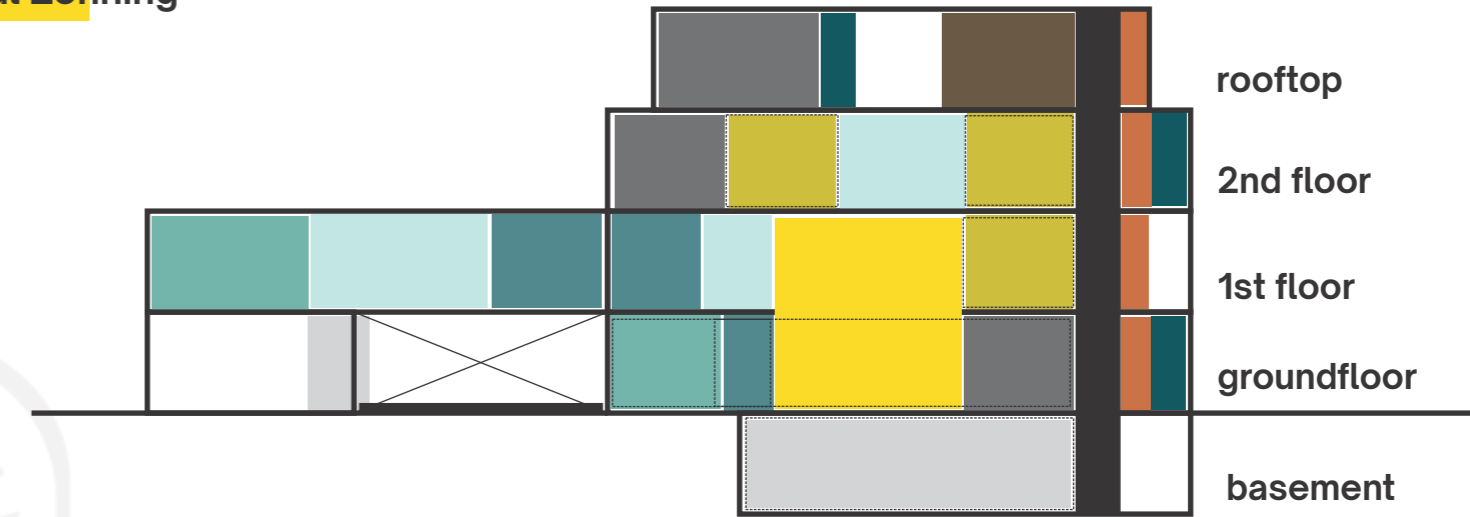


Figure 2.39 Vertical Zoning by author

Multi Faith Hall

This space is the orbital center which is interconnected with other facilities making this space the heart of the building. Wide and flexible space with a unique design emphasizing the ambience of a sacred place which is used to host religious festivals from various religious communities. This space is located on the ground floor to the first floor for easy access, loading, and is more flexible with the public space on the ground floor.

Conference Room

Conference rooms are on the first floor and second floor. specifically for the second floor, it is used for religious communities and for the second floor, it can be used for religious communities and the public.

Co-working Space

Co-working space is a facility that is not widely available in the city of Magelang. 2 types of co-working space will be provided that can be used for the public. The working space on the second floor is for those who want to focus on work. On the first floor is a working space close to the F&B where visitors can work and eat while enjoying the festival from above.

Sigaluh Culinary

Culinary street vendors on the left side of the road are moved to the top, while those on the right side of the road are shifted into the site to join the public redundant space. This is intended to increase the circulation of road users and create a culinary street vendor that is more organized and cleaner.

Children Playroom

Available indoors and outdoors. Outdoor on the ground floor and indoor on the first floor.

Green Space

The green space also functions as a gathering space on several floors. Green space gives a fresh and environmentally friendly impression to be placed in outdoor areas such as rooftops and balconies

Gathering Space

Gathering space is in the outdoor area. on the ground floor is a redundant public space used for festival activities. On the first floor and second floor, an outdoor gathering space group will be provided with a visualization of the Magelang city square area

Parking Area

The main parking is placed in the basement. Alternative parking can use the left side of the road but specifically for motorbikes (if the basement parking lot and the public parking area are full)

Mechanical Electrical

Lift house, HVAC, roof tank placed on the rooftop.

Lavatory

Public toilets are located near the shaft and are provided on all floors

Shaft, Vertical Transportation

Space for an elevator, emergency stair, and shaft electrical mechanical plumbing

2.6.8 Sigaluh Culinary

Sigaluh Culinary has 26 vendors located on the side of the road (pedestrian), in this case the goal to be achieved is how to create circulation for pedestrians and reduce congestion. Based on Magelang city government regulations, street vendors can sell on one side of the road. While in the case of Sigaluh Culinary street vendors are on two sides of the road. If one of the street vendors is removed from one side of the road, eating will remove the uniqueness of Sigaluh Culinary and affect the livelihoods of the merchants. The first alternative is to move part of the street vendors to one side of the road so that the pedestrian path opens. Because the site is on the side of the road, the culinary side that is next to the site can be moved inward a little so that it provides a pedestrian path.

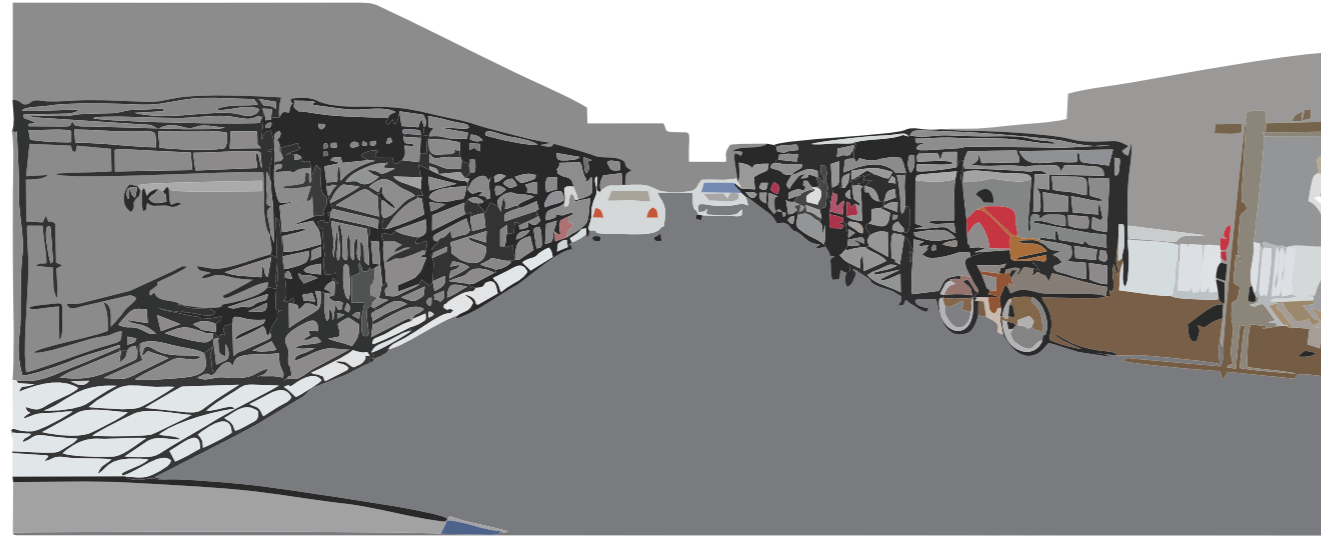


Figure 2.40 Current design of Sigaluh Culinary by author

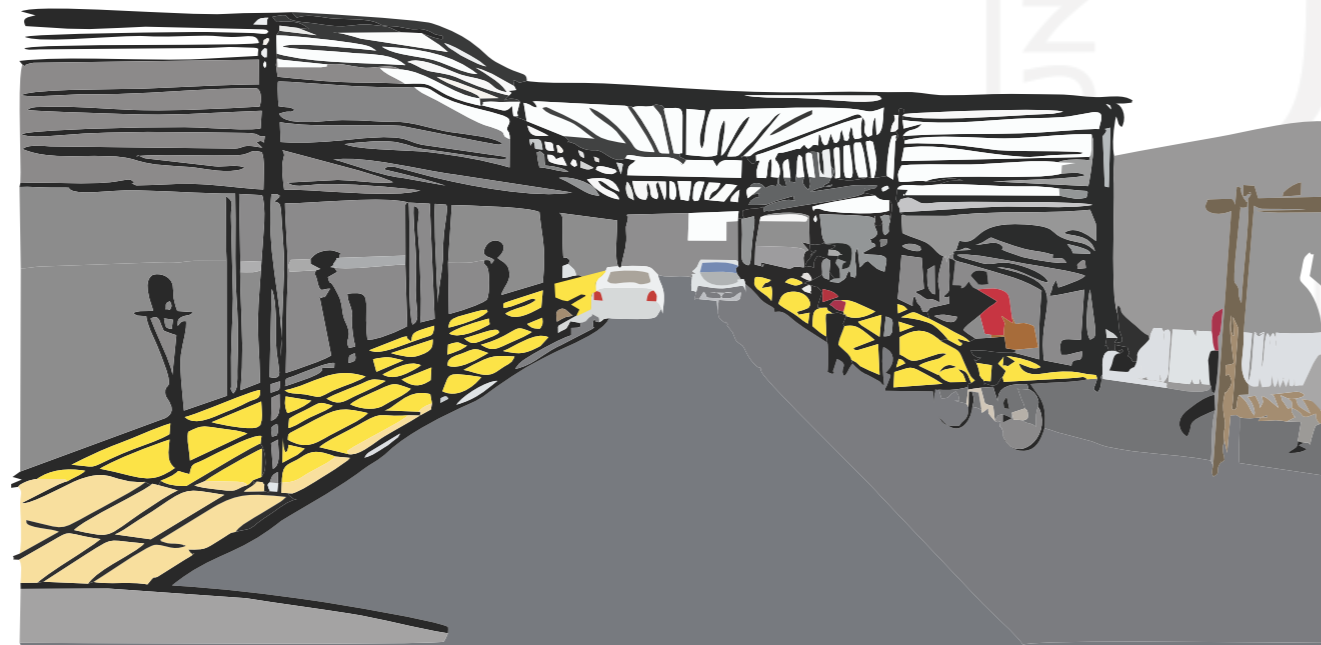


Figure 2.41 Alternative 1 of new Sigaluh Culinary by author

2.6.9 Site Zoning Exploration

The lobby can be reached from 2 directions each of the 2 main access roads. Drop off area placed facing on Sigaluh street because the site is on the corner of the road, make easier for the car to return to the main road

The culinary area is rotated facing inward to the site to provide space on the pedestrian walkways. access can still be passed through the sidewalk.

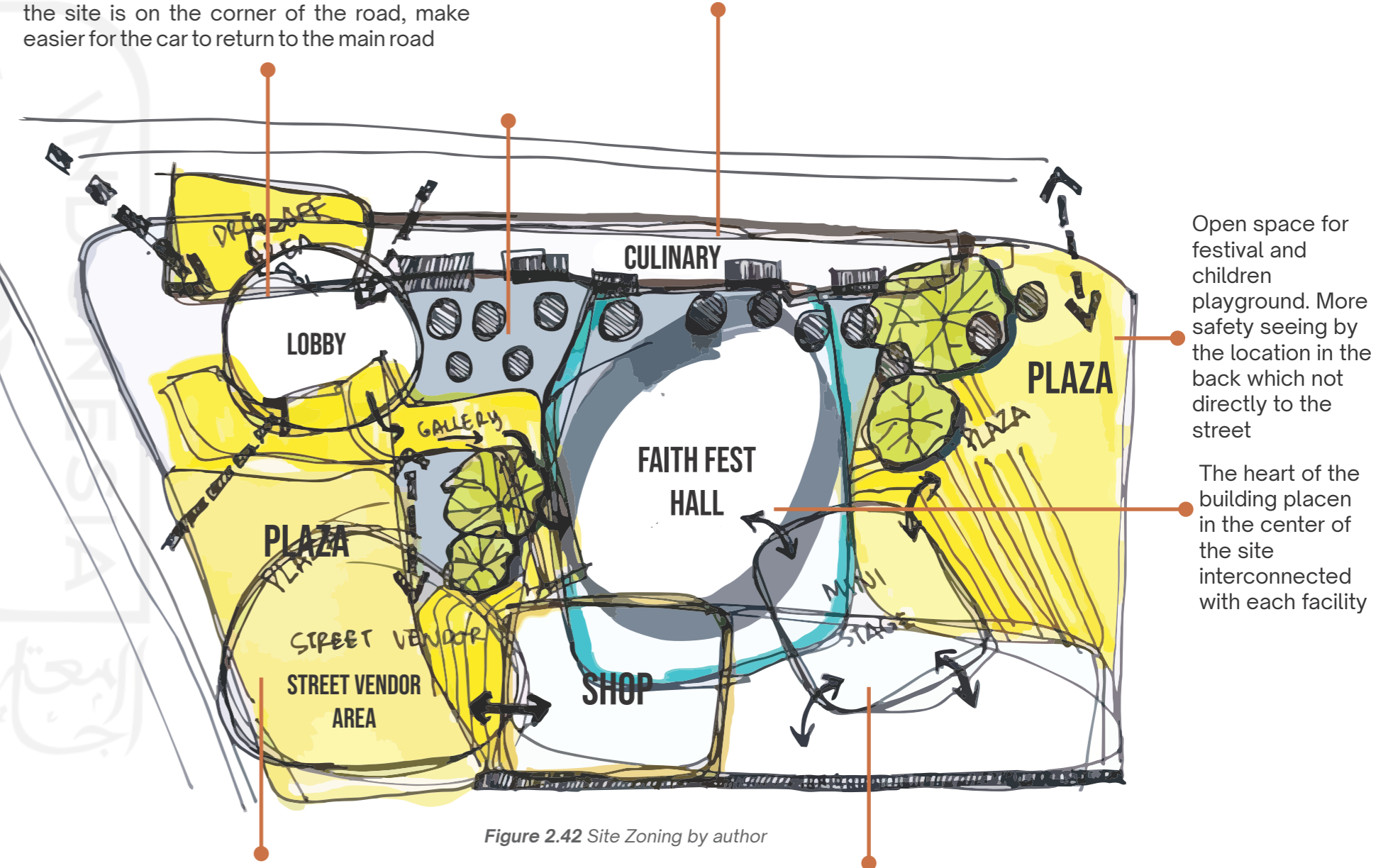


Figure 2.42 Site Zoning by author

Front plaza will give impression of welcoming to public user. Space use for street vendor and gathering place with open area and green area. The plaza will connect the front part with the shop also directed to the multi faith hall.

Provide ministage area for festival performance. The audience can see through from the hall or the second plaza. Flexible space.



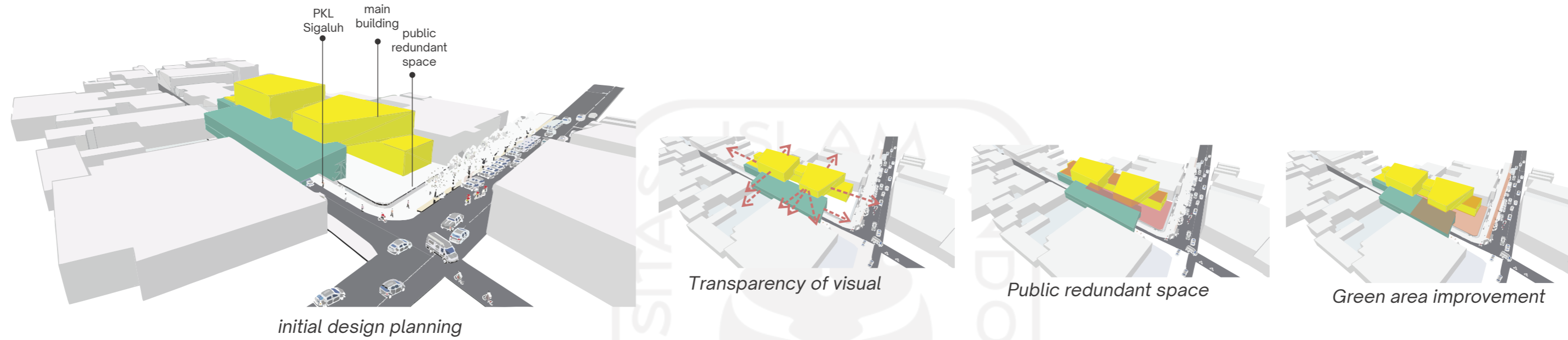
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03

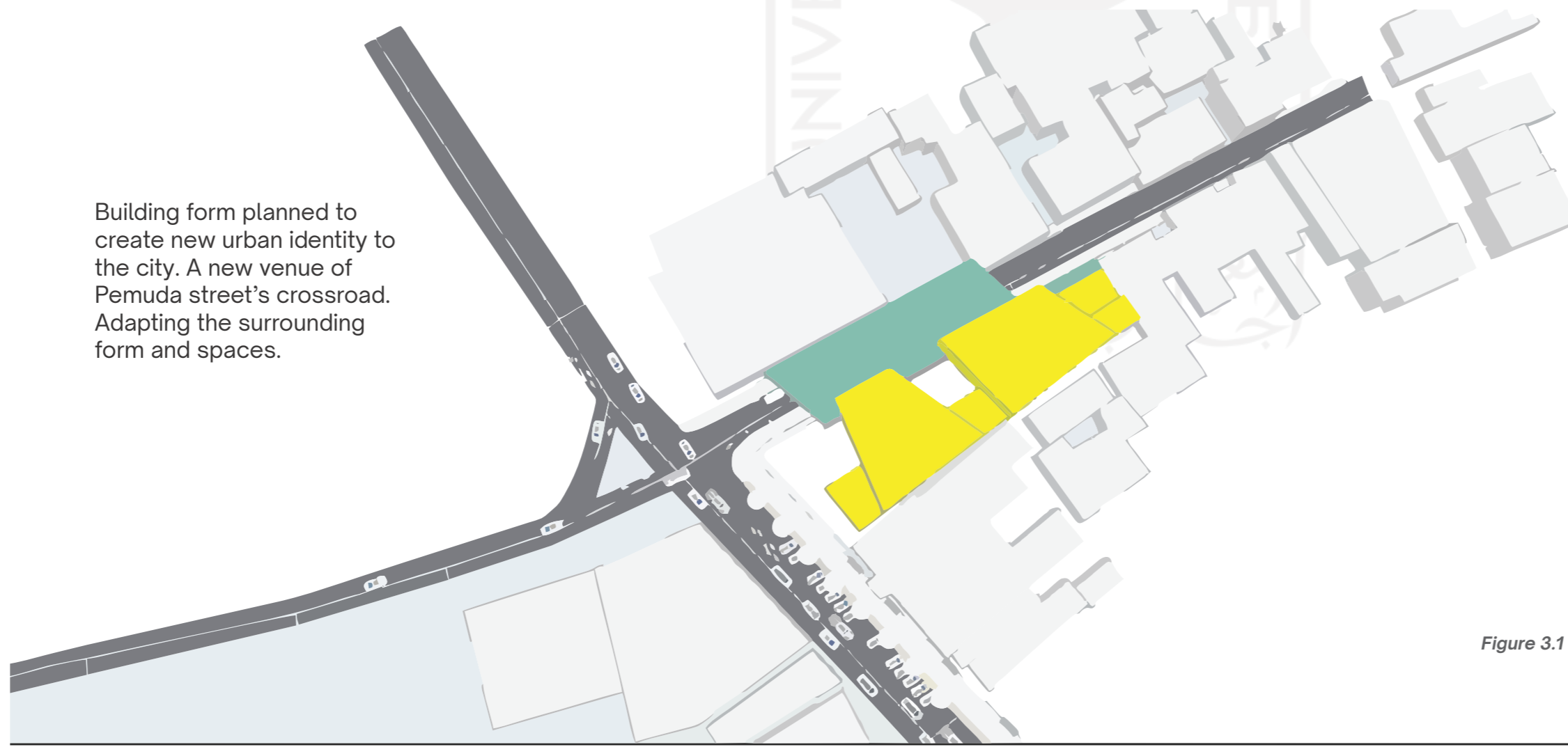
**schematic
design.**

3.1 design alternative

3.1.1 Building Mass Alternative A. Alternative 1



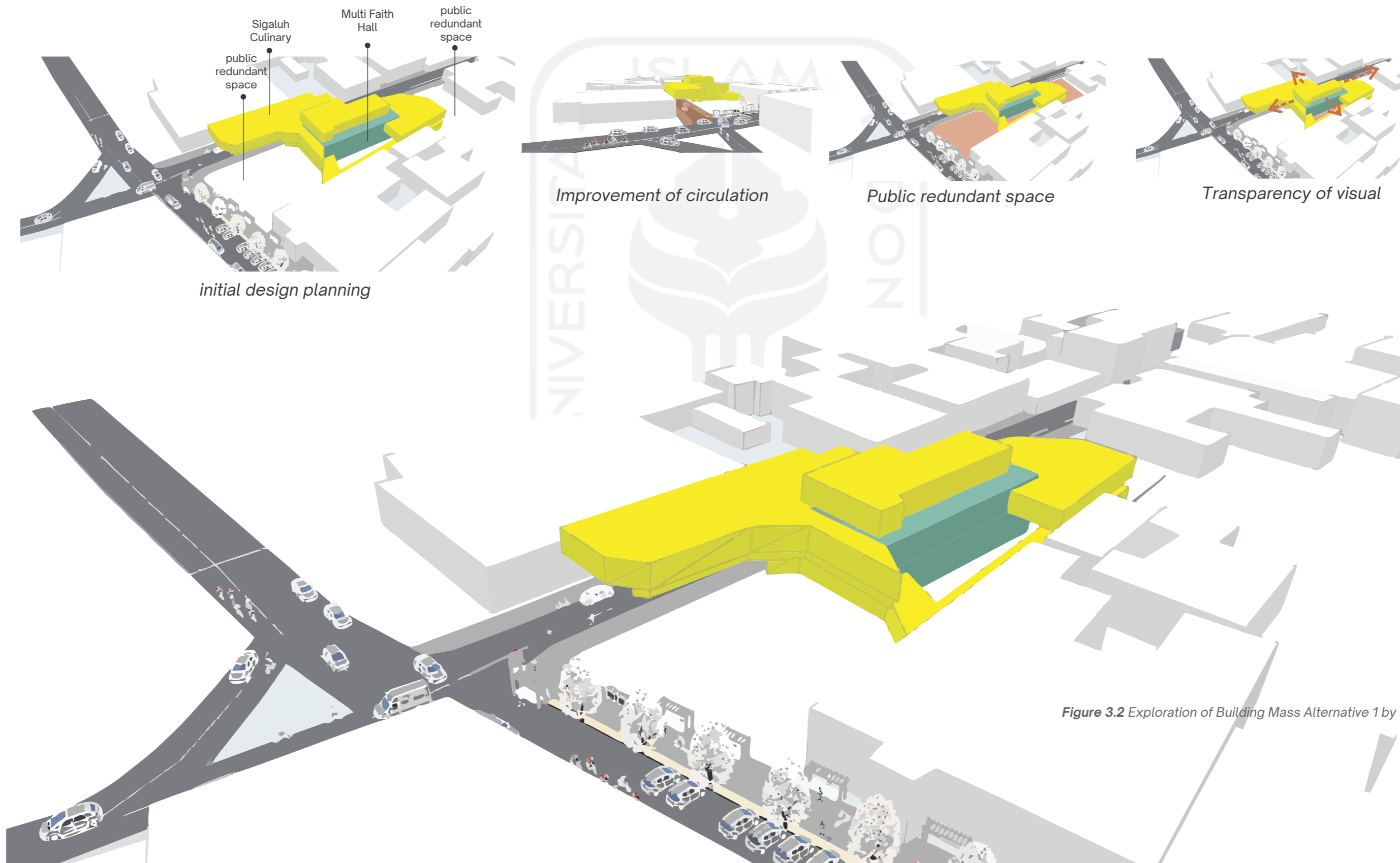
Building form planned to create new urban identity to the city. A new venue of Pemuda street's crossroad. Adapting the surrounding form and spaces.



building mass exploration

Figure 3.1 Exploration of Building Mass Alternative 1 by author

B. Alternative 2



building mass exploration

Figure 3.2 Exploration of Building Mass Alternative 1 by author

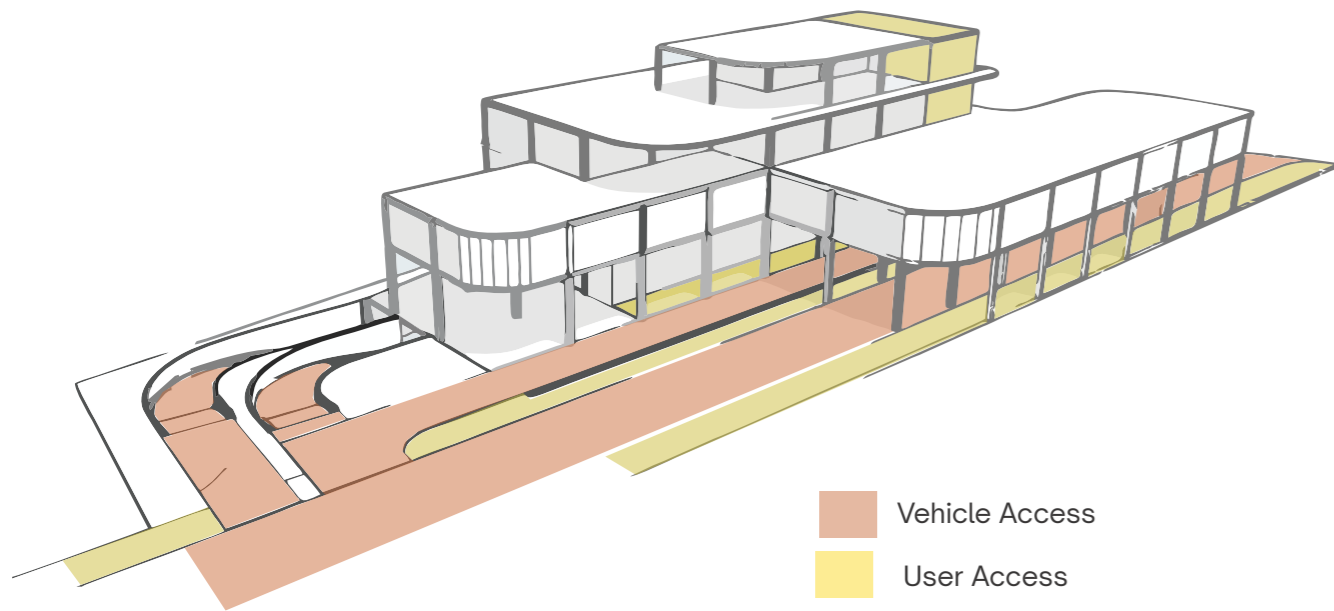


Figure 3.3 Scematic design of accessibility by author

Accessibility

The main access for vehicles is from Sigaluh street. To maximize site potential, the main road plays a role, namely as a turning point if you want to go to the basement from the drop-off. The relocation of Sigaluh street vendors opens new roads for pedestrians so that the circulation on Jalan Sigaluh is freer and the main road is specially used by vehicles.

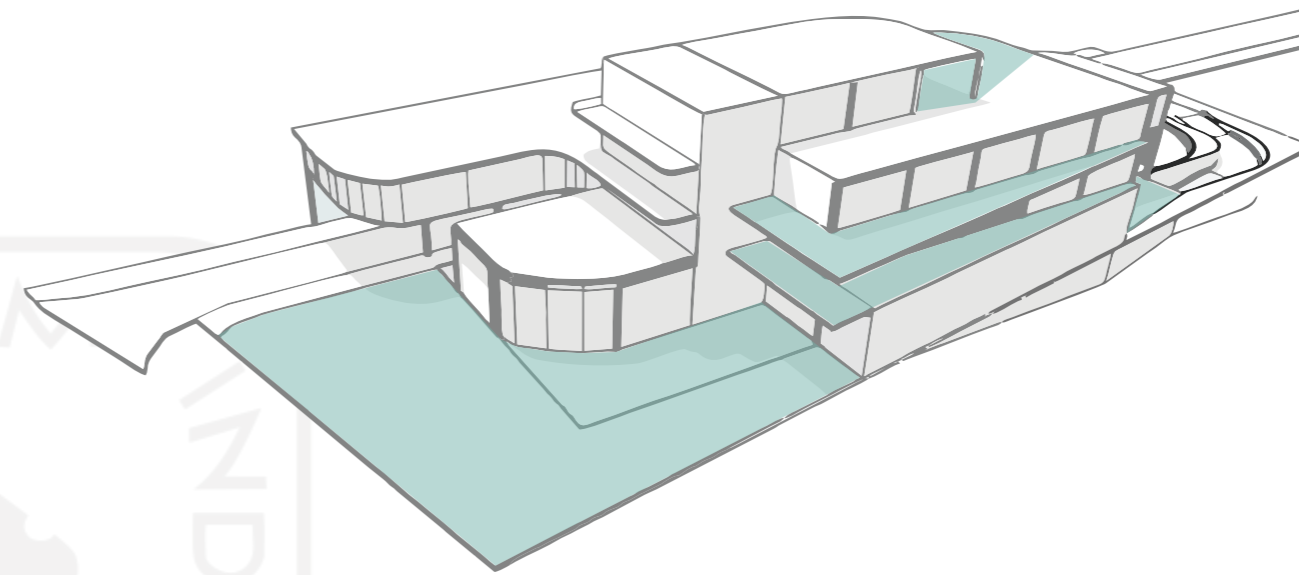


Figure 3.5 Scematic design of outdoor community spaces placement by author

Community Public Space

Outdoor public spaces are scattered on the sides of the building. outdoor public spaces create activity relationships between users. The main public space is on the ground floor at the front of the building intended for use during festivals. playground, gathering space, benches, use of light and color in public spaces with visualization of the square, Chinatown, and pagoda. intended to provide a welcoming vibe to the public. balcony as a vertical garden development platform and additional gathering space

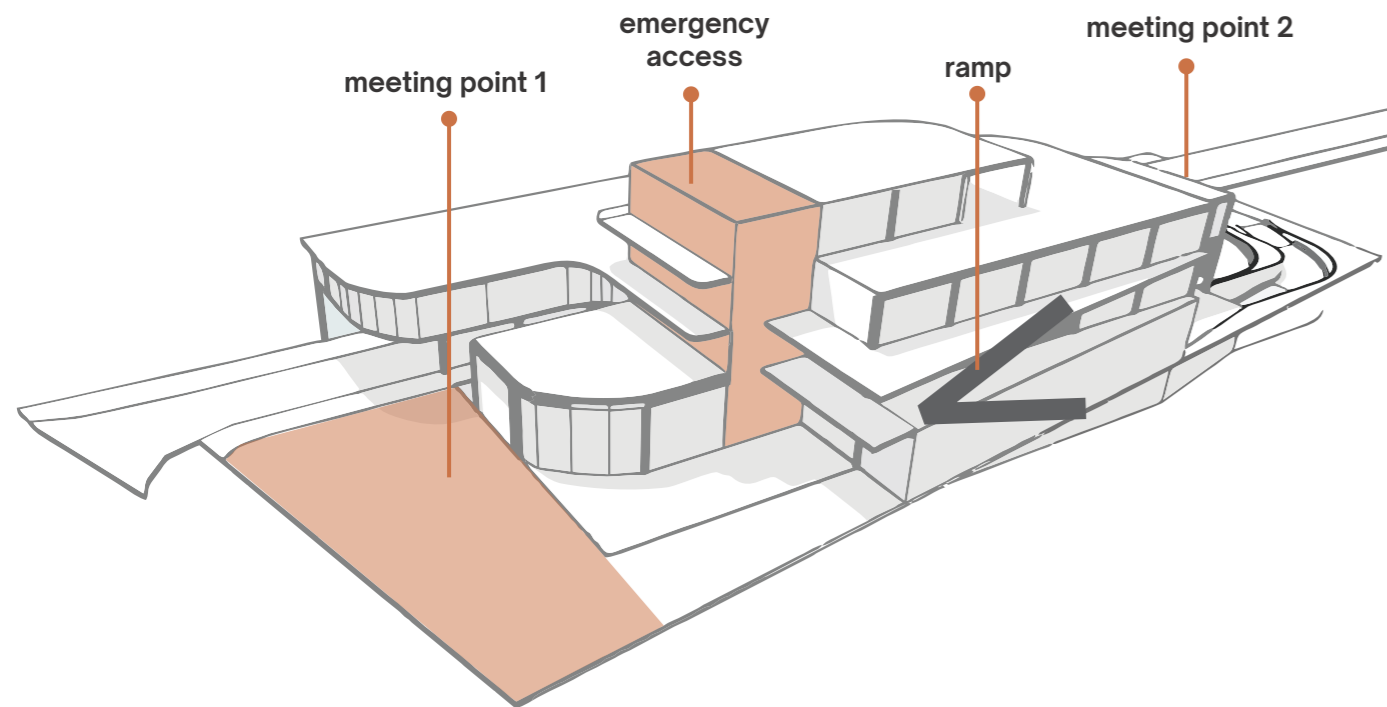


Figure 3.4 Scematic design of safety by author

Safety

There are 2 evacuation zones during an emergency, namely on the front and back of the site. provided emergency stairs, ramps, and emergency lifts (disabled users only). Emergency stairs will go directly to meeting point 2. Lift and ramp will lead to meeting point 1

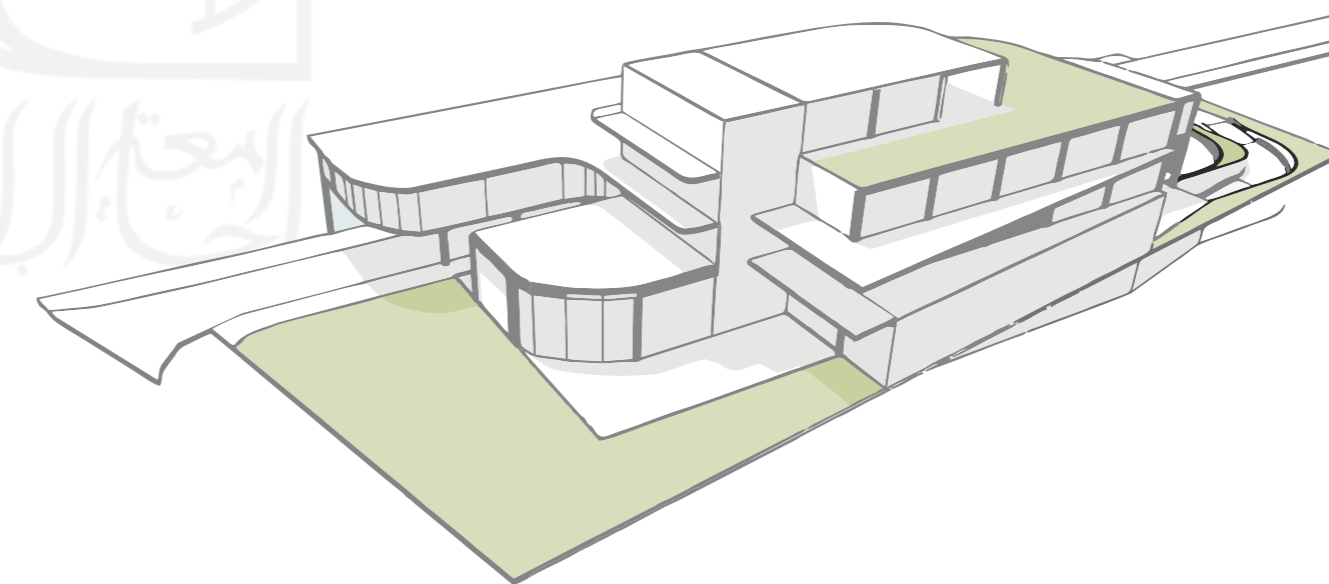


Figure 3.4 Scematic design of green area development by author

Green Area

Maximizing the area to be developed into a green area. the green area coefficient is at least 10%. This building uses 40% of the site area for green areas. The balcony and public space provided are also planned to be used as a vertical forest to provide a canopy and improve air circulation in the building (the location of the building is in a crowded area of vehicles).

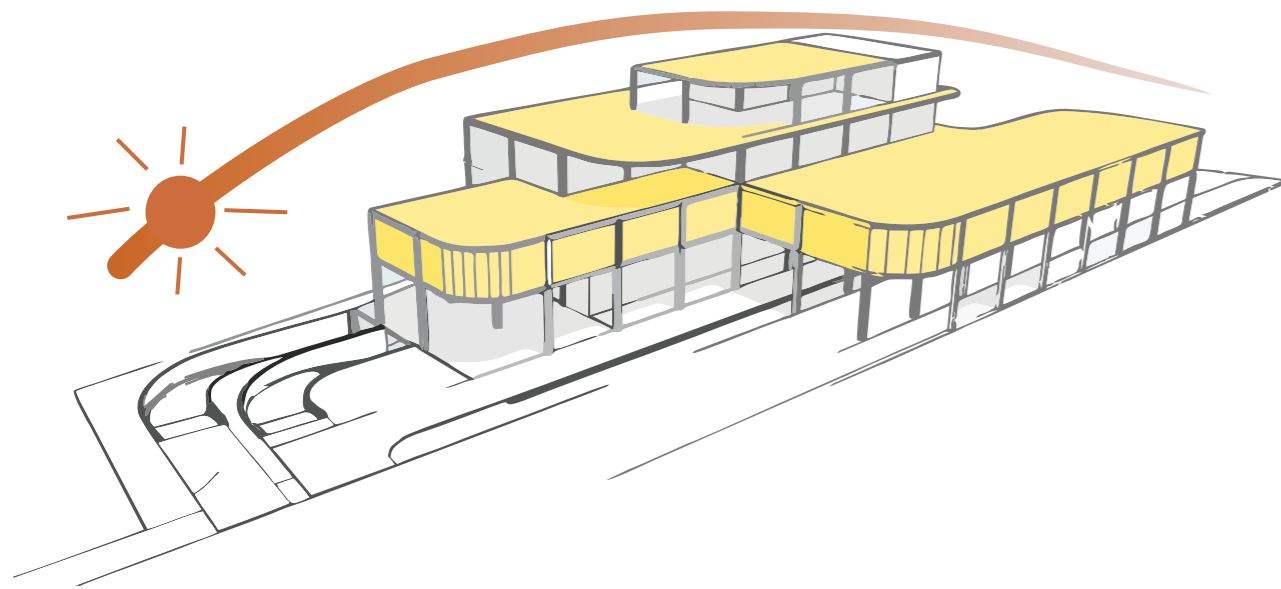


Figure 3.5 Mass form provide cantilever by author

Mass Orientation Based On Solar Direction

The direction of the mass composition responds to the direction of solar radiation, providing efficient natural lighting for the building. mass compositions are arranged in layers to form a cantilever for the compositions underneath for the purpose of shading.

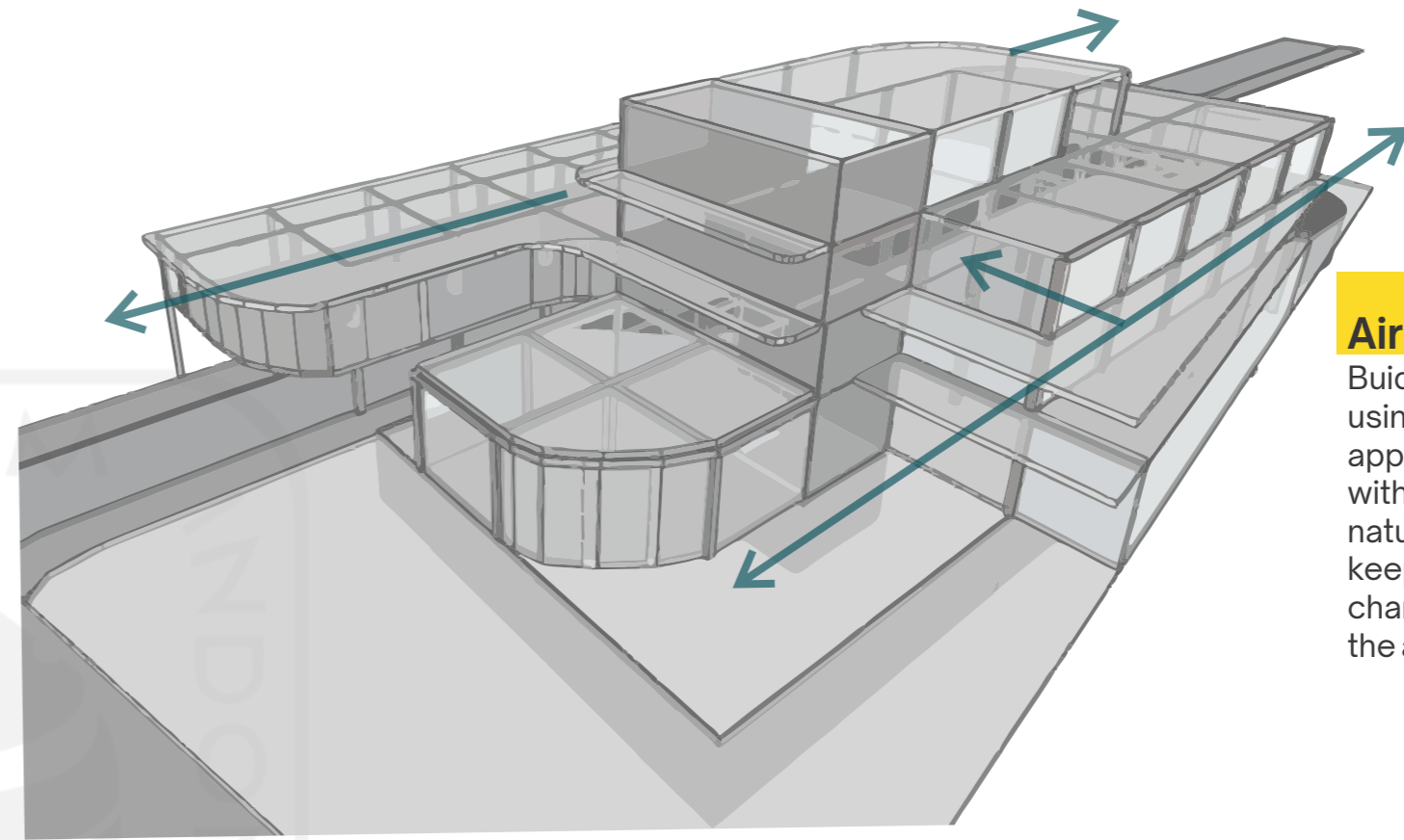


Figure 3.7 Scematic design of air circulation flow by author

Air Circulation

Building mass responds to wind direction using the principle of passive cooling. application of a passive cooling system with 2 main vents to produce healthy natural air circulation. This air circulation keeps the smell from the culinary spirit changing so that it doesn't interfere with the activities of other users.

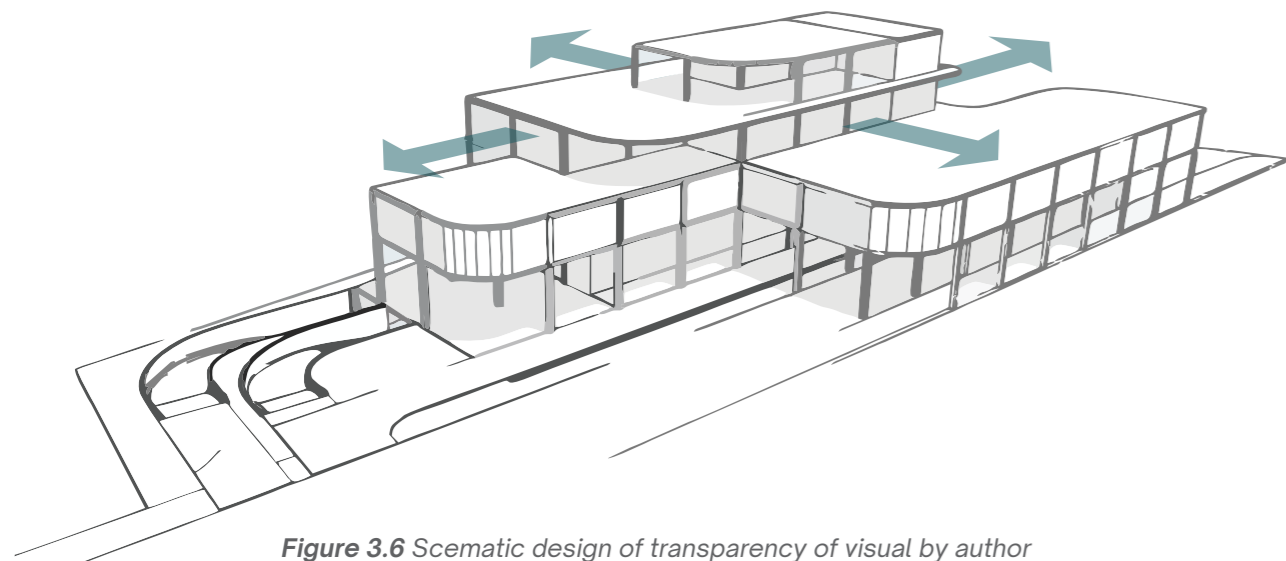


Figure 3.6 Scematic design of transparency of visual by author

Transparency Of Visual

Building mass with the concept of visibility to the outside of the building, especially at levels 1-3 the masses are arranged in different directions. With the opening given in certain directions, users can enjoy the view outside the building. the openings are placed according to the vistas that are best suited for the user

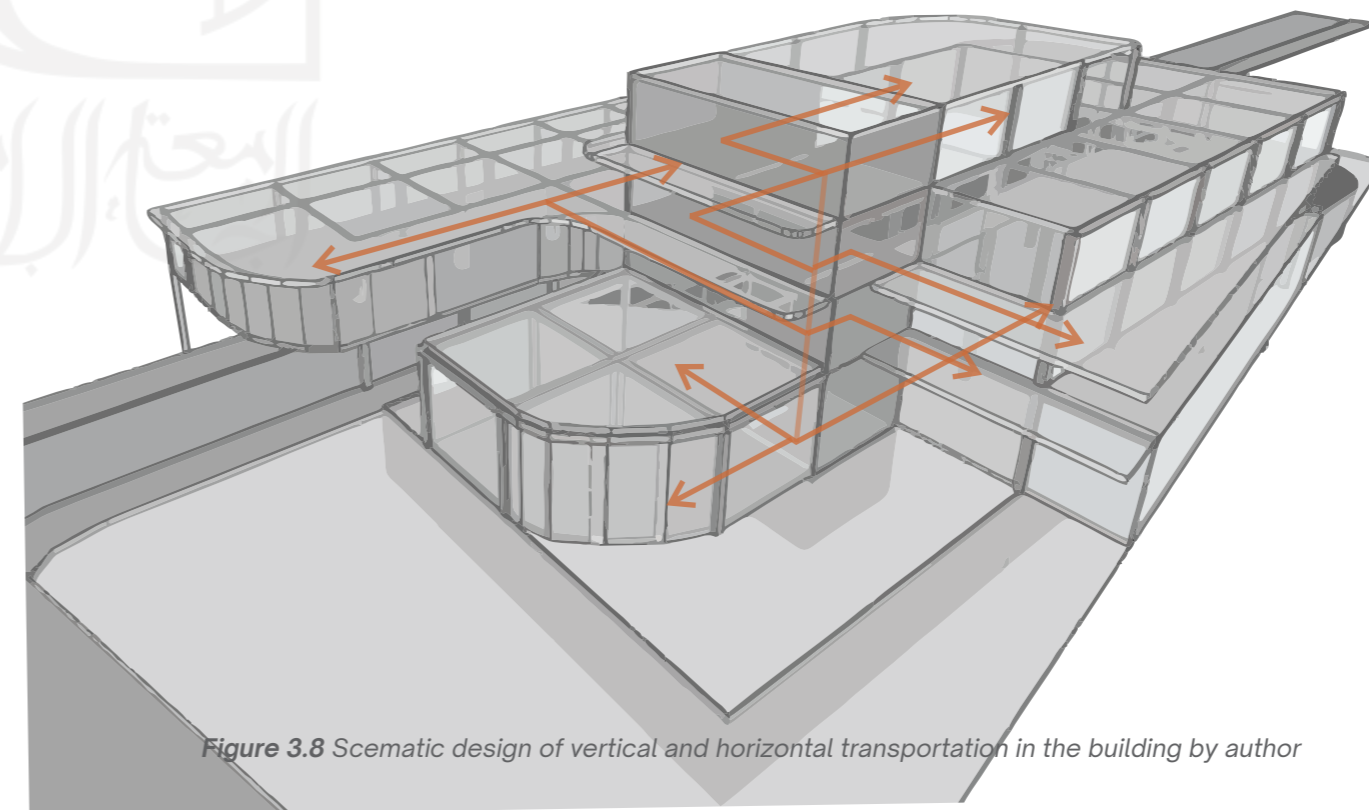


Figure 3.8 Scematic design of vertical and horizontal transportation in the building by author

Transportation

Vertical Transportation in the building is using lift and stairs. In the outside there is ramp. There are two main access for user : lobby, drop off area which can directly go to the lobby lift stairs and ramp

3.1.2 Design of Children Environment

Space In Between

Space and circulation transitions using a play of color and shape, textures. Differences in each space transition that creates a new experience. For example the first entrance will play a nature ambience. Then the interior of the corridor will use texture and different material. The hall and ceiling will play with color.

Relationship with Social Activity

Children can interact or participate in activities. Children's zone spaces can be connected directly to the main multi-hall zone, allowing children to interact more flexibly. viewing space is provided on the 2nd and 3rd floors in the form of a balcony or vertical garden (outdoor) providing security for children who want to observe

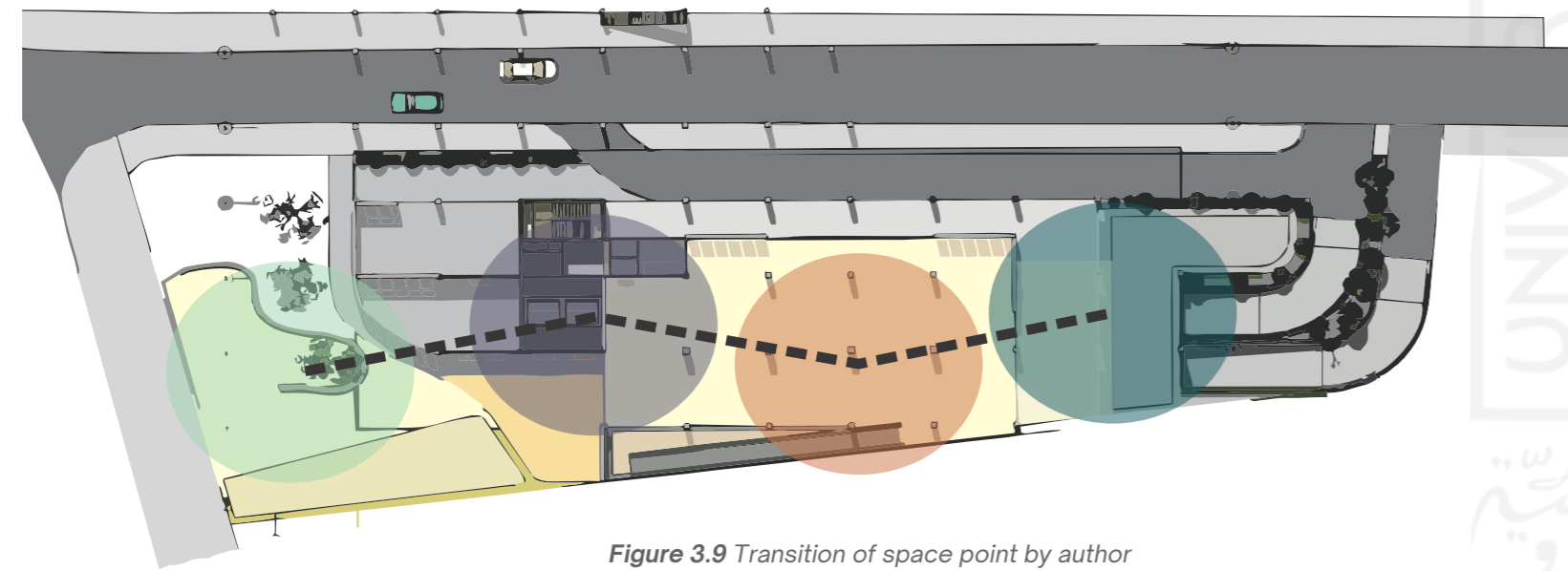


Figure 3.9 Transition of space point by author

Safety

- Children can move freely throughout the building safely.
- Placing the focus of the playground in a safe area (from vehicles, ongoing activities). Children's playroom is placed on the top floor to reduce the risk of children going to the street
- Vertical circulation ramps and lifts are provided for children because when using stairs there is the potential for tripping / falling. this is assisted by the fittings of a railing with a special child handle.

Transparency & Nature

- Openings in the building that allow control from inside the building to the outside of the building which can directly supervise children. This opening leads to the public space where the public space provides a natural atmosphere that can increase the sense of calmness.
- Outdoor play area for children is integrated with the front public space that blends with natural elements.
- Spaces are made open with minimal partitions or obstructions to increase the visibility of space.

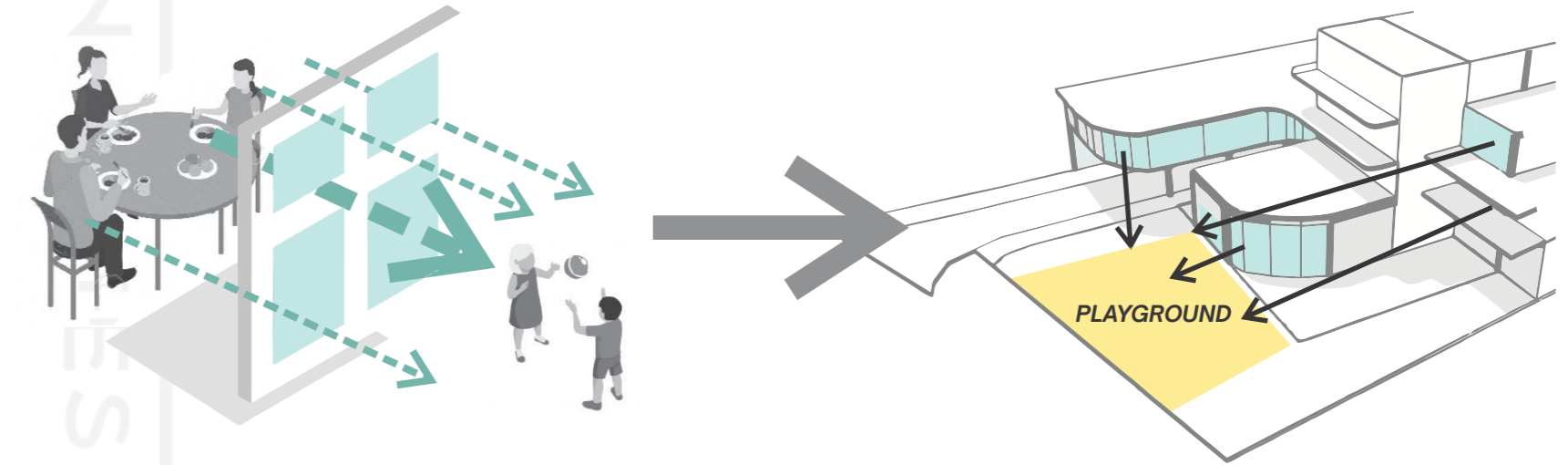


Figure 3.10 Diagram of transparency and visibility for parents by author

Scale

There are 2 children's play rooms, outdoor and indoor. outdoor is in the public spacenya. Adjustable equipment & furniture use for children.

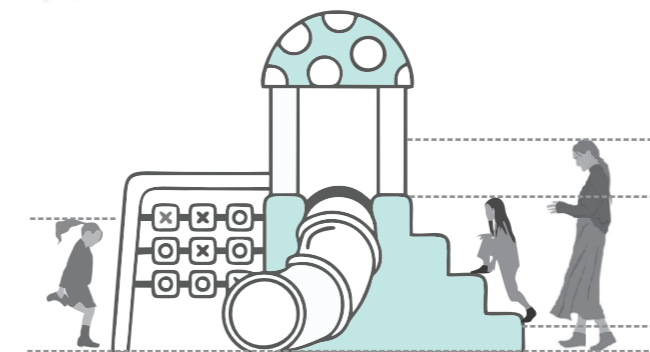


Figure 3.11 Scale in children equipment by author

3.1.3 Floor Plan

ground floor

The ground floor area is used specifically for the faith festival, starting from public space to buildings. the ground floor area is also used as a major commercial center, namely Sigaluh Culinary and street vendors. The multi faith hall is designed in a modular and flexible manner by maximizing the height of the room and ceiling so that it gives a spatial effect to the space.

1st floor

The first floor is divided into 2 compositions. composition 1 for the commercial area, namely Kuliner Sigaluh, a coworking space and a meeting room that can be rented out for the public. composition 2 is the building of a multifaitth hall, as well as the special needs of the religious community

2nd floor

The 2nd floor contains a coworking space, a multi-function room and an area to enjoy the festival from above. The 2nd floor function is more specifically for children with special play facilities for children

rooftop

Rooftop area used for mechanical and electrical needs such as lifthouse, roof water tank, etc. The rooftop area has a view of the city, with this view the roof area is also used as a gathering space.

Rooftop area used for mechanical and electrical needs such as lifthouse, roof water tank, etc. The rooftop area has a view of the city, with this view the roof area is also used as a gathering space.

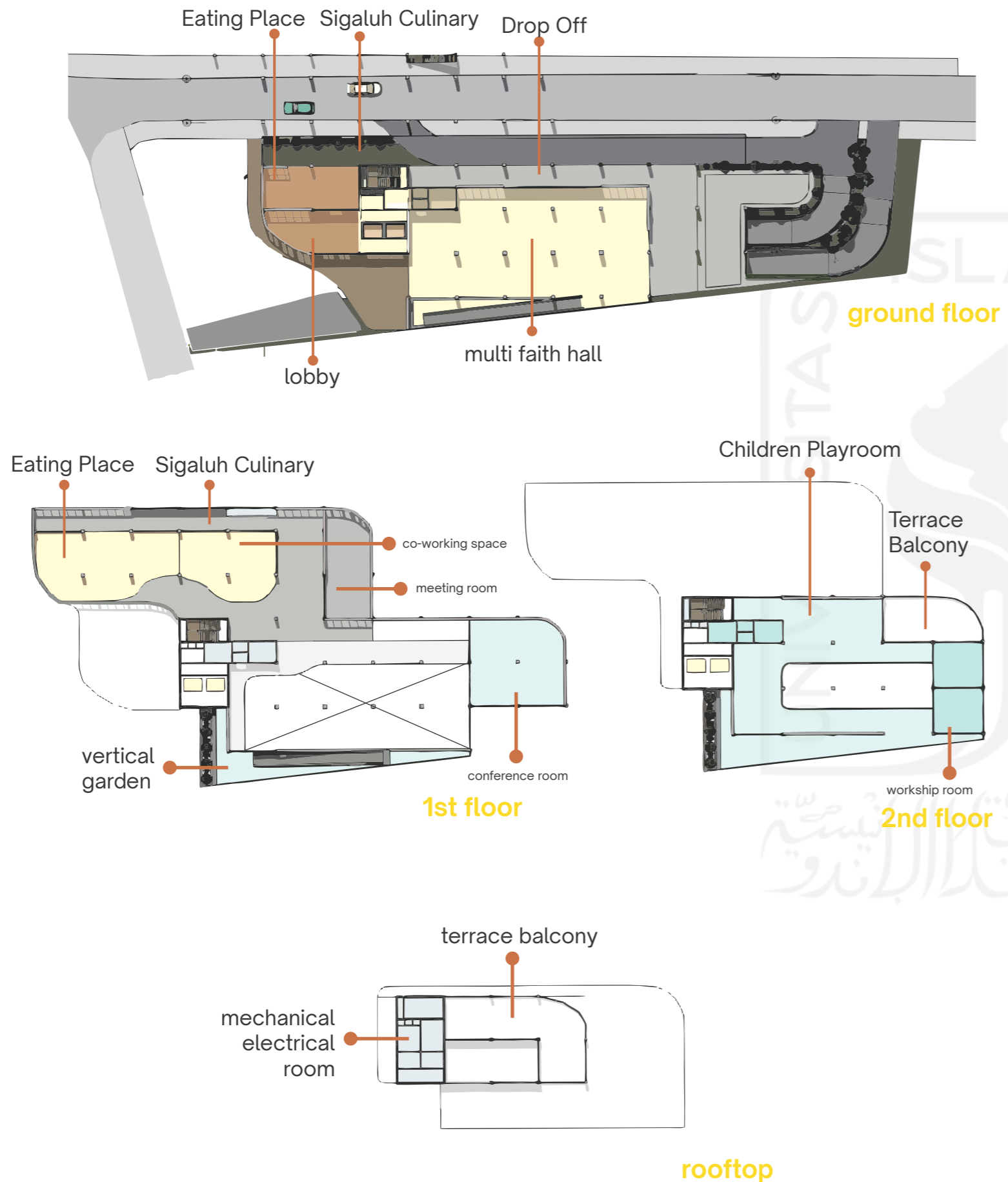


Figure 3.12 Magelang Community Center scematic floor plan by author

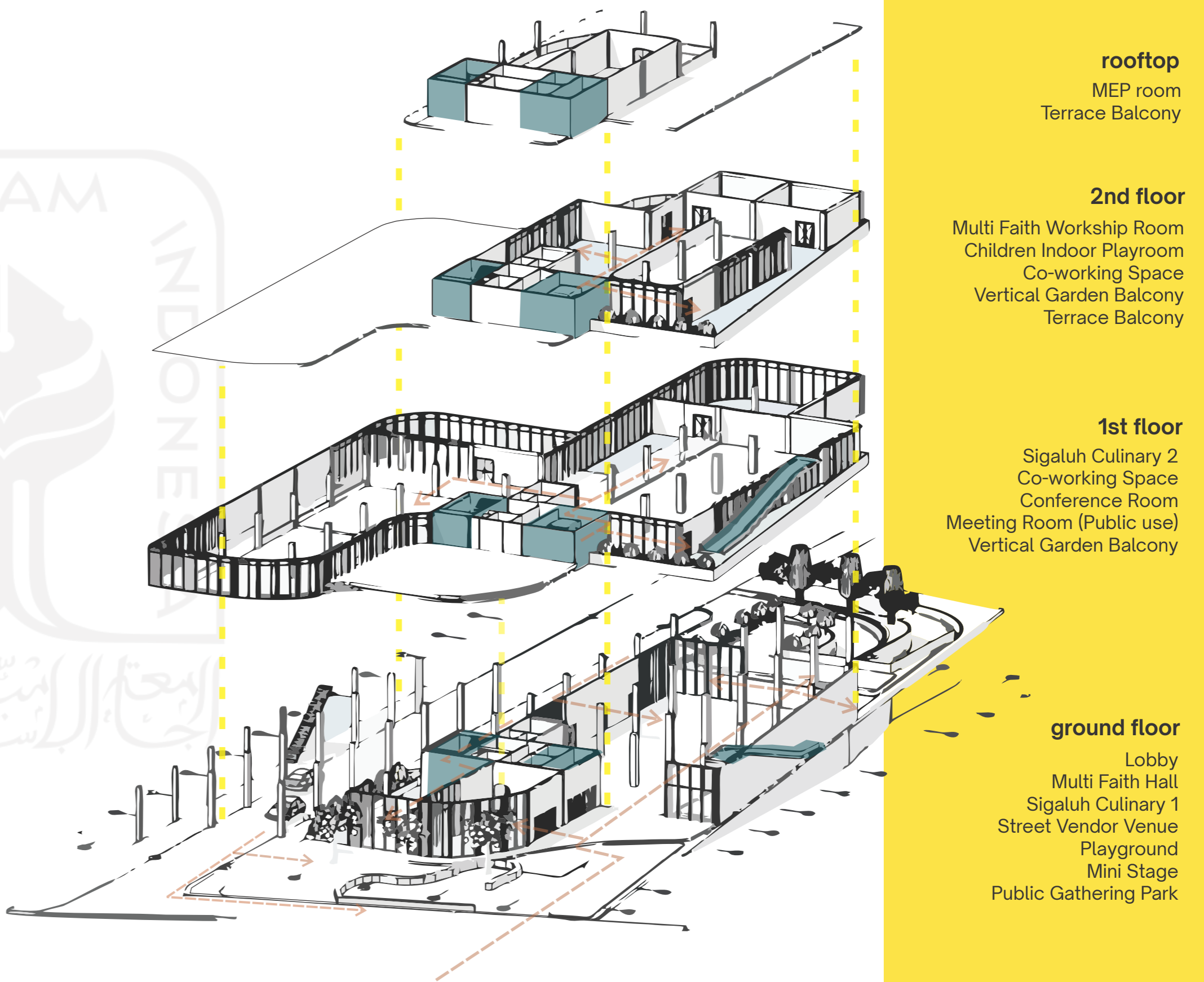


Figure 3.13 Scematic Exploda Axonometric of Magelang Community Center by author

3.1.4 Site Plan

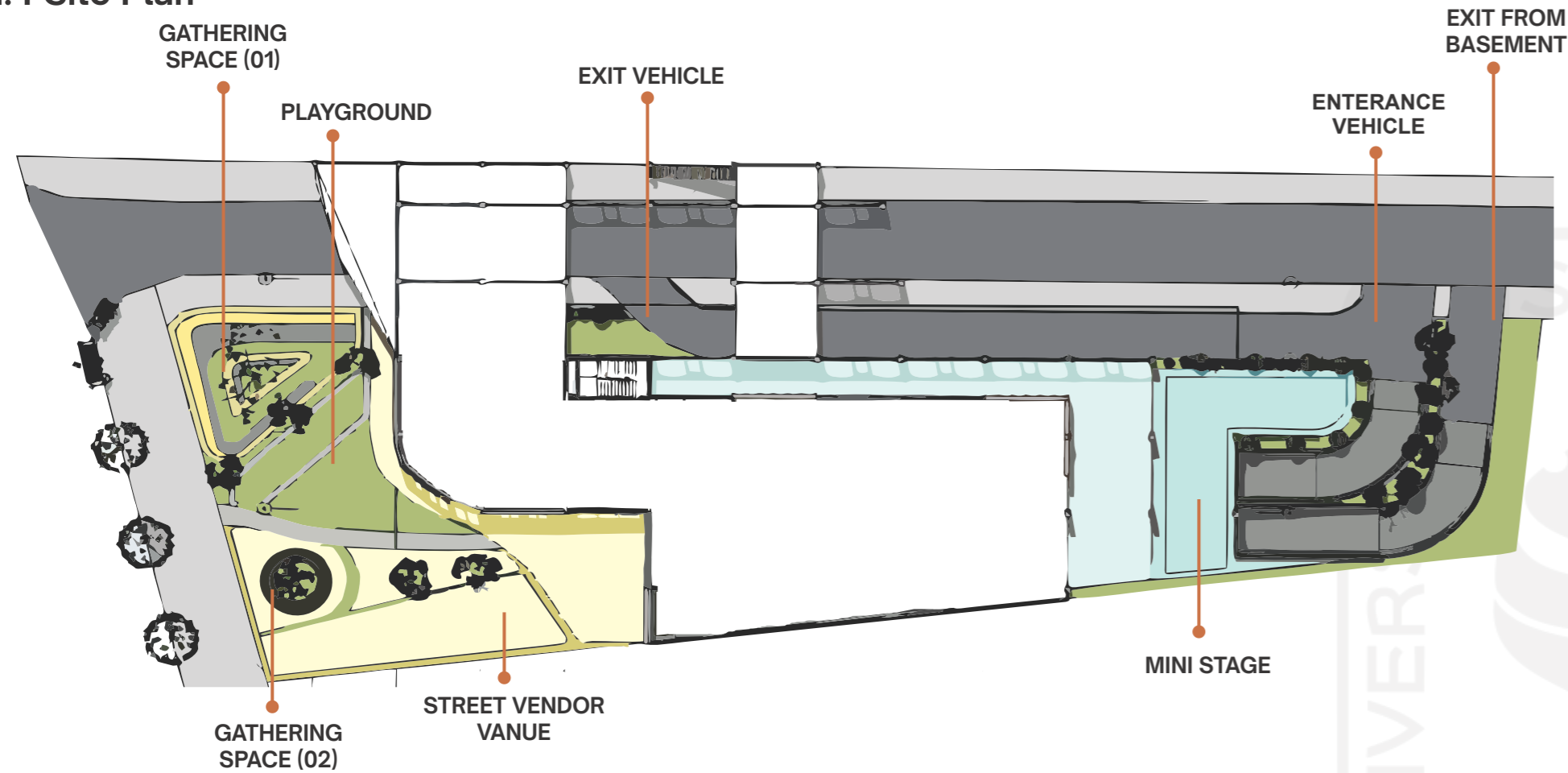


Figure 3.14 Scematic Design of Magelang Community Center Site Plan by author

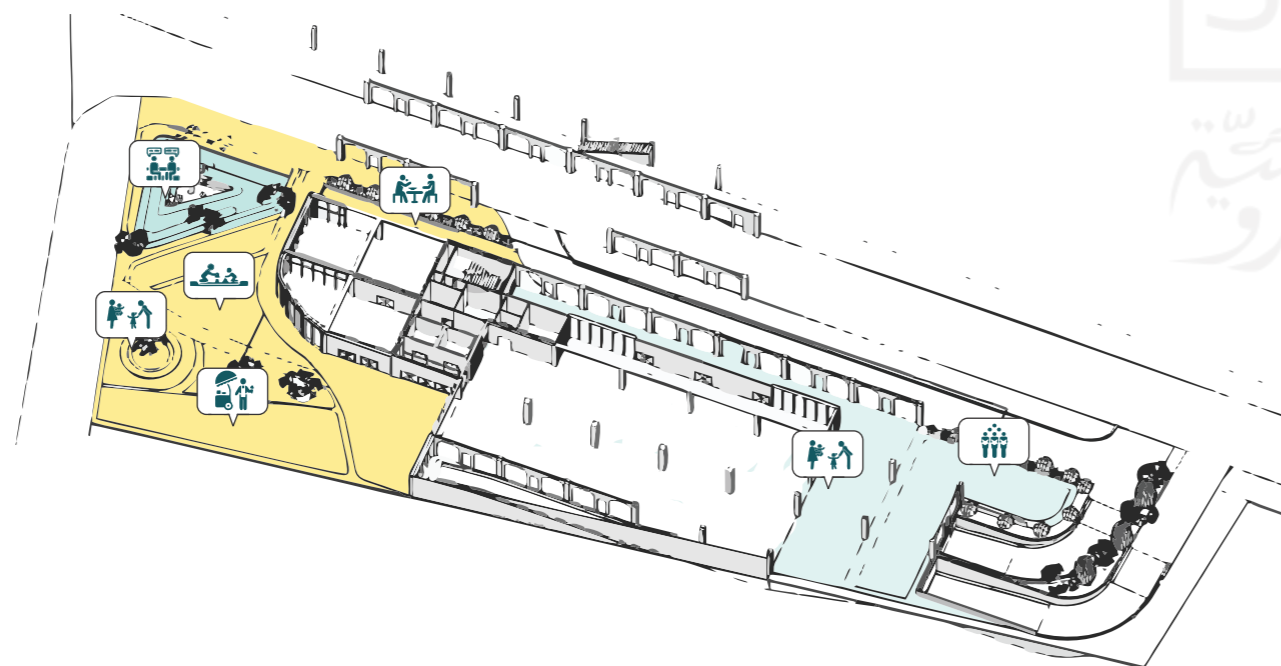


Figure 3.15 Outdoor Public Activity in Community Center by author

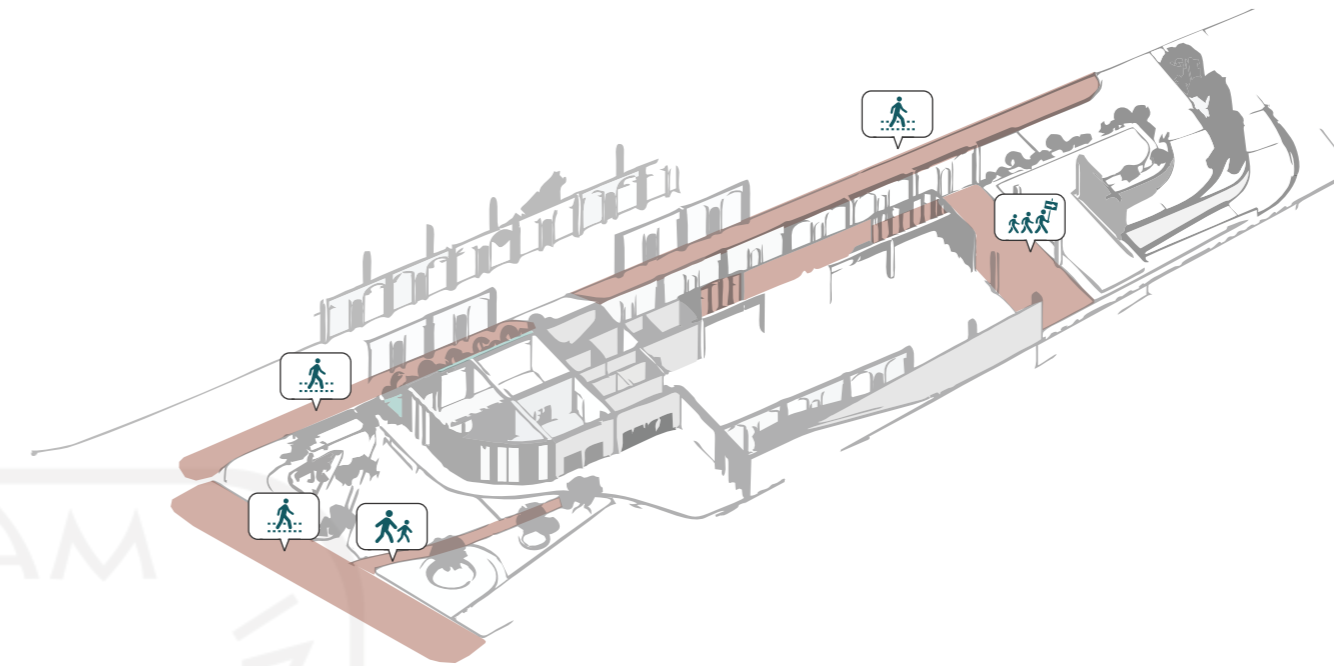


Figure 3.16 Accessibility for pedestrian in Community Center by author

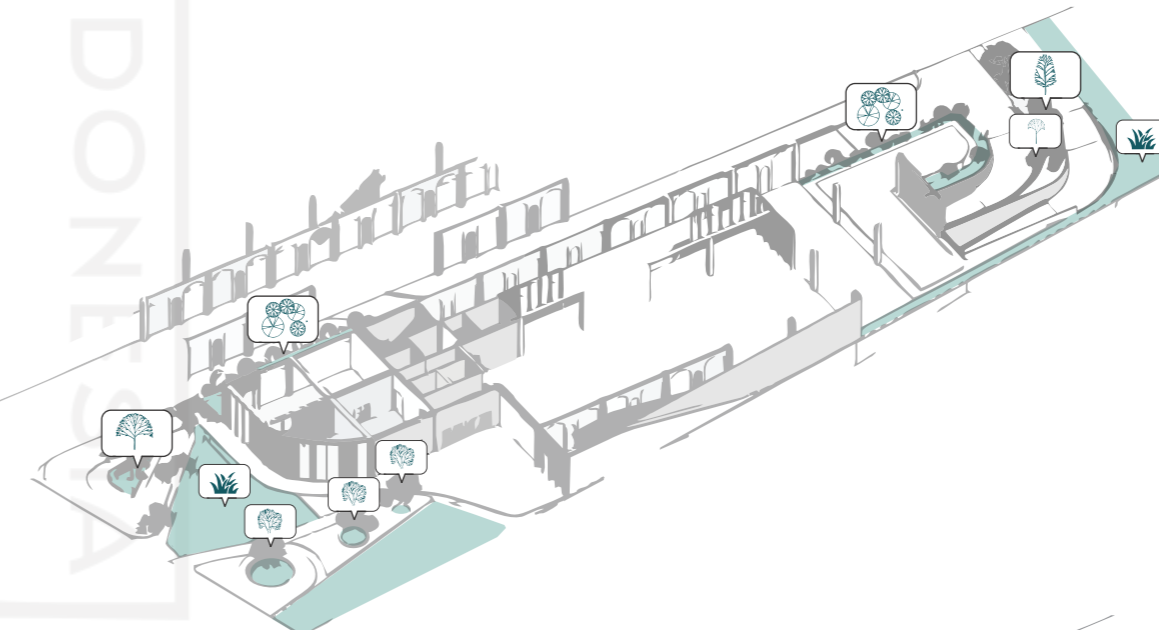


Figure 3.17 Green Area in Community Center by author

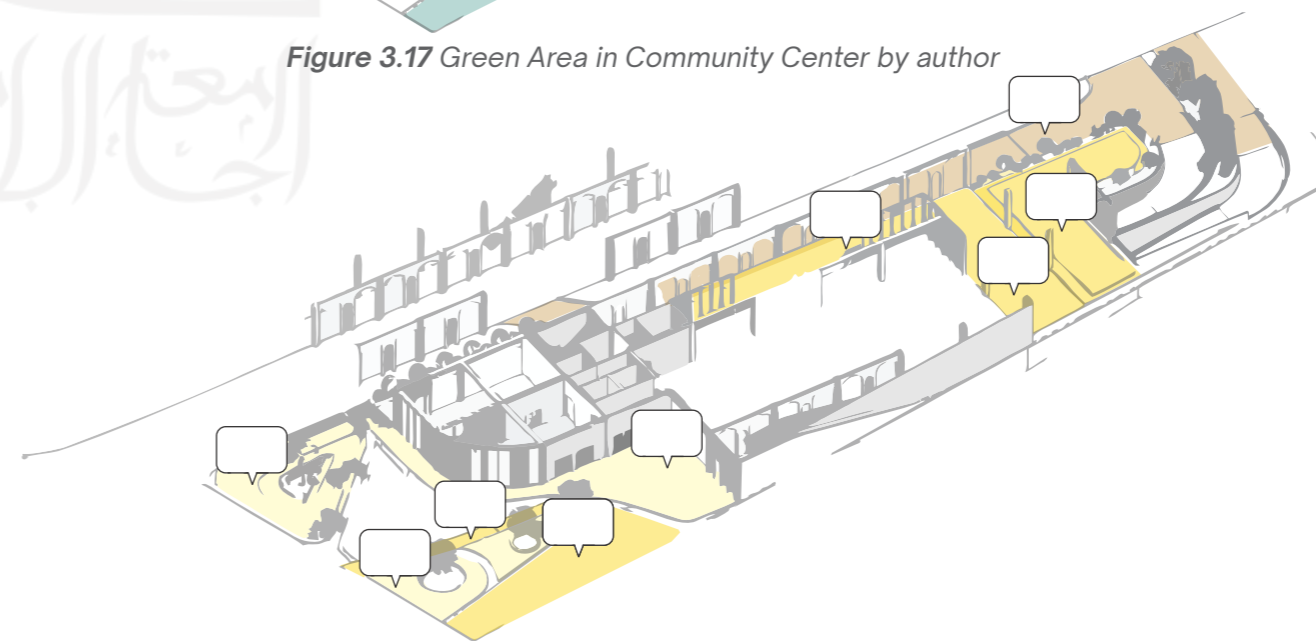


Figure 3.18 Softscape and Hardscape design in Site Plan by author

ACCESSIBILITY

The red zone indicates the access that can be used by pedestrians around the site in Magelang Community Center design. Starting from the existing sidewalk, then the road designed in the site plan as part of the circulation of user movements.

GREEN AREA

the development of green areas as natural elements in the community center, namely to apply the concept of symbolic architecture where mingle with nature is part of creating a spiritual space and improving site quality in terms of efficiency and environmental control. The diagram shows the type of tree or shrub canopy shape applied in the design

SOFTSCAPE & HARDSCAPE

Improve the quality of site by using durable material and minimizing the hardening on the green area. The materials used can have different effects on the user. In this design, the material used must be child-friendly and can provide an attractive effect.

3.1.5 Sigaluh Culinary

Various elements of Sigaluh Culinary should be preserved to bring the ambiance of latest Sigaluh Culinary. As it located in the side of the street this Culinary has a very compact and tidy arrangement where the food stall and eating space adapting the small size of the pedestrian sidewalk. They are using street vendors as food stalls and each vendor will decorate their own food stall. For 2 food stall, they will merge it into one big module of space and have a banner on it. The trademark of this culinary that people find is the vibes of the street. Like many other street vendors, they need to see cars passed and the noises of the vehicle where they eating. It giving a new experience to the user.

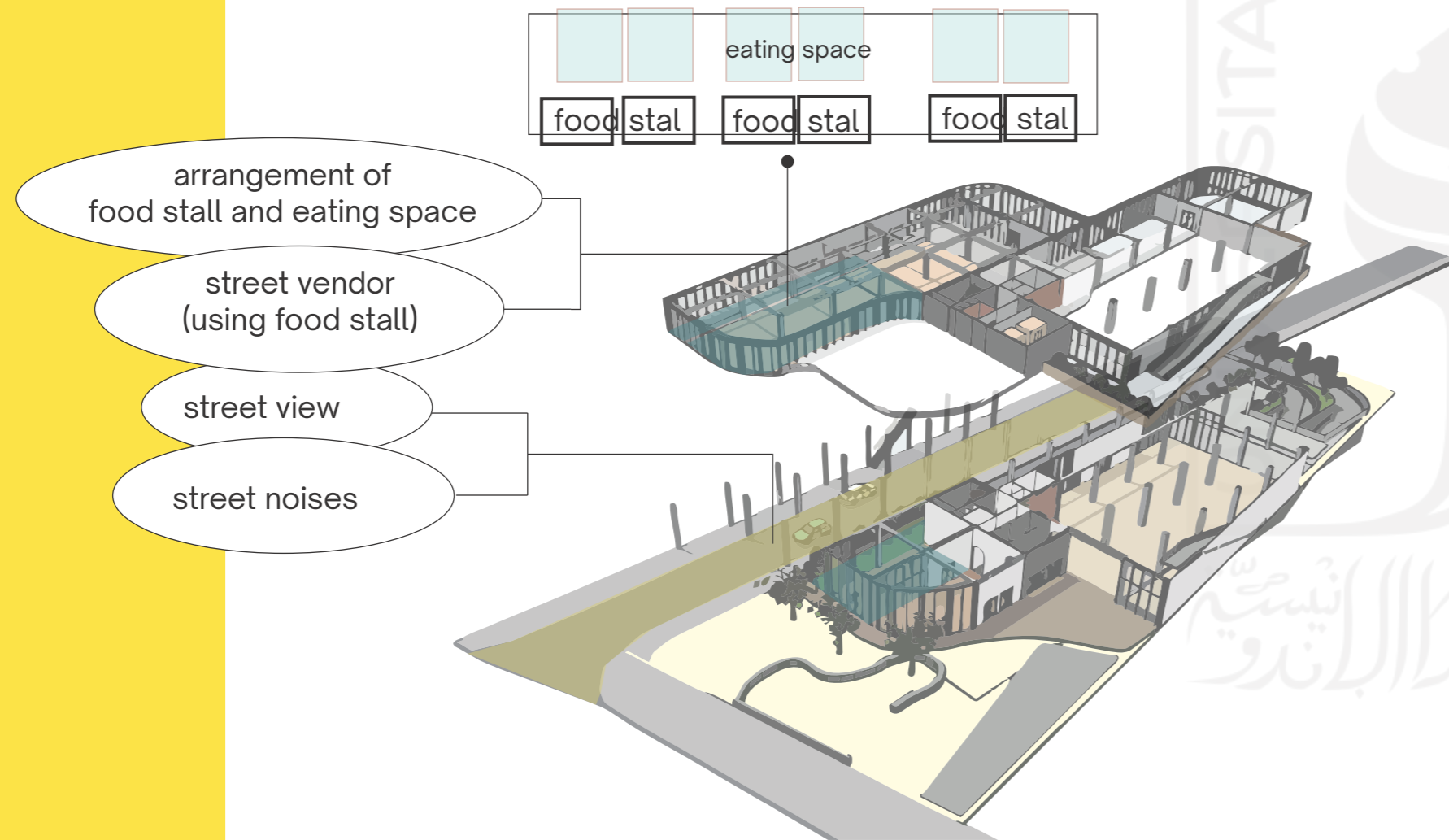


Figure 3.19 Sigaluh Culinary scematic by author

3.1.6 Facade Concept

Strategy Of Forming Facade In Urban Scale

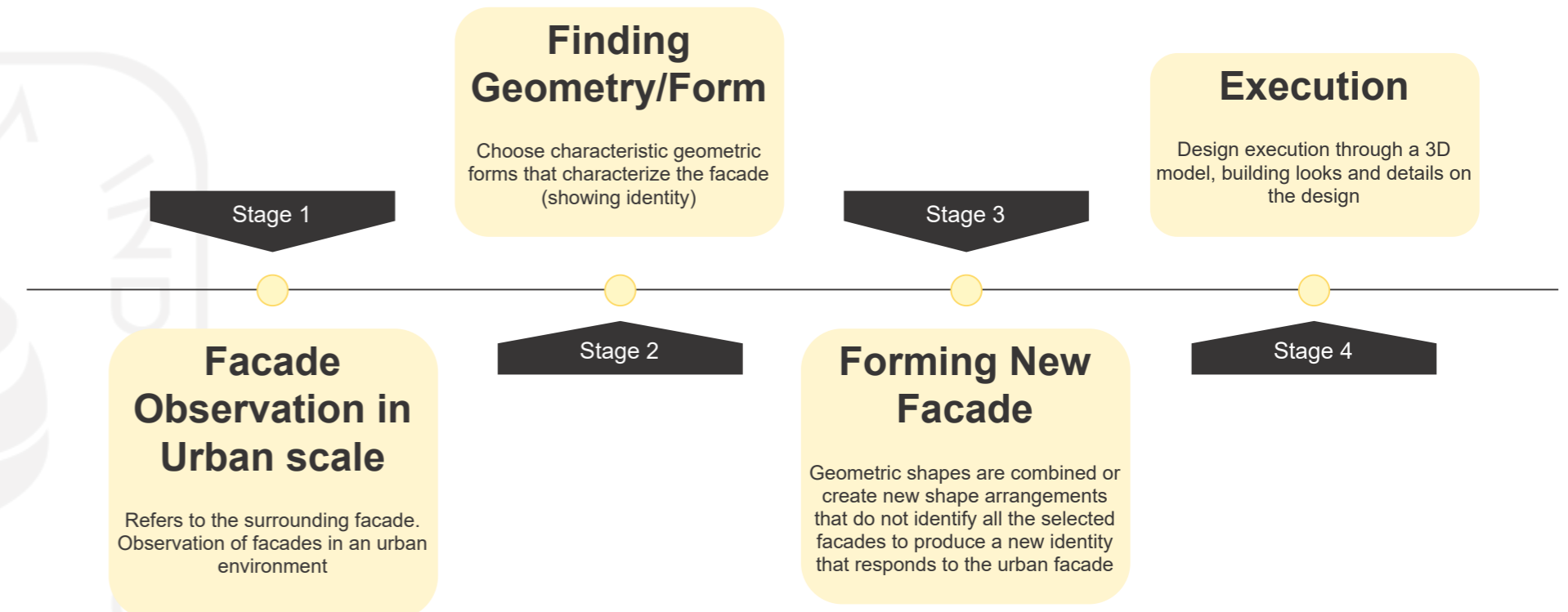


Figure 3.20 Forming Facade In Urban Scale Strategy Diagram by author

Elements of building facades become important because building facades can give identity to the building. The achievement to be achieved is to make the Community Center building symbolic inclusive where there is no domination of symbols that show the characteristics of a party or without an aura. However, it is undeniable that the facade must also show the identity of the function of the building whose function is to facilitate religious festivals for the public. The facade must be able to show symbolic characteristics and respond to the neighborhood facade.

The discontinuity of this concept requires the architect to have a strategy to design a facade that is following the function of the building without reducing the value to be raised from the community center design with symbolic inclusive.

URBAN FACADE

1

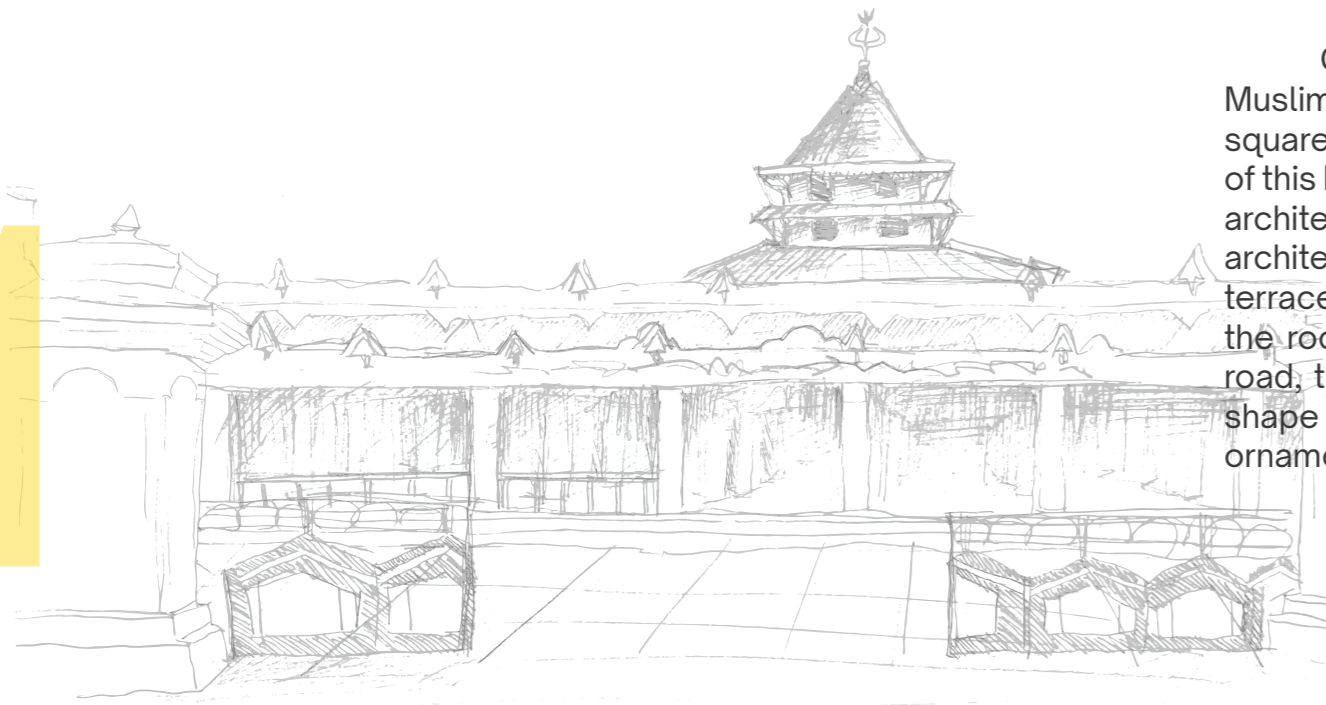


Figure 3.21 Grand Mosque of Magelang Front Facade by author

Grand Mosque Magelang is the center of Muslim worship activities which is located in the square circle of Magelang City. The uniqueness of this building is the adaptation of Islamic Demak architecture as well as the influence of Hindu architecture which can be seen from the form of terraced roofs and the relic ornaments around the roof. When viewed at a glance through the road, the shape that will be most notified is the shape of the mosque roof and also the form of ornaments such as triangles.

3



Figure 3.23 GPIB Beth-El Cathedral Front Facade by author

GPIB cathedral is a historical heritage of European-style architecture with a minimalist facade. The form of the building towers upwards with Roman architectural-style windows. The three large windows that form a triangular pattern on the main facade are the main attraction of the facade. From the front, the minaret-shaped roof facade is very striking.

2

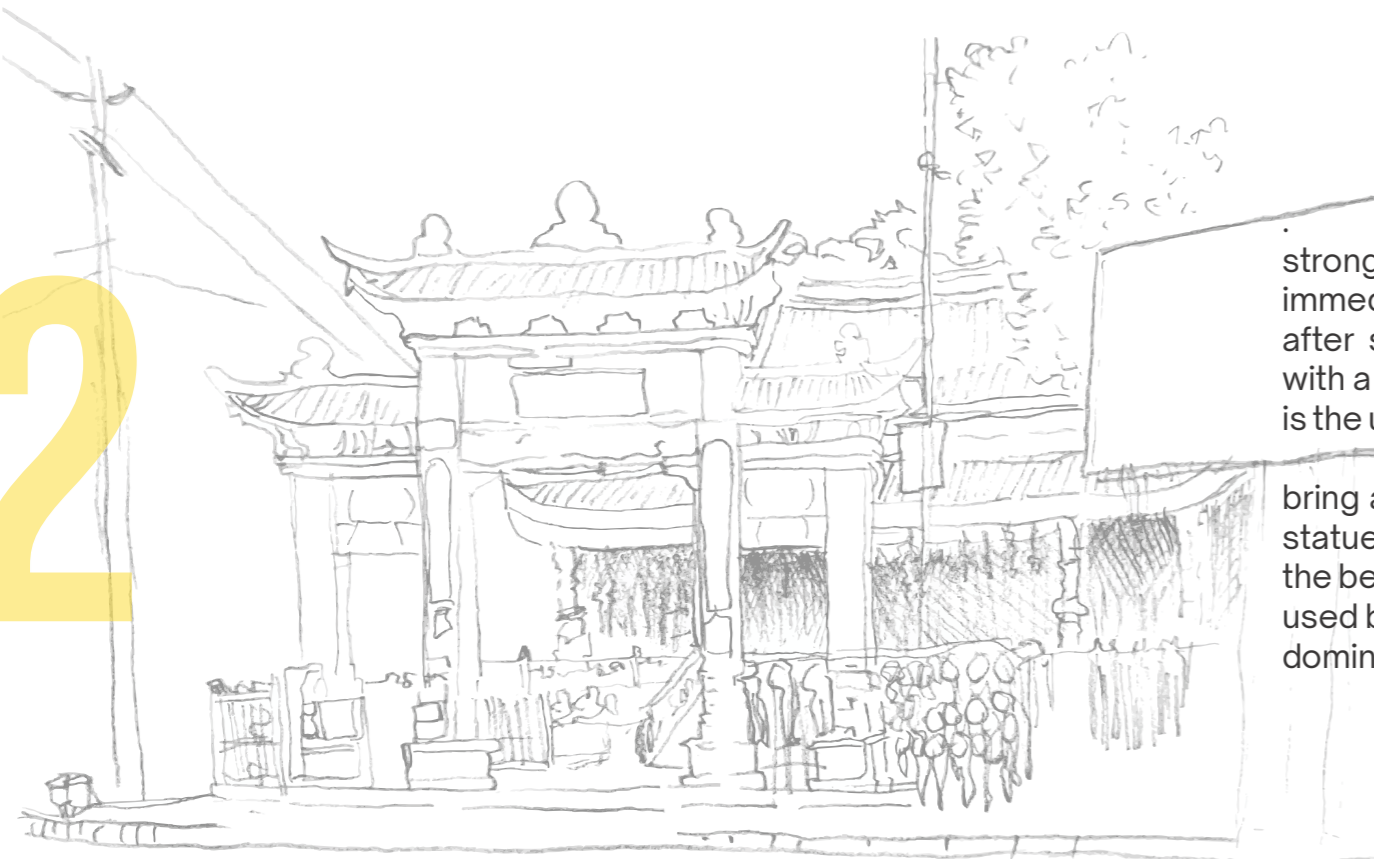


Figure 3.22 Liok Hok Bio Pagoda Front Facade by author

After being renovated, the pagoda gives a strong impression on the urban image. You will immediately feel the image of the Chinatown after seeing this pagoda. Chinese architecture with a unique roof shape and detailed ornaments is the uniqueness of the pagoda.

The sharp colors are eye-catching and bring a lively feel to the wall reliefs. The dragon statue on the roof shows a symbolic presence of the belief being held. Although this temple is also used by Buddhists, the architecture used is more dominant in Chinese architecture.

4



Figure 3.24 Chinatown shophouse Facade by author

The location is close to the Chinatown neighborhood where almost along the main road is filled with shophouses. A typical shophouse in general is a multi-storey building whose lower part is used for shops. The shophouse characteristics here are quite free because each shop is renovated according to the owner's taste. The bottom is focused on the shop, the upper part of the balcony with minimalist windows, some are still seen bringing a European style to the openings.

Building Facade

Alternative 1

The form of the facade design 1 formed by adapted the dominant architectural characteristic from neighborhood facade and transform it into new form of shape. The intention to have neighborhood context as a part of this building without showing one symbol of religion's facade as the purpose of this community center to mingle between religion community.

Adapting the roof element from the pagoda, the roman architecture which showing curvy form and the composition of Grand Mosque the facade show irregular dynamic curvy form creating continuous flow from west to east of front facade.

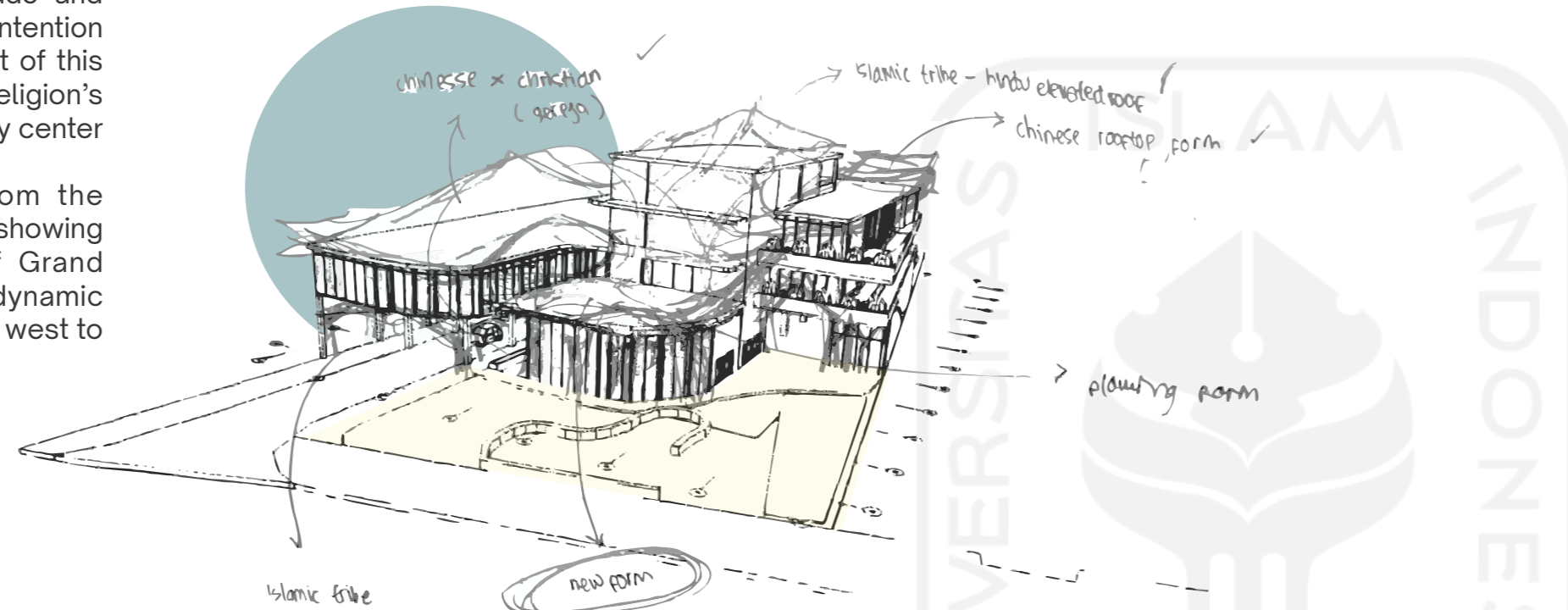


Figure 3.25 Schematic facade design alternative 1 by author

Alternative 2

The form of the facade design 2 is adapted to the existing forms in the characteristics of the surrounding buildings. Here, what is more dominant is the curvy shape which shows the architectural romance combined with the Islamic architectural triangle to form a taper on the facade of the openings. Curved and pointed roofs and ornaments are also found on the roof shape which adapts the Chinese model of the roof as in the pagoda. Curvy elements as a connector between the roofs are shown to show the unity of the building masses with one another. In addition, the curvy element has a more friendly and smooth impression, especially for children to attract more attention. The weakness in alternative 2 is that the forms are adapted from the unique geometry of the surrounding buildings, namely the complexity of the building and the impression of the building being too crowded and complex.

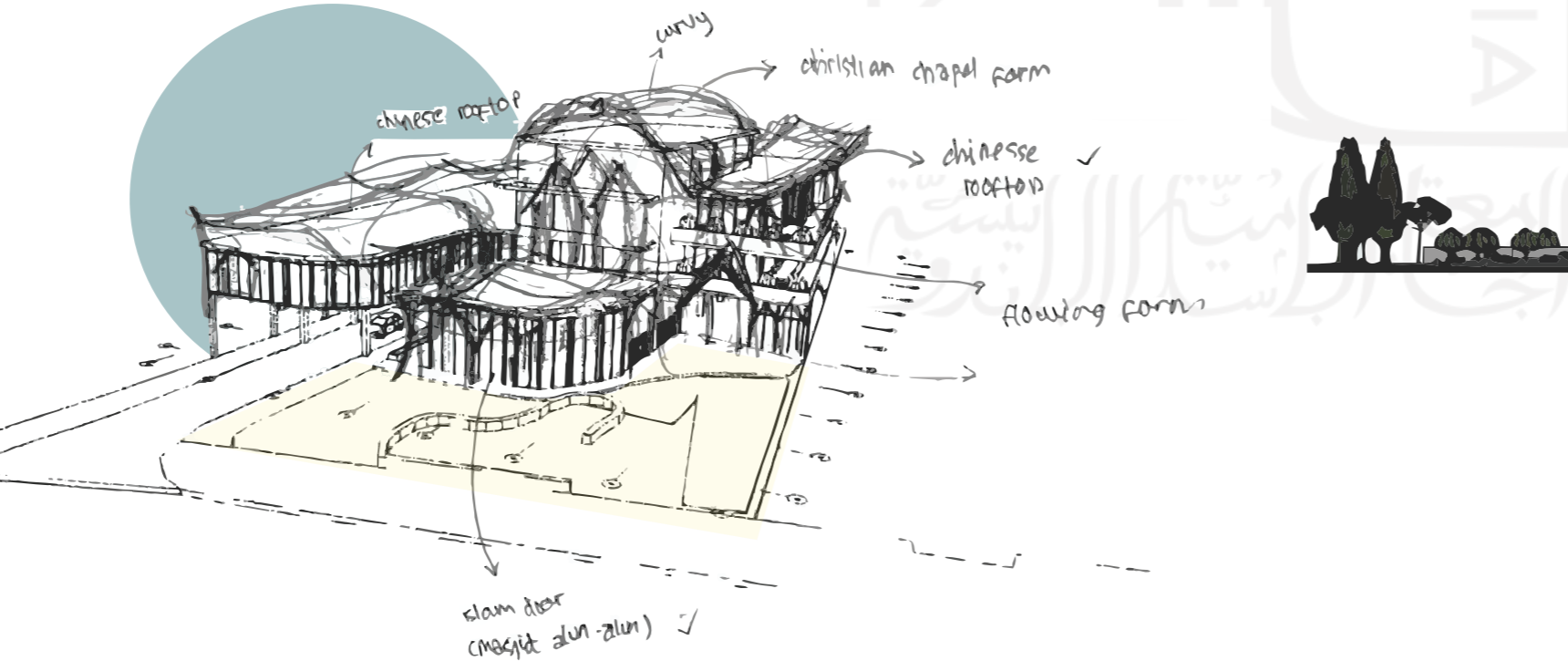


Figure 3.26 Schematic facade design alternative 2 by author

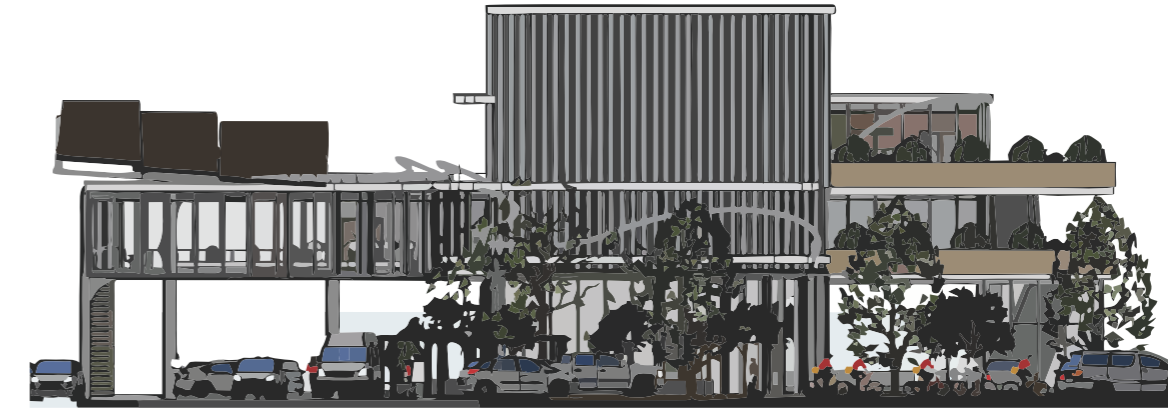


Figure 3.27 Front Facade of Magelang Community Center by author



Figure 3.28 West Facade of Magelang Community Center by author

3.1.7 Architectural Element In Multi Faith Hall

The multifaith hall room as the heart of the building is designed by utilizing the high ceiling so that space can look spacious and majestic. Architectural lighting elements are shown from the shadows created by different ceiling design form. The ceiling has 3 different types and can be adjusted to the ambiance we want to create from every festival held in the multifaith hall. The configuration created from the combination of lighting and the shape of the ceiling creates shadow elements that form a certain space in the hall. In addition to creating an aesthetic impression, this combination can create a significant difference in the event being held.

Design 1 uses transparent nets between the ceilings. Alan's lighting is mounted on those frames And has a separate system. This ceiling functions as a source of artificial lighting so that when the room uses this configuration, the light will radiate in all directions from the frames creating a center of light as the main attraction. In addition, the light at night will be reflected through the surrounding objects and the glass that surrounds the room. The multifaith hall space when viewed from a human perspective from the bottom up will be like having 2 layers depicting the earth and the night sky.

The design wants to show this impression where architectural elements can create an atmosphere of the night sky (mingle with nature. This design can be used flexibly to hang or place decorative instruments for festivals.

As in the design concept of spiritual architecture, although the main function of the multifaith hall is for faith festivals, it will be more memorable if space has a spiritual ambient. One of the ways is to Mingle with Nature, where architectural elements form a tree from pillars that actually function as a height structure and a wide span. Coupled with the lighting configuration, the illusion of lighting will create the impression of natural elements in the room (president: Garden by the bay). the design configuration coupled with the topmost ceiling connected to the main pillar system provides lighting play in the multifaith hall space. This design is very suitable for religious festivals that use indoor plants because it can be integrated with interiors such as Christmas festivals. Or festivals that require space without barriers like festivals



Figure 3.29 Ceiling Design Configuration 1 by author



Figure 3.30 Ceiling Design Configuration 2 by author

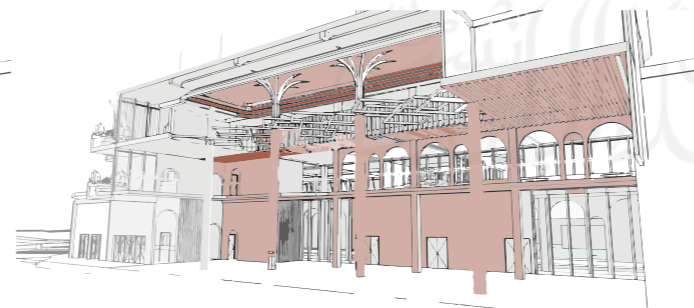


Figure 3.31 Ceiling Design Configuration 3 by author

Interior Proposed in Some Festival

The activities of faithfest which have many variations of activities at each festival require a design to be able to give uniqueness and characteristics to each festival performance. For example, for the Maulid Nabi festival held by Muslims in the Magelang area, the tradition of *grebeg pisang* is to eat together using banana leaves as a container by sitting on the floor and facing each other. As well as performing arts such as tambourines and salawatan. In contrast to the Vesak festival held by Buddhists. In Magelang they parade around places of worship, city streets and stop to eat *nasi lesah*. In contrast to the Lunar festival by the Kong Hu chu religion, they will install lanterns and release lanterns. This difference in space needs needs to be taken into account in creating a multifaith space which in its implementation can still provide benefits for existing activities such as Sigaluh culinary and street vendors around.

The use of contemporary architecture that is temporary in the multifaith hall provides space design flexibility so that the space can meet the needs of the festival. alternating other festivals the space will be different ambient. this is supported by the design of architectural elements on the ceiling and walls which have 3 configurations with different embnices. Each festival can have its own configuration based on what the atmosphere wants to achieve.

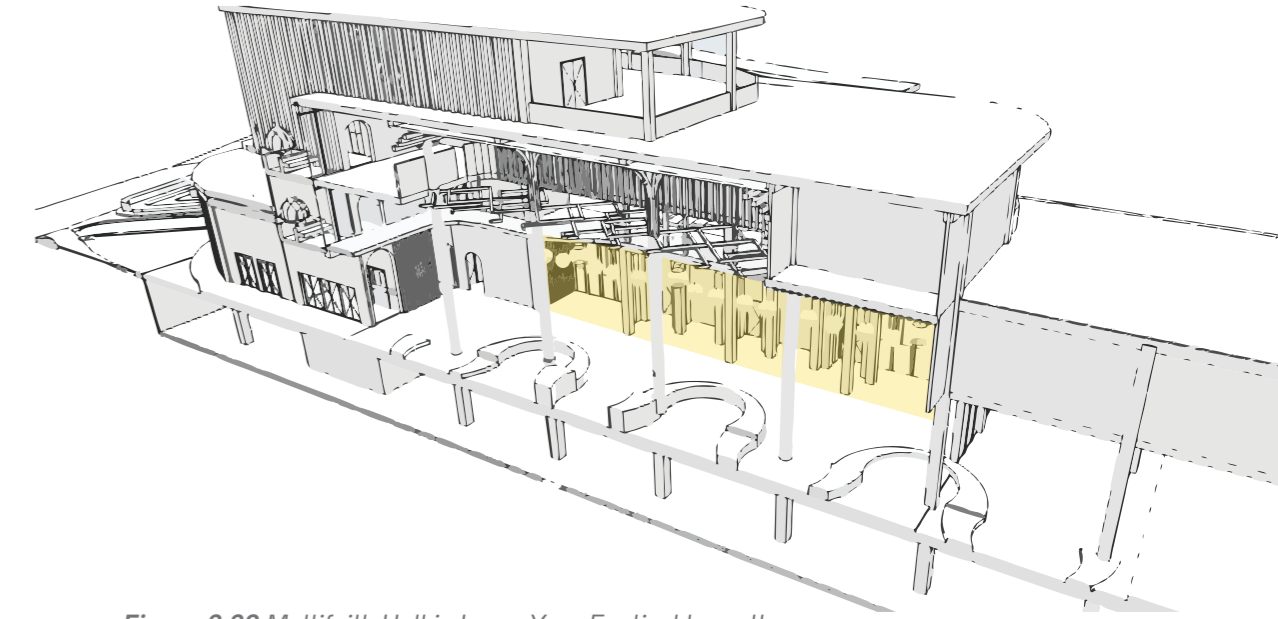


Figure 3.32 Multifaith Hall in Lunar Year Festival by author

Lunar Year Festival

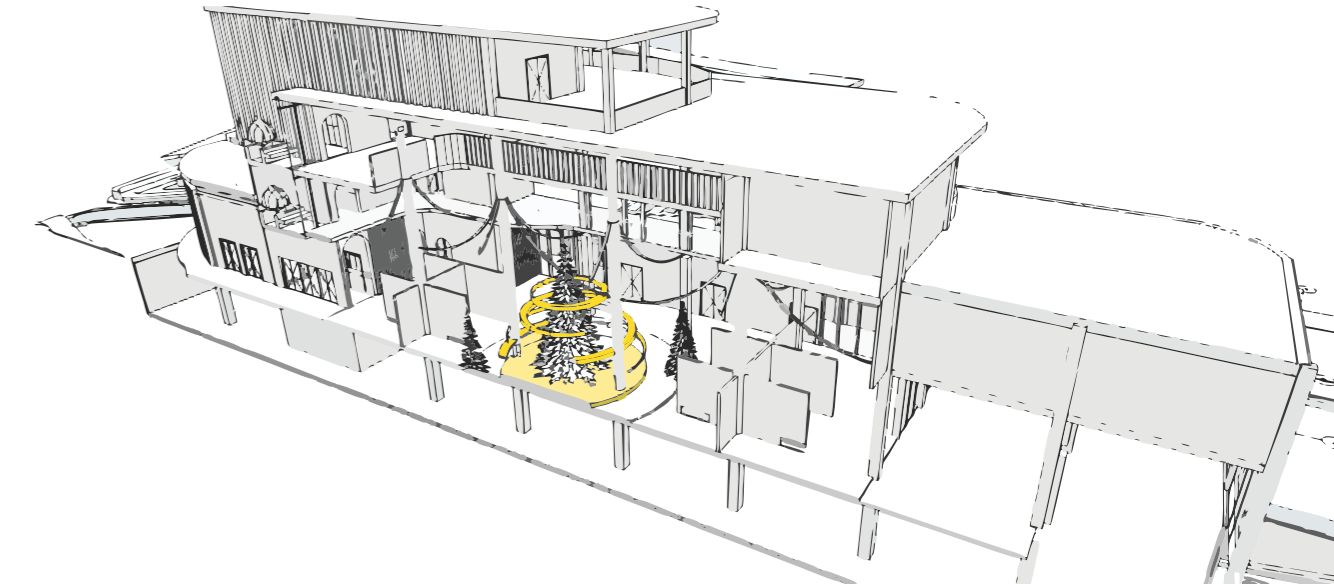


Figure 3.33 Multifaith Hall in Christmast Festival by author

Christmast Festival

3.1.8 Building Structure

Structure type

Using frame structure using column and beam. The grid span each column is 6 meters with main column dimension is 40cm x 40 cm.

Grid of column create modular space

The design try to create modular space inside as many as possible for host the activity that require flexible space. The grid structure makes it easier for users to divide their respective spaces. This community center can be used by more than one party or if there is an exhibition held where participants are allocated a place, by using a grid structure the distribution of the functions of the place can be more evenly distributed.

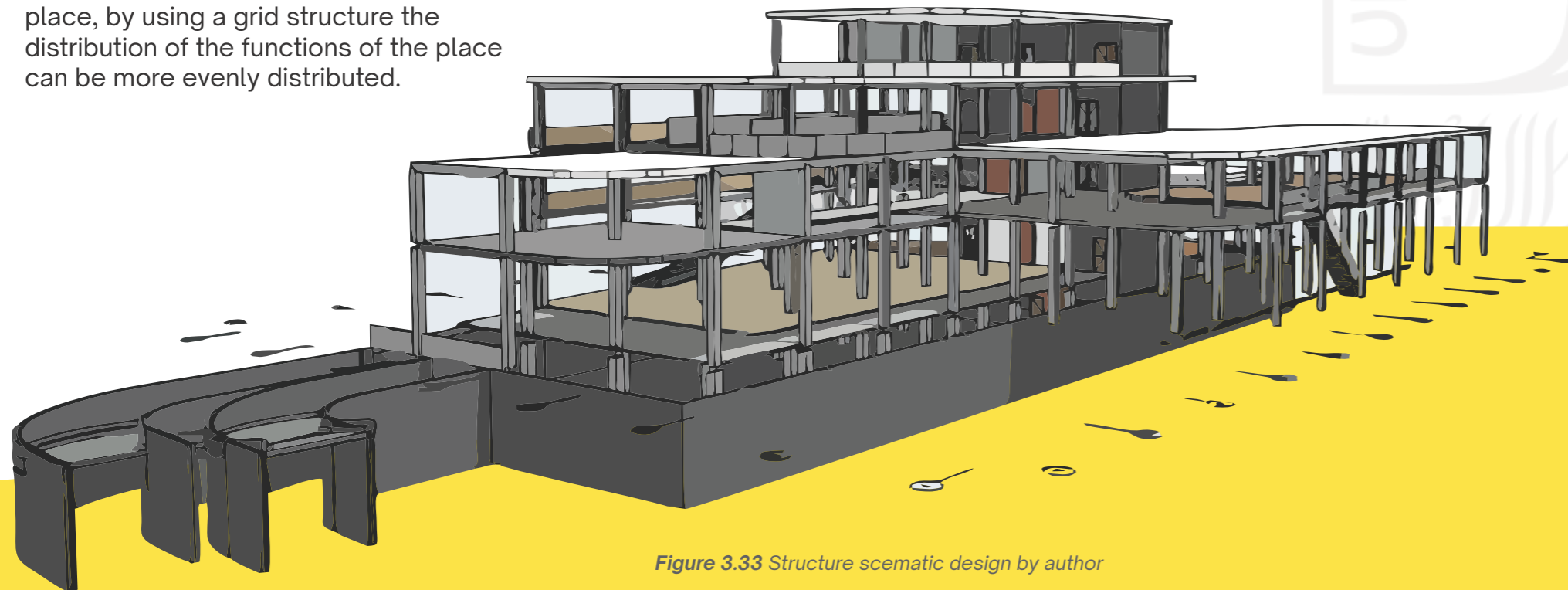


Figure 3.33 Structure schematic design by author

Earthquake resistance

Magelang city is often affected by natural disasters such as earthquakes and ash rain. The location of the city of Magelang is close to Mount Merapi so that it often experiences earthquakes, if an eruption occurs it will be affected by ash rain. Modular frame structure with compact building form can strengthen the building. The structure of the building is made of multi-storey, if there is ash rain, the mass of the roof covered by ash rain will also increase. the use of frame structures is very suitable in responding to these problems



Perspective of the Magelang Community Center from Pemuda street

3.2 Pre-design model



Perspective show the form of the building and the front public space area that is directly related to the environment on the Pemuda street



REVISED



Perspective of the building seen from the side of the Sigaluh street



REVISED



Multi faith Hall

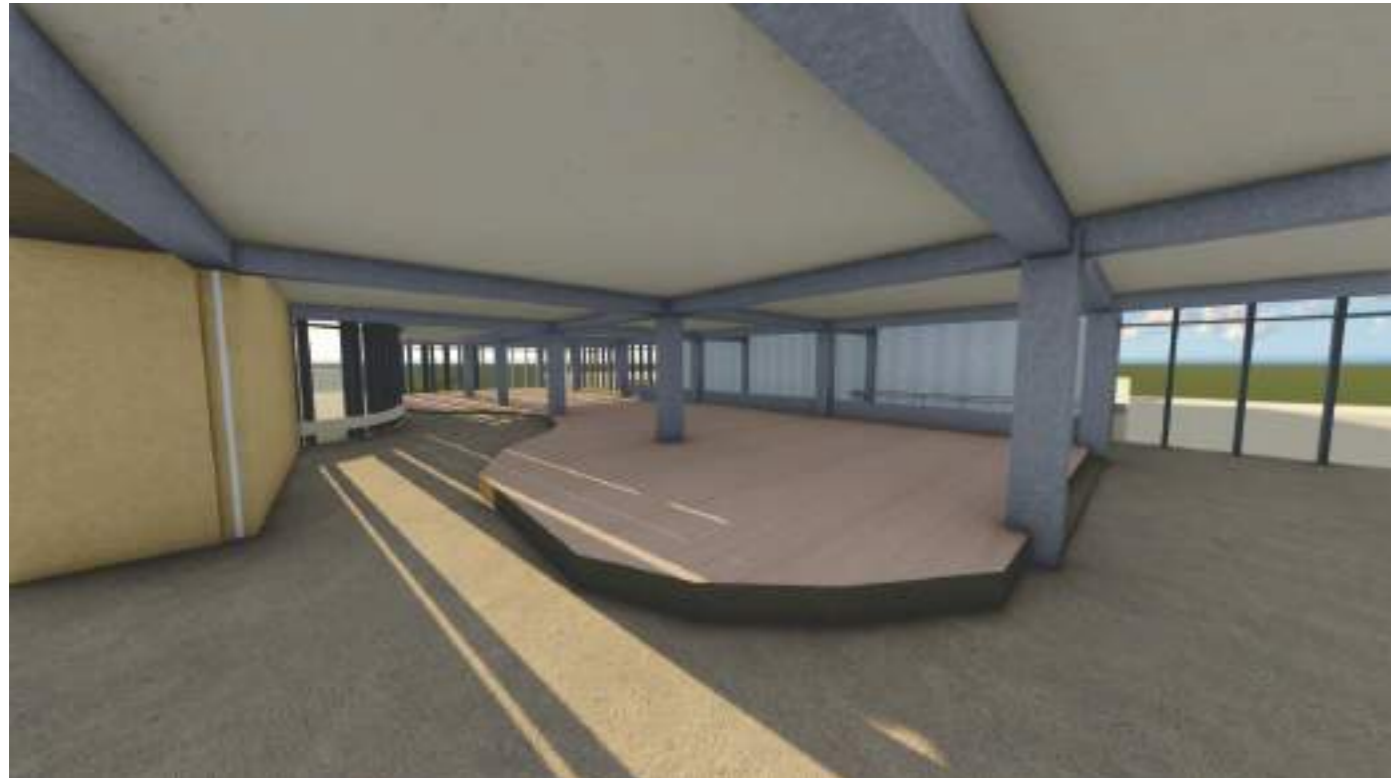
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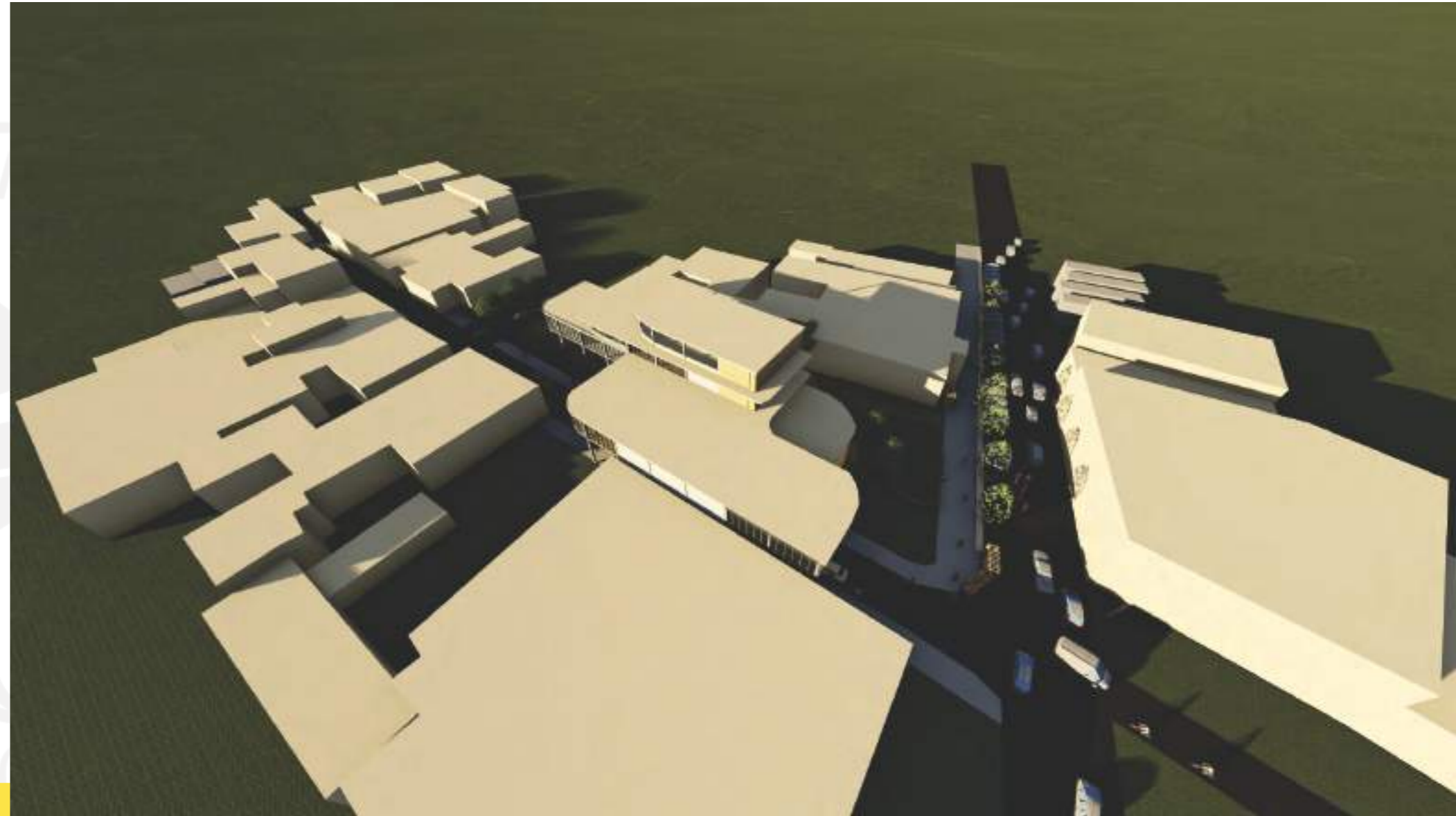
Performance on the mini stage



REVISED



Sigaluh Culinary, Co-working space and Sigaluh Street



Building from above in an urban view



chapter

04

final
design.

4.1 final design description

4.1.1 PROPERTY SIZE

TOTAL SITE AREA : 3.708,5 M2	BCR (80%) : 2.966,8	BCR : 2.965,08
	FAR : (5.00) : 14.834	FAR : 14.800
	GCR : >10% : 370.8	GCR : 21.6% : 487.6

Following the building codes and regulation, the result of site engineering and building calculation is :

- Total site are 3.708,5m2 with total building area is
- Maximum Building Coverage Ratio from the codes is 80% or 2.966,8m2 and the building have maximize the use of space which is the building coverage area is 2.965,08m2.
- Floor Area Ratio from the site engineering is 5.00. Means the building's height should less than 14.834m. Total building's height is 14.800 m
- Minimum Green Coverage Ratio is 10% or 370,8 m2. Green area preserve in the building with no hardening is 21,6% or 487.6m2

PUBLIC		COMMUNITY	
PUBLIC GATHERING SPACE LOBBY STREET VENDOR VANUE F&B CULINARY SHOPS		MULTIFAITH HALL TERRACE PUBLIC SPACE KIDS PLAYROOM MULTI PRAYER ROOM CONFERENCE ROOM MINI STAGE	
SUPPORT	MECHANICAL & ELECTRICAL	CIRCULATION SERVICE AND PARKING	
MEETING ROOM CO-WORKING SPACE REST ROOM	CONTROL ROOM HVAC ROOM GWT ROOM RWT ROOM GENSET ROOM	LIFT LOBBY EMERGENCY STAIRS RAMP CORRIDORS BASEMENT 1 DROP OFF AREA	

Figure 4.1 Space categorize by author

4.1.2 SPATIAL PROGRAMMING AND ZONING

Arrangement used in the building are creating the multifaith hall as the heart of the building which mean all the space and it's activities are connected with multifaith hall. Building with total of 3 floor, with all the area are meant to be public spaces. The site that located in the crossroad resulting the building have 2 faces and 2 main entrance to the multifaith hall. The system created by integrating multifaith hall, Sigaluh Culinary, and public spaces can accommodate the needs of movement for the faith festival which show in the next page.

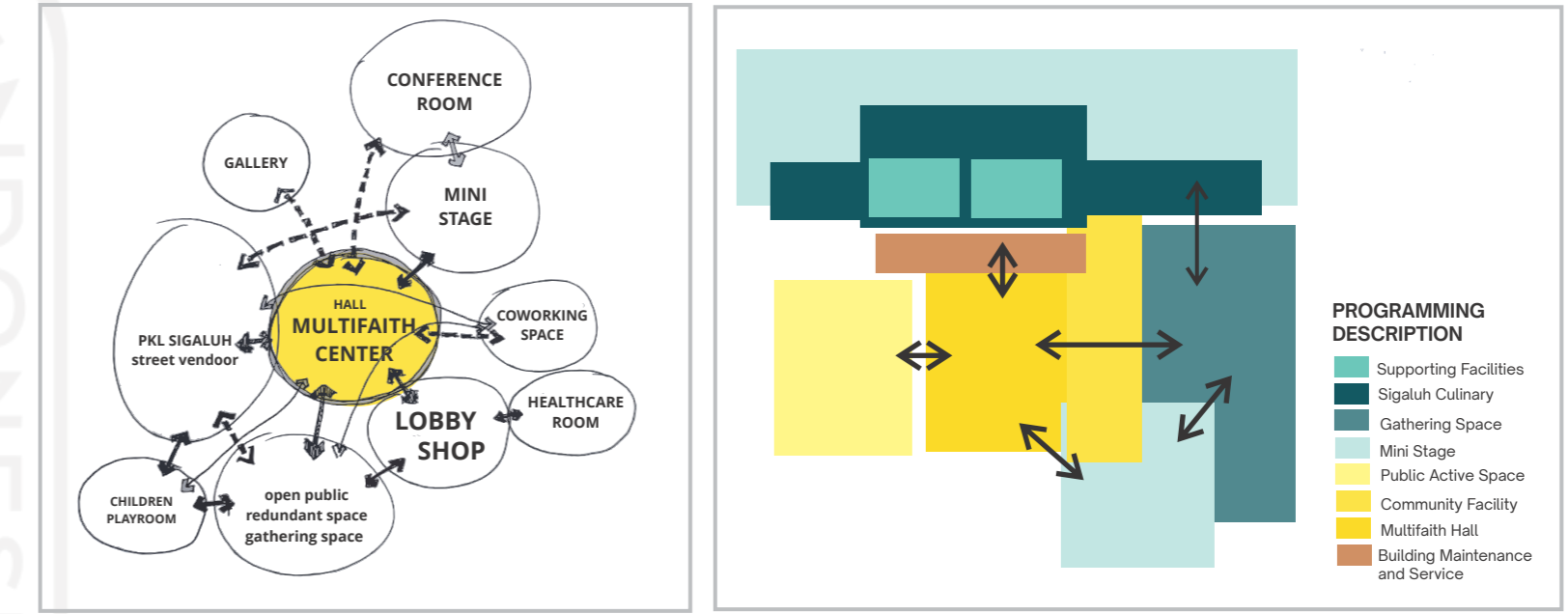


Figure 4.2 Diagram of room programming by author

Ground floor area used for public use. From outdoor public space, Multifaith hall and Sigaluh culinary. Multifaith hall can be rent by vendor or any business in the mean day. Second floor used for Sigaluh Culinary and co-working space which classifies as public use, hence the meeting room only used by community who rent the space and conference room only for religion community. The third floor mainly for public gathering and children playroom. Meeting room and workshop room is a private only for Magelang religion community. As we can see many spaces as use as public. In the mean day public can use the multifaith hall for common activities or festival.



Figure 4.3 GF Zoning by author

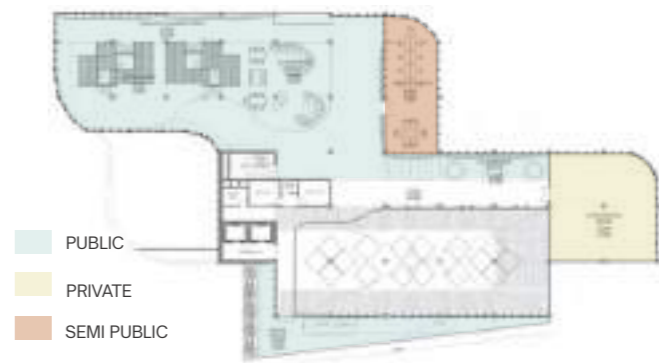


Figure 4.4 1st Floor Zoning by author

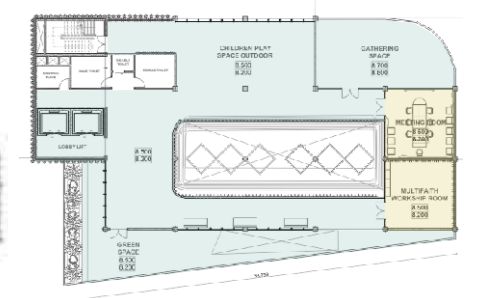


Figure 4.5 2nd Floor Zoning by author

From the room programming analysis, the result can be seen on the plan where the placement of the spaces is connected and the multifaith hall as the center of the activity.

Starting from the basement floor that can accommodate 25 cars and 57 motorcycles. If the amount of car more than that, then the users can use the public parking area in front of the building provided by the government. based. The basement area using 70% basement coefficient area. The lobby lift closed with the glass wall to protect the room from pollution. The area of the basement also use as the mechanical and electrical room where the generator room and control room are placed. One emergency stair is provided.

Multifaith hall placed on the ground floor with the height of the ceiling up to the third floor to create extensive spacious space and main passive cooling design. This multifaith hall is interconnected with public spaces in front of the building and in the back of the building. Let say if there is a festival that required movement tradition like a Carnaval. The front public space is the space where the audience can start to cheering and watch when the performance or religion community come inside. While the back public space have mini-stage that can be seen from Sigaluh street to accommodate performance. In daily activity, this mini stage can be used as public stage such as a music corner, gathering space, or charity activity.

Sigaluh Culinary is separated into 2 parts. Part of Sigaluh culinary from the right side of the street will be placed on the ground floor, near the lobby, and face Sigaluh street like the original part. The left side of Sigaluh Culinary will be moved upstairs on the 1st floor to make the spatial conflict between vehicle and pedestrian are decreased. The movement of the street will be more organize and reduce traffic.

The first floor also uses as a meeting room and conference room. There are co-working spaces that integrated with Sigaluh culinary to maximize the potential use of space and economic aspect of Sigaluh culinary. The void on the second floor which is part of the multifait hall is given a balcony corridor that connects to the outside area of the building. This balcony functions as a viewing area from above also provides visibility for users to the lower area.

The 3rd floor is used for public areas where there is a closed children's room as well as a gathering space and a seamless meeting room. The rooftop floor or the top floor is used for mechanical and electrical purposes. The HVAC room and roof water tank are placed on top. Visitors can visit this floor to the extent of gathering space provided in the form of an outdoor terrace to relax and enjoy views of the city and Magelang square. The core consists of vertical transportation in the form of 2 universal lifts, a control room, and a shaft. toilet on each floor with 1 special toilet for disable

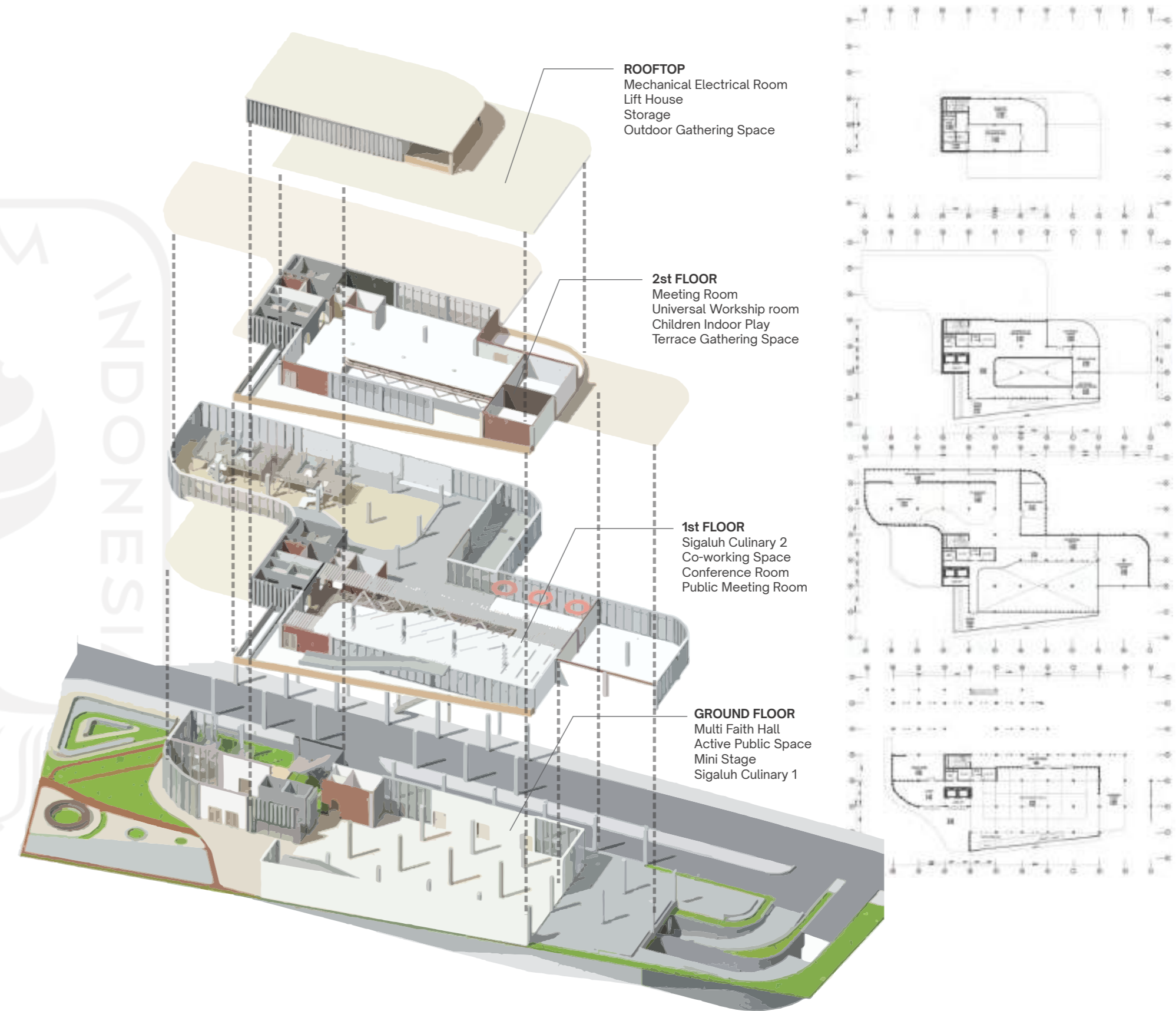


Figure 4.6 Exploda Axono and Plan of Magelang Community Center by author

4.1.3 SITE AND LANDSCAPE DESIGN

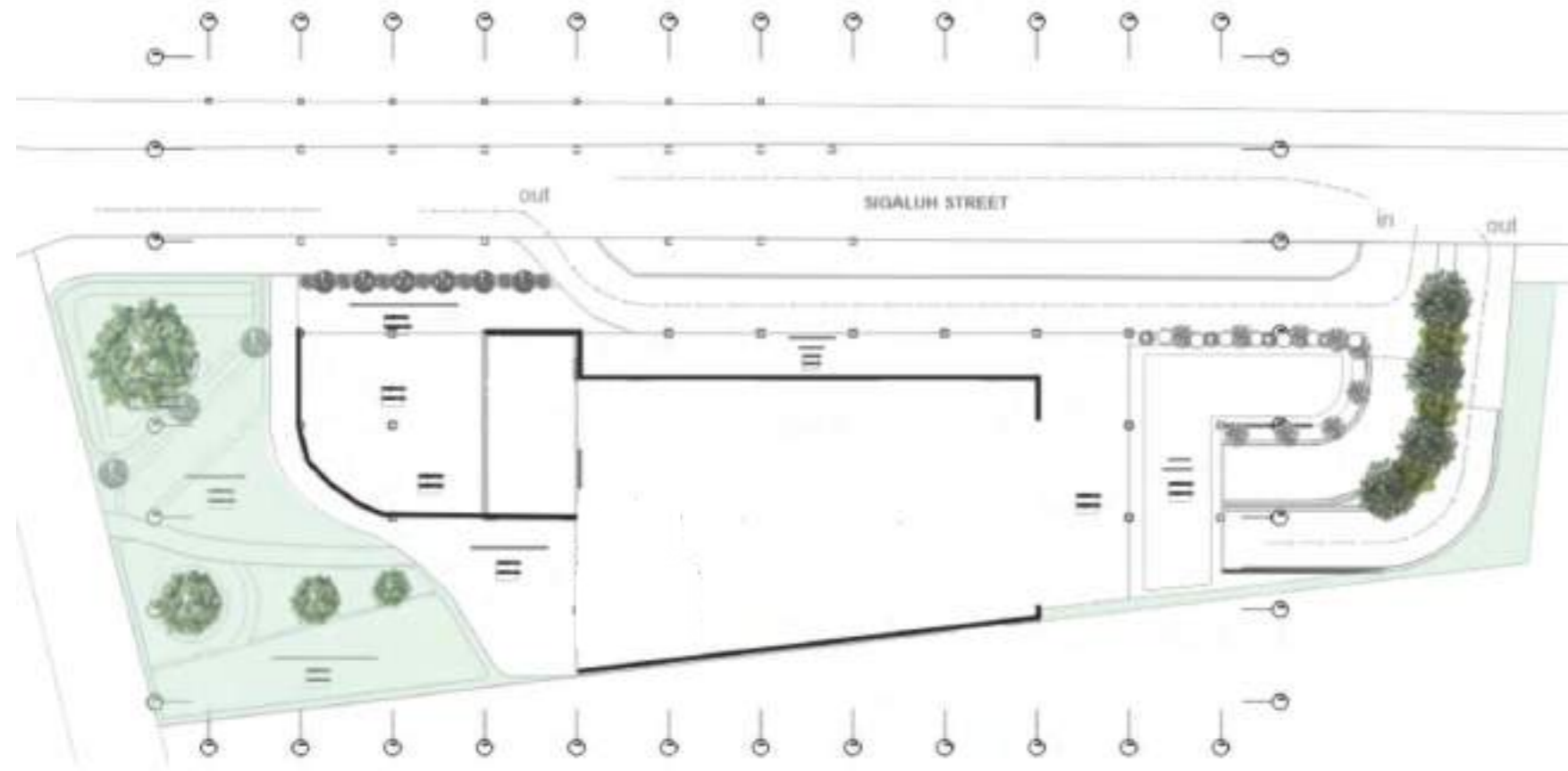


Figure 4.7 Site Plan by author

Two outdoor public spaces in front and the back of the building. Building (multifaith hall) also play a role as a transit point for some festival that required Carnaval activity. Access from front public space to other public space as it crossed the 2 main roads. Front public space use as gathering space, playground, and street vendor venue. While public space behind the building has a function as a mini stage.

Access to the building is from Sigaluh street directly go to the drop-off area and if they need parking they can use the public parking area on Ahmad Yani street or in the basement parking by turn around in Sigaluh Street - basement entrance. There are 3 main access for pedestrians. First from the north side - public space in front of the building. Second from the east (Sigaluh Street) in the drop-off area and the third is using stairs in a pedestrian way on Sigaluh street directly to Sigaluh Culinary on the 1st floor.

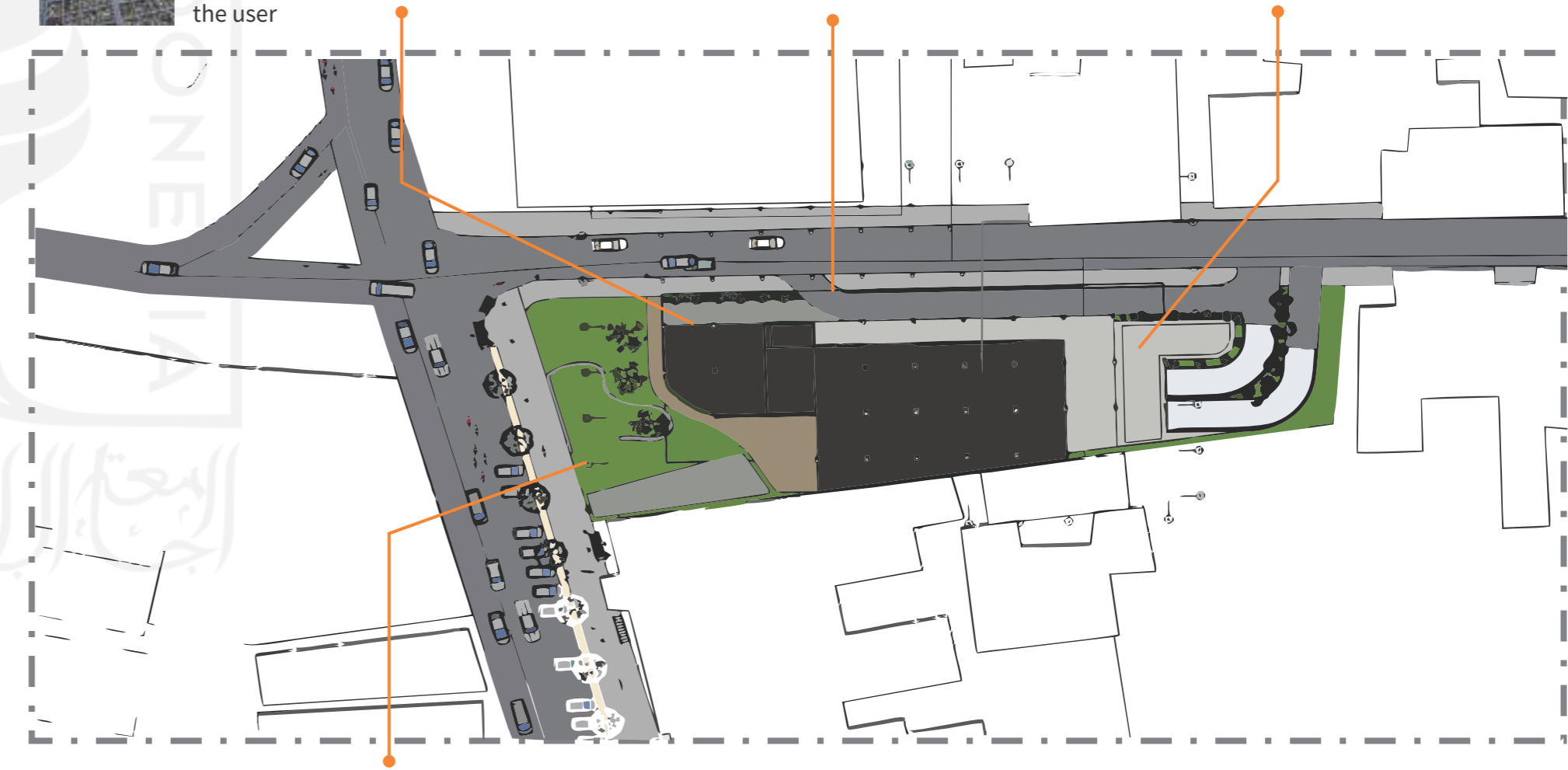
Improve the quality of the site by using durable material and minimizing the hardening on the green area. Playground uncovered or maintaining the green space. Gathering space and terrace will using the wood deck as it is more environmental friendly and safe for children. The drop-off area, gathering space on the back of the building that continues to the mini stage will use hard concrete. For pedestrian and user circulation using gravel pavement while for the vehicle circulation is using the concrete pavement.



Paving from gravel has a high water absorption because it has spaces. gravel is placed on a special frame for its structure and so that the gravel strength is not thrown out to withstand the load above it is quite good. The texture of the gravel adds to the experiential value of the user

The lowest carbon footprint for a structure or pavement over its lifecycle, unparalleled strength, durability, longevity and resilience

The use of hard materials for the main road of the vehicle. paving is used because it has a channel that can be channeled into green open spaces. paving is more environmentally friendly because there is no hardening of the soil



Green spaces are planted with grass, at the meeting point, green open spaces are not given pavement to increase the percentage of green space inside the site and the area of water absorption

Figure 4.8 Softscape and Hardscape detail by author

4.1.4 FACADE REFLECTED NEIGHBORHOOD

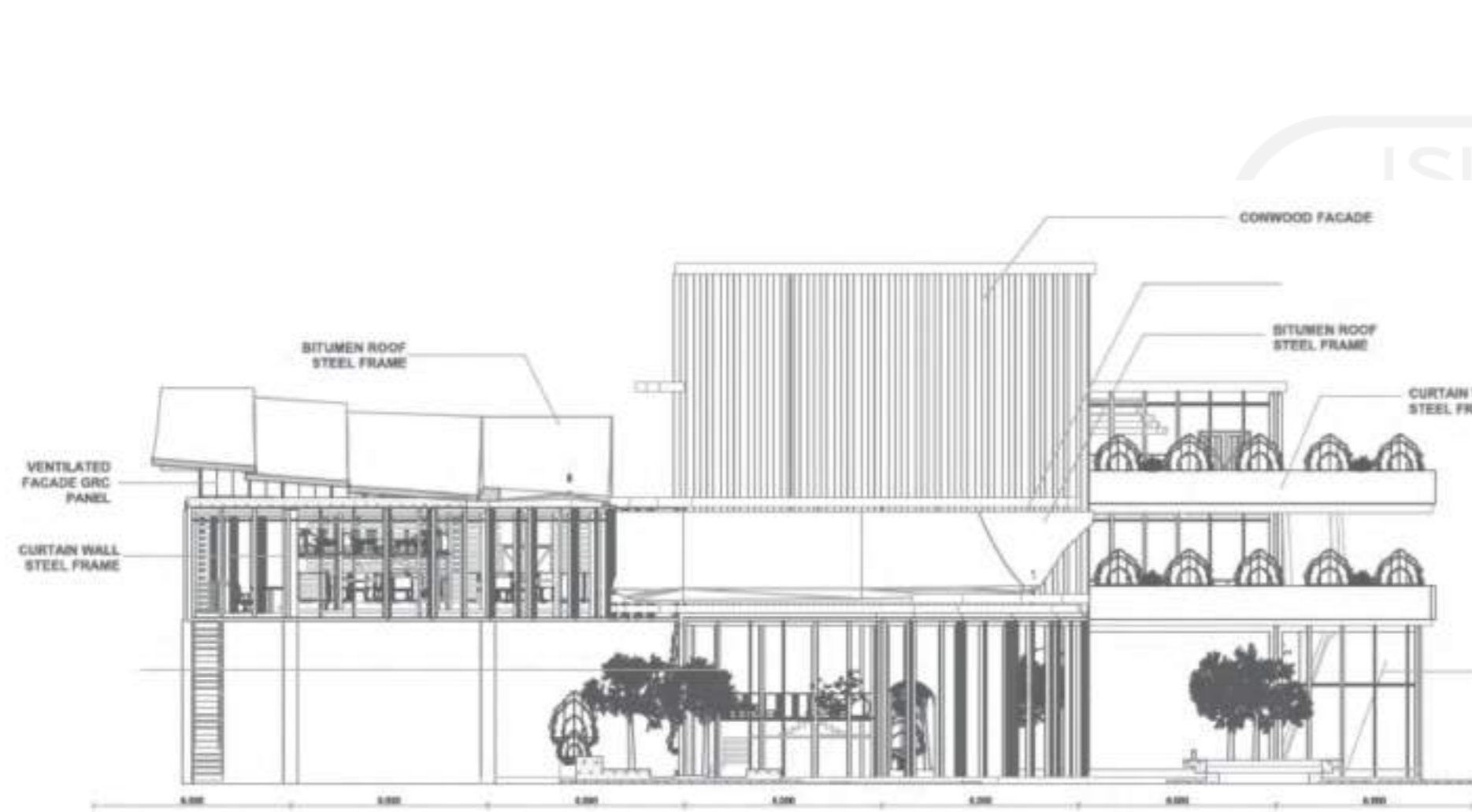


Figure 4.9 Facade Material by author

The form of facade design 1 was formed by adapted the dominant architectural characteristic from the neighborhood facade and transform it into a new form of shape. The intention is to have neighborhood context as a part of this building without showing one symbol of religion's facade as the purpose of this community center is to mingle between religion communities.

Adapting the roof element from the pagoda, the roman architecture which showing curvy form and the composition of the Grand Mosque the facade show irregular dynamic curvy form creating a continuous flow from west to east of the front facade.

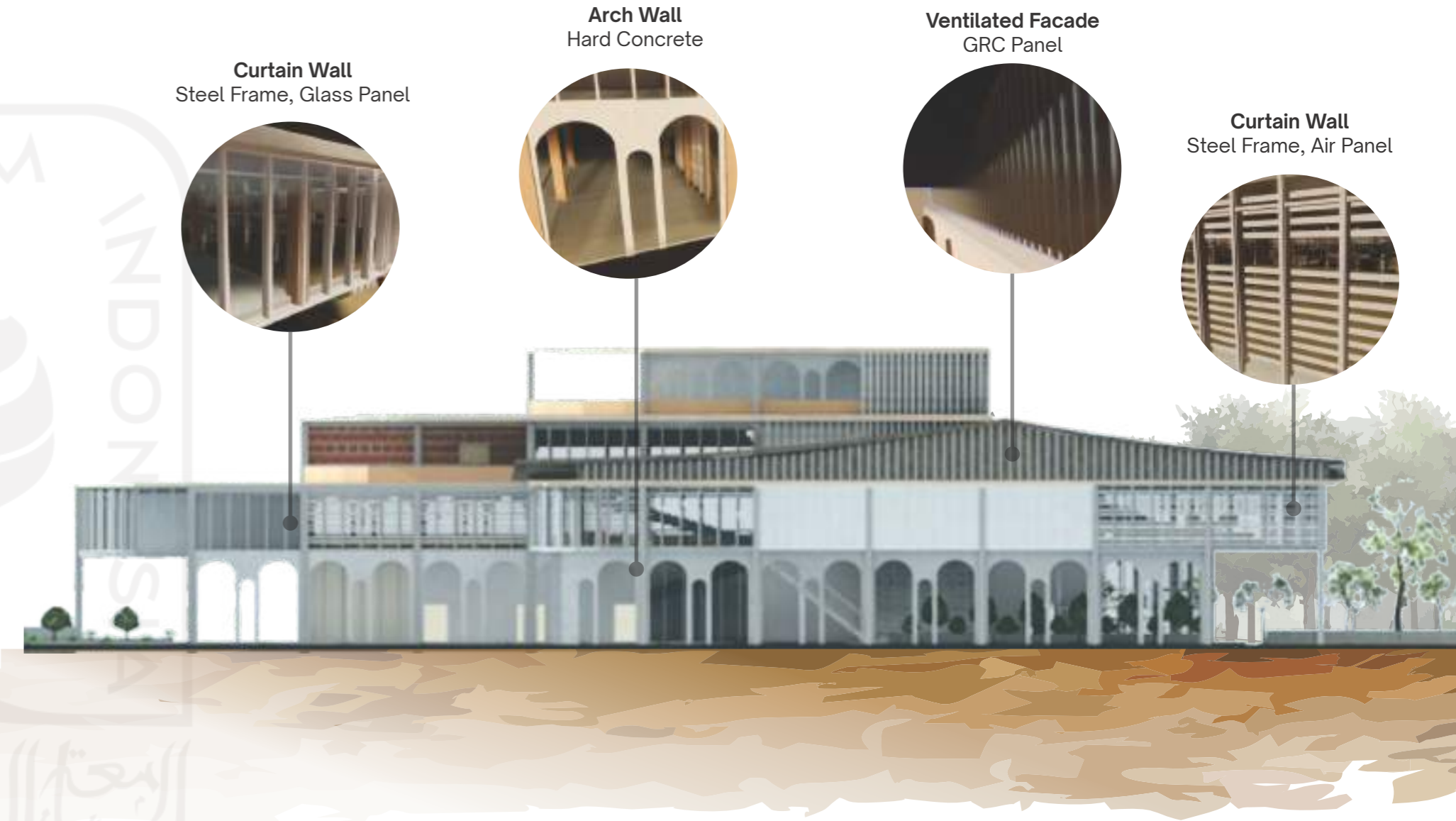


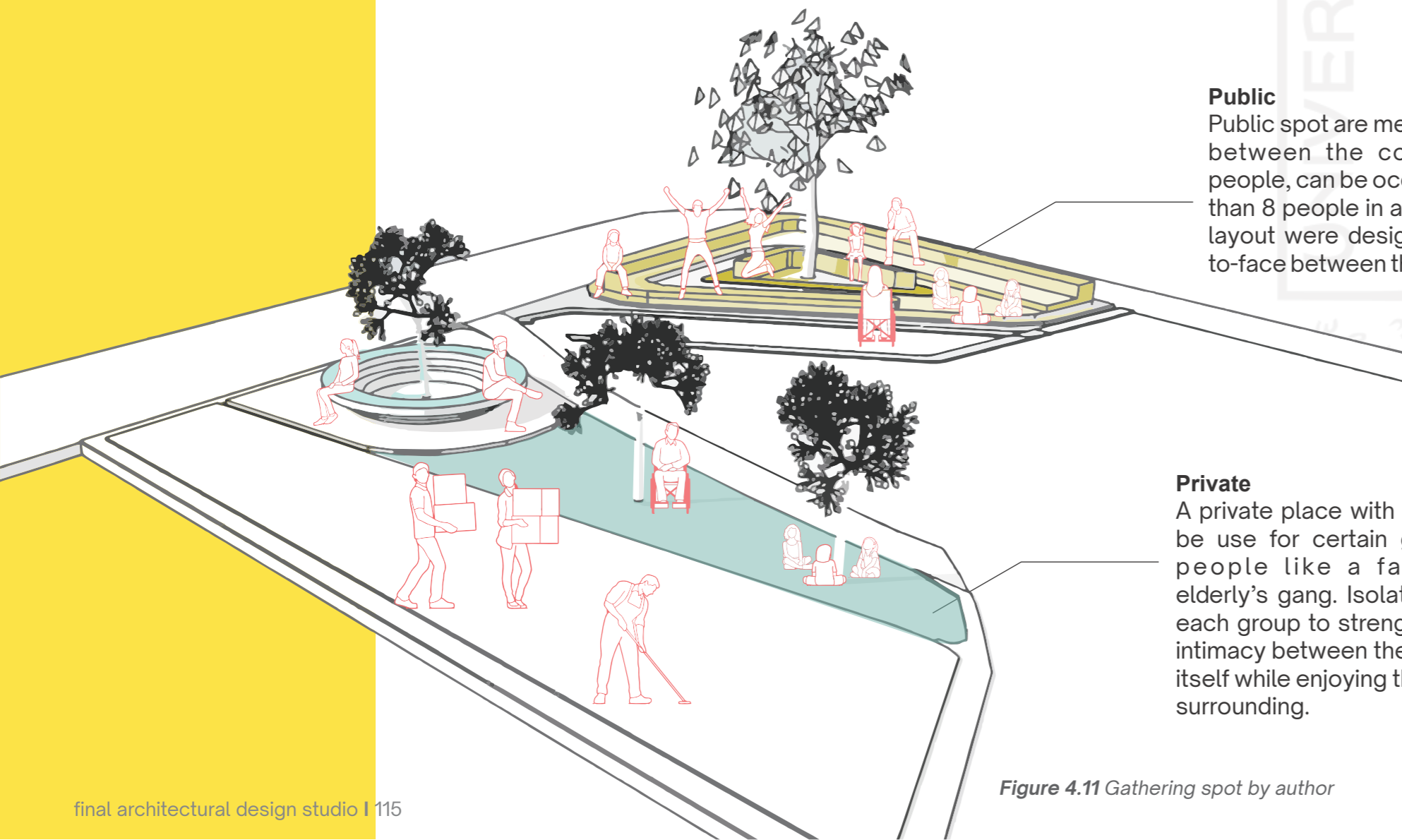
Figure 4.10 Facade material in perspective by author

4.1.5 Magelang Community Center in a redundant space that provides safety of movement and accessibility for children and elderly

Looking back at the background of the context of the city of Magelang which has a population of elderly people and children, these are the basic goals of the design of the Magelang Community center where this community can provide safety in terms of movement and accessibility for children and elderly. Based on an inclusive design, using an individual-specific design, the results will show children and elderly-friendly design. The strategy used to achieve these goals is to apply the following points:

Inclusive gathering space

Public space builds with gathering space considering the habit of elderly where they tend to have a more private place or they willing to mingle with other people. Gathering space is defined as private and public, interconnected with an outdoor playground. The design tries to mingle with the community without giving force to the individual to mingle with. Allow wheelchairs and disabled to access everywhere. The division of zones is done to provide comfort to users, especially the elderly. the arrangement layout is made simple by considering the access and comfort of the user's space.



Public
Public spot are meant to mingle between the community or people, can be occupy by more than 8 people in a spot and the layout were designed to face-to-face between the users.

Private
A private place with spot can be use for certain group of people like a family or elderly's gang. Isolating from each group to strengthen the intimacy between the groups itself while enjoying the public surrounding.

Figure 4.11 Gathering spot by author

Age- friendly access

Vertical transportation using universal design standards with Wayfinding where it is easy to access and provide direction. Lift is using for the elderly and disabled up to the top floor, the lift placed in between the public space and multifaitth hall that effectively can be accessed from both sides. Provide wheelchair accessible ramp outside the building close to the entrance directly to the meeting point. In case of emergency by using a ramp the evacuation is efficient in terms of span. Placement of lift and ramp are perpendicular in a strategic location of main activity space in the building. It will be easy for the elderly to find a way if they get lost either can use the ramp or lift.

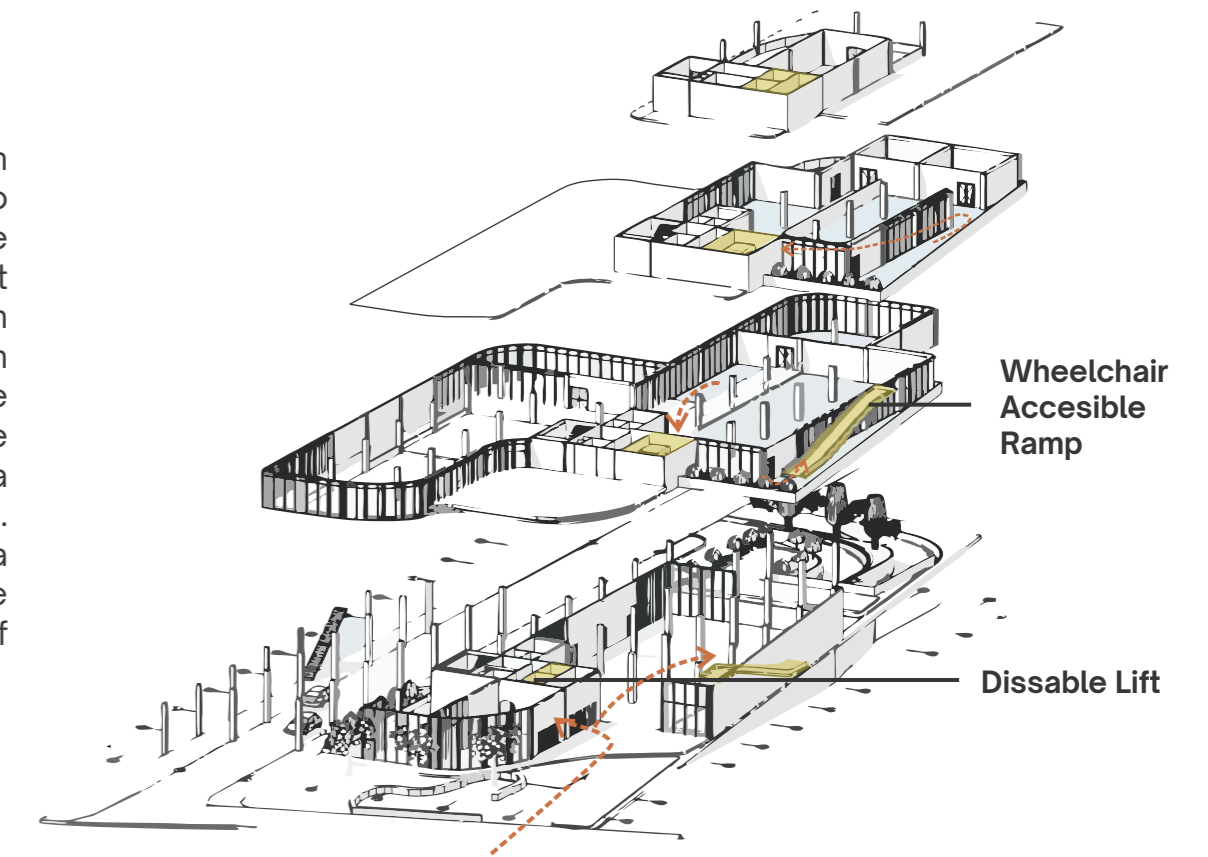


Figure 4.12 Route and inclusive vertical transportation diagram by author

Design of Children Environment

Space in Between
The transition between spaces using different architectural ornaments with tactile textures in different shapes on each floor. Beginning with the entrance which is a public space itself. Nature welcomes the user with an attractive space of gathering space spot layout. The ground floor begins with arch geometry, then continues to half of the 1st floor with the curvy shape transition in the Sigaluh culinary space. The next floor is the repetition texture of the line.

Transparency & Nature
The design makes it easy to observe and supervise children. the multi faith hall balcony on the 1st and 2nd floors is designed to be able to look down, as well as the public green balcony with glass walls that can observe into the room. Facades to the outside (1st floor) that can observe the playground in public space not only function as design transparency, but the use of transparent materials provides visibility for users by presenting a natural view of the public space. Space between functions is designed openly with minimum partition or obstruction to increase the visibility of space

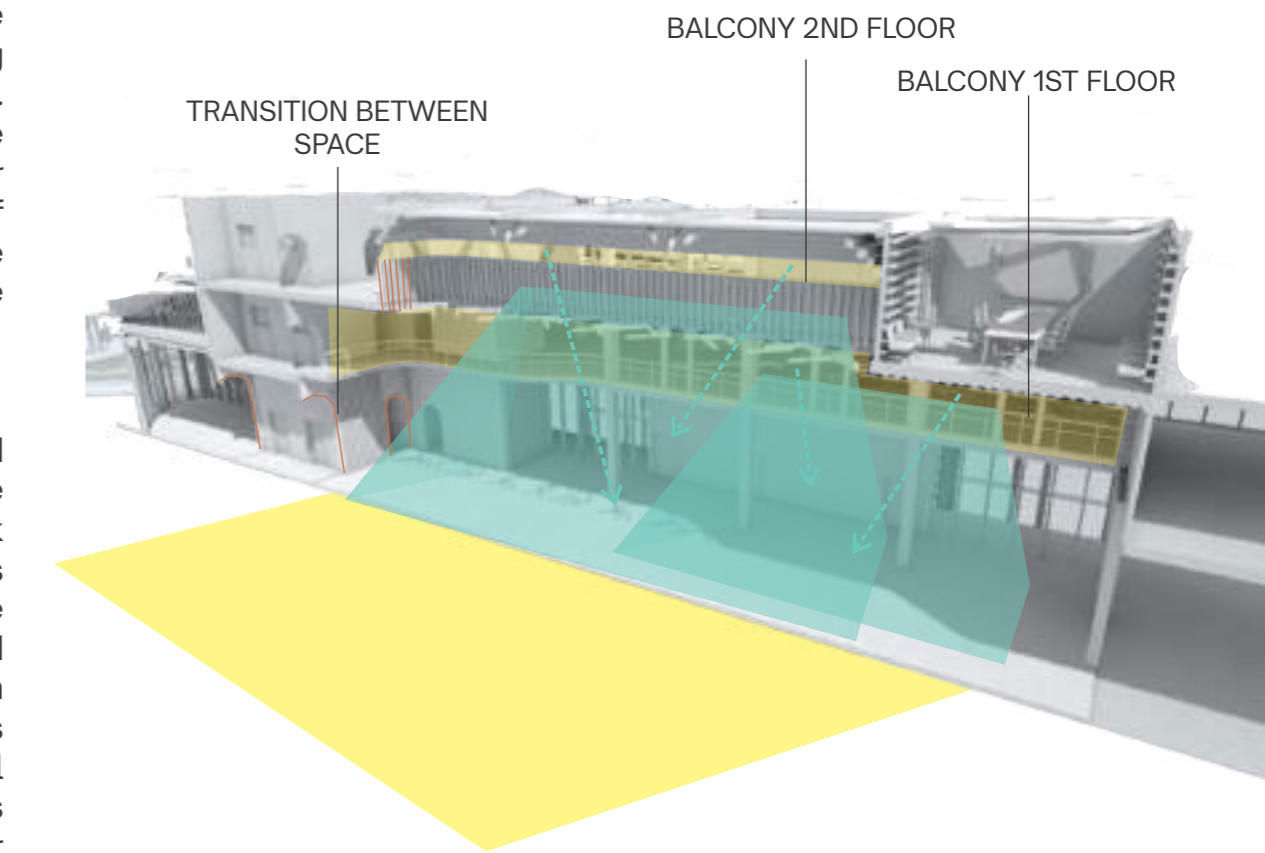


Figure 4.13 Transparency and visibility in design by author

Scale

The children's play area is designed to adjust to the size of the child where public space can be customized according to the theme to be carried or can be installed for children with the appropriate scale.

Relationship with Social activity

Children's zones are interconnected with many spaces occupying for community activity, offering them to interact or participate, such as a playground surrounded by gathering spots and directly going to the multifunction hall. Sigaluh Culinary Installation is made considering the children's needs and habits who are likely to explore, climb, and play around with the new object. The space transition is designed for children to move freely with many features of the building they can explore.

Safety

Placing the public space with a playground in a safety zone more than 6 m from the main street, avoid vehicles and dangerous objects. Outdoor playground surrounded by gathering space spot, while children play parents can observe and take care of them. The access inside the building using lift and ramp with universal design approach and safe for children. This design is also assisted by the fittings of a railing with a special handle for child.

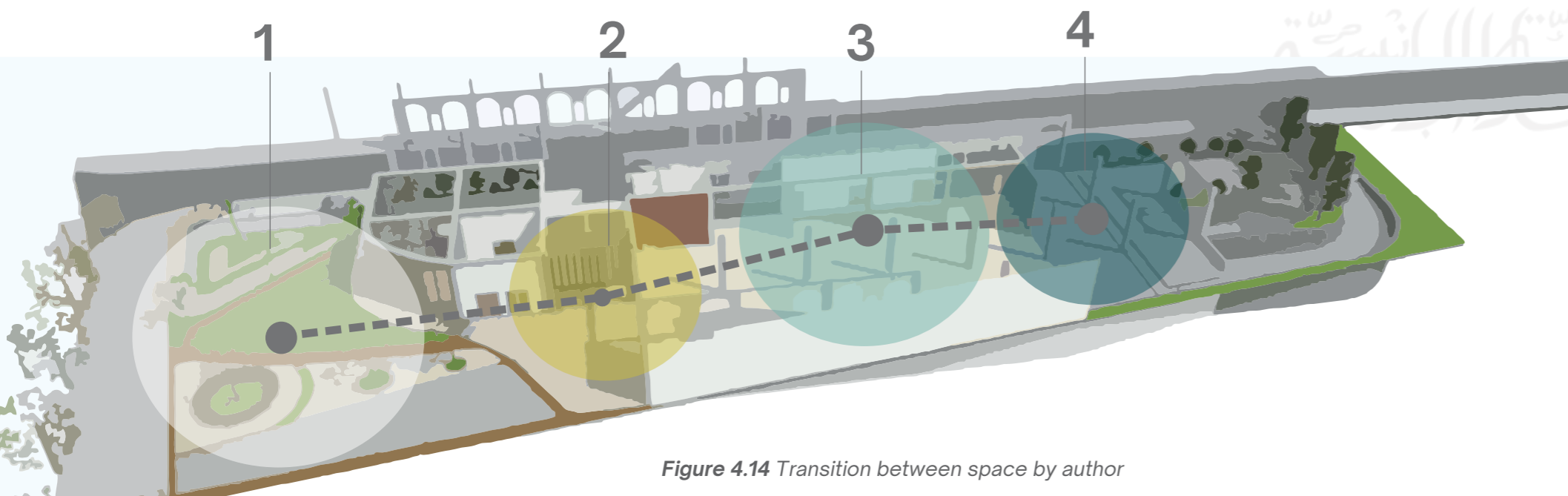


Figure 4.14 Transition between space by author



Figure 4.15 Magelang Community Center Public Space by author

4.1.6 Magelang Community Center host religious communities where the communities can mingle with each other

Answering the question of how the design can host religious activities, namely by providing the main room, namely the multifaith hall where the main activities of the faith festival can be carried out in the hall. The diversity of religious festivals in the city of Magelang is a design benchmark, where the design provided is an interconnected space design between public space-multifaith hall and gathering space with a mini stage. The placement of the space creates a sequence path where this multifaith hall also functions as a movement path for several festivals such as carnivals or parades at the Buddhist festival, a lunar new year with the lion dance, prophet birthday, and so on.

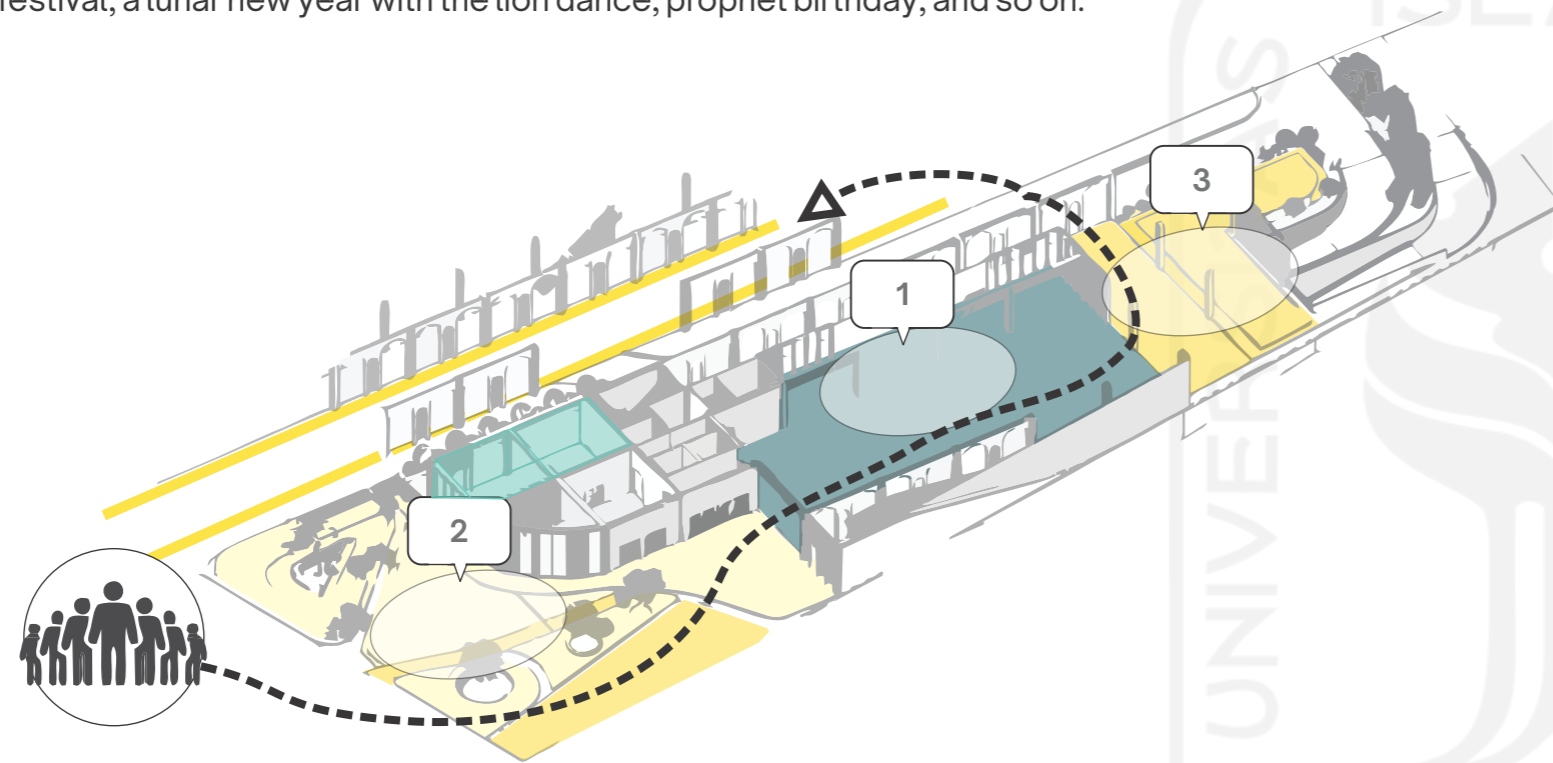


Figure 4.16 Interconnected in Multifaith Hall by author

Multifaith hall as a space to support the main activities of faith festival with a uniqueness that is different from other halls, namely the ambiance created by this space, showing a spiritual ambiance. This atmosphere was created from several strategic approaches.

Mingle with nature or natural elements shown in the selection of a tree with a philosophy that describes the unity of religion. a tree with a symbol of unity using a banyan tree placed in the public space area in front of the building. the multifaith hall connects 2 public spaces (outdoor) directly applying a passive cooling system to catch prevailing wind. using cross openings and ceiling heights. In addition to controlling the hall air, this is done to give the effect of gusts of wind into the room as a natural element.

Lighting design with 3 configurations of architectural elements such as column, beam, and ceiling design. Lighting is placed at the point of space that can reflect the geometries and give the spiritual ambiance to space. The light used by the warm temperature lamp gives a calm effect. Space will look a little dark with a tinge of light showing a mysterious yet calming impression forming a spiritual situation. This design can also show natural elements at night to be very strong. The multifaith hall, which is designed to be semi-open, makes the nature of the outside into the multifaith hall.



Figure 4.17 Multifaith Hall from front entrance by author



Figure 4.18 Multifaith Hall from back entrance by author



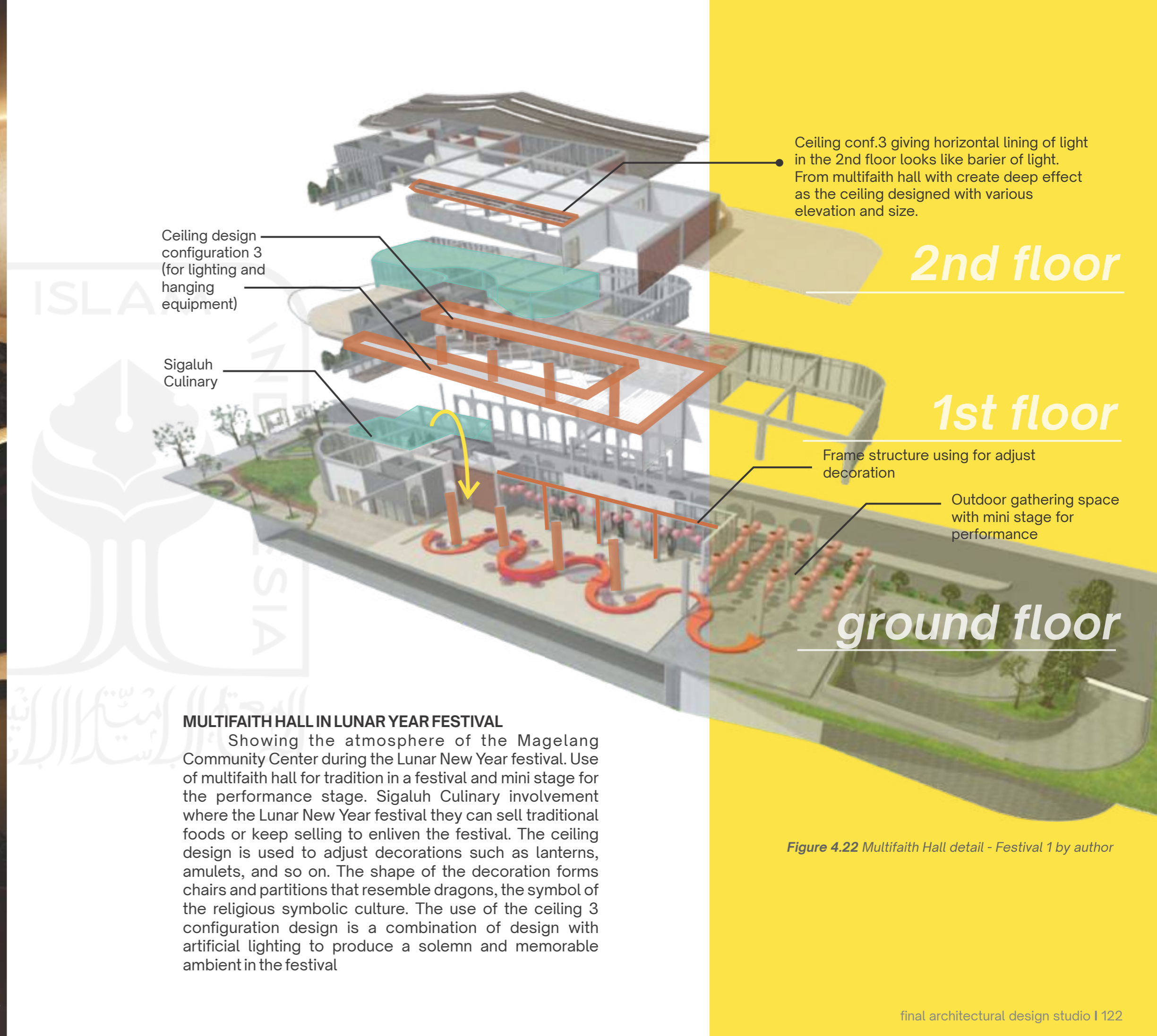
Figure 4.19 Corridor and Co-working space by author



Figure 4.20 Multifaiith Hall from balcony by author



Figure 4.21 Multifaiith Hall in Lunar New Year Event balcony by author



MULTIFAITH HALL IN LUNAR YEAR FESTIVAL

Showing the atmosphere of the Magelang Community Center during the Lunar New Year festival. Use of multifaiith hall for tradition in a festival and mini stage for the performance stage. Sigaluh Culinary involvement where the Lunar New Year festival they can sell traditional foods or keep selling to enliven the festival. The ceiling design is used to adjust decorations such as lanterns, amulets, and so on. The shape of the decoration forms chairs and partitions that resemble dragons, the symbol of the religious symbolic culture. The use of the ceiling 3 configuration design is a combination of design with artificial lighting to produce a solemn and memorable ambient in the festival

Figure 4.22 Multifaiith Hall detail - Festival 1 by author



Figure 4.24 Multifaith Hall Christmast Fest by author



Figure 4.25 Multifaith Hall in Christmast from entrance by author

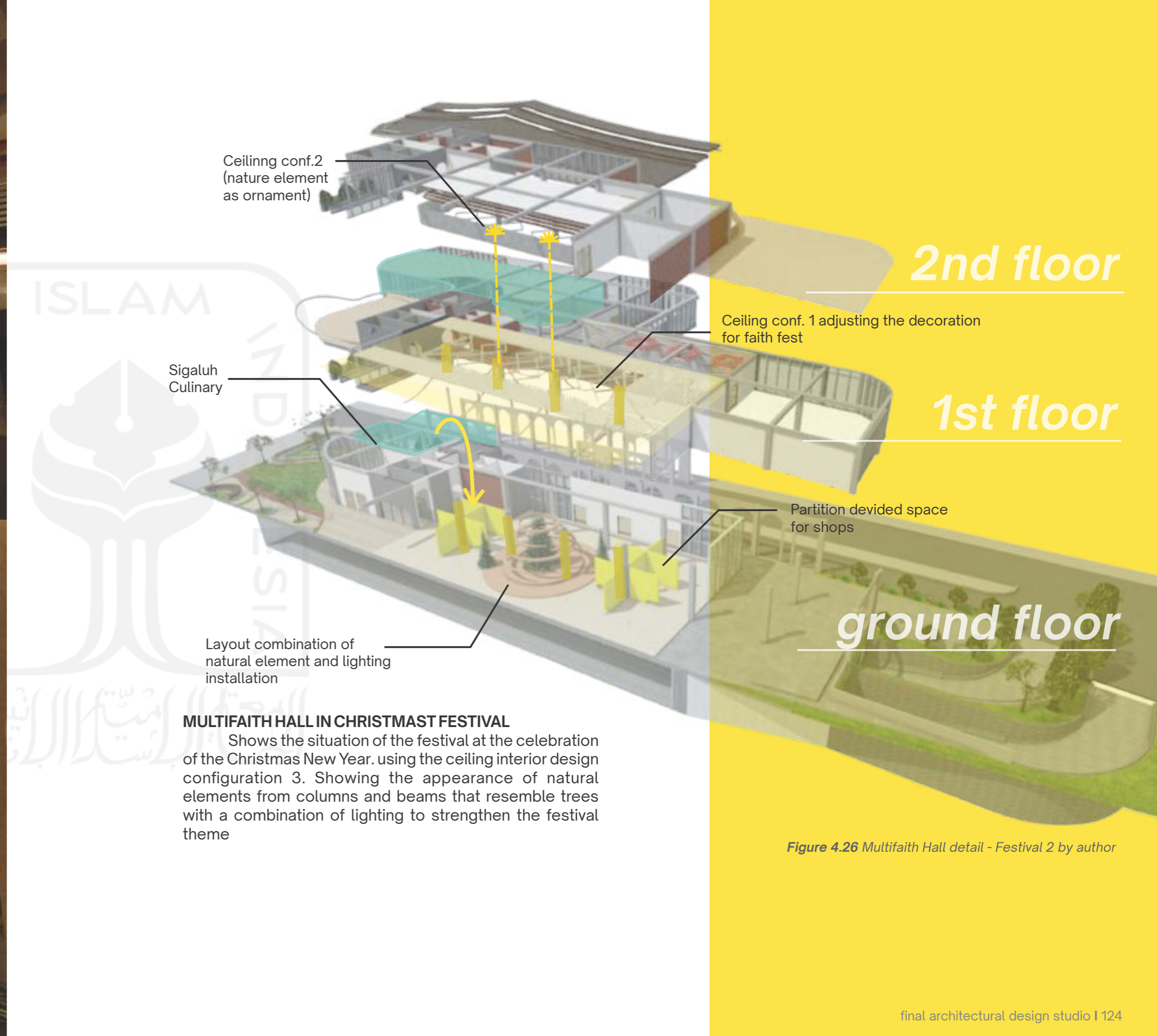


Figure 4.26 Multifaith Hall detail - Festival 2 by author

4.1.7 Sigaluh Culinary

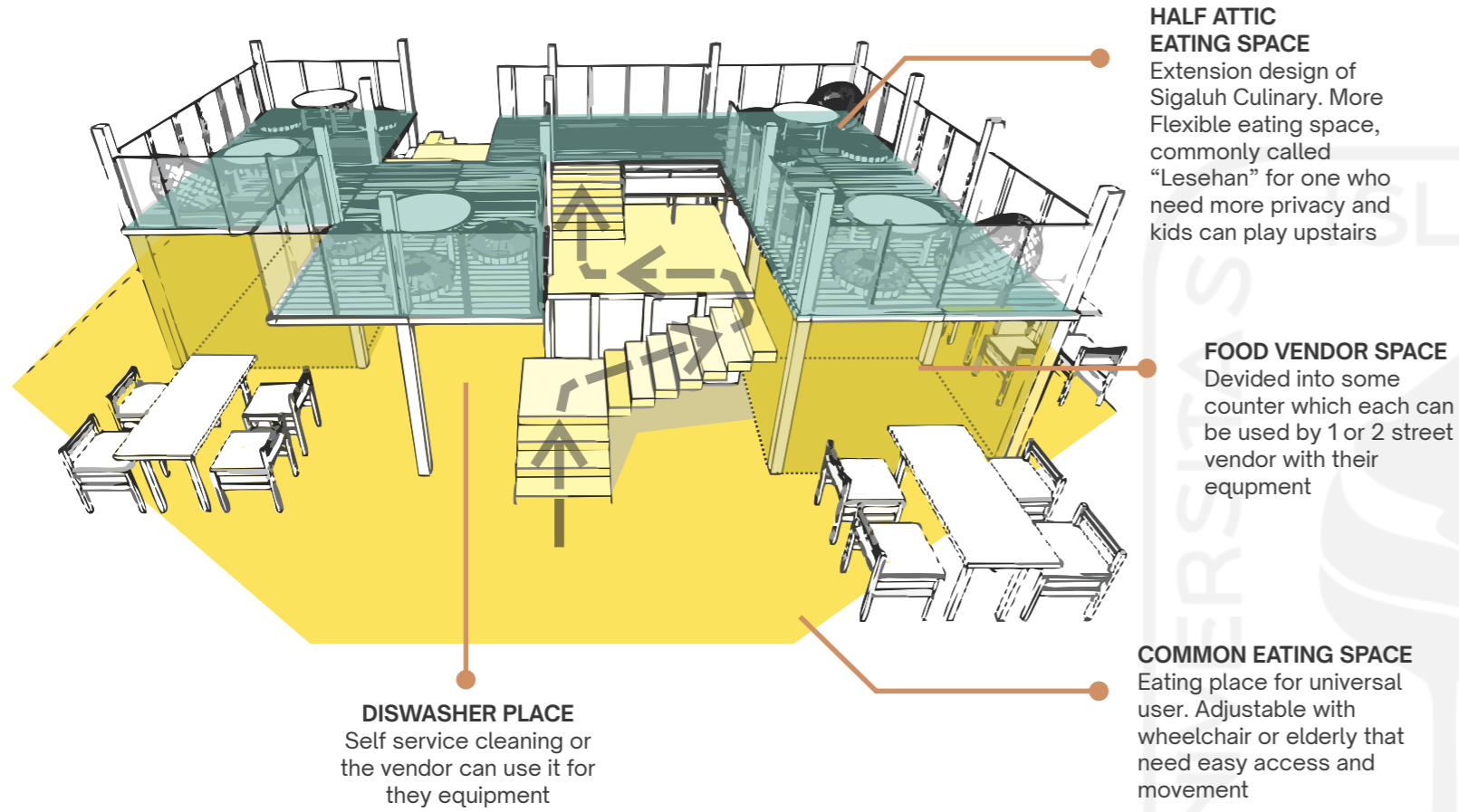


Figure 4.27 PKL Sigaluh Installation by author



Figure 4.28 Sigaluh Culinary Corridor by author



Figure 4.29 Co-working space and Sigaluh Culinary by author

4.1.8 STRUCTURE

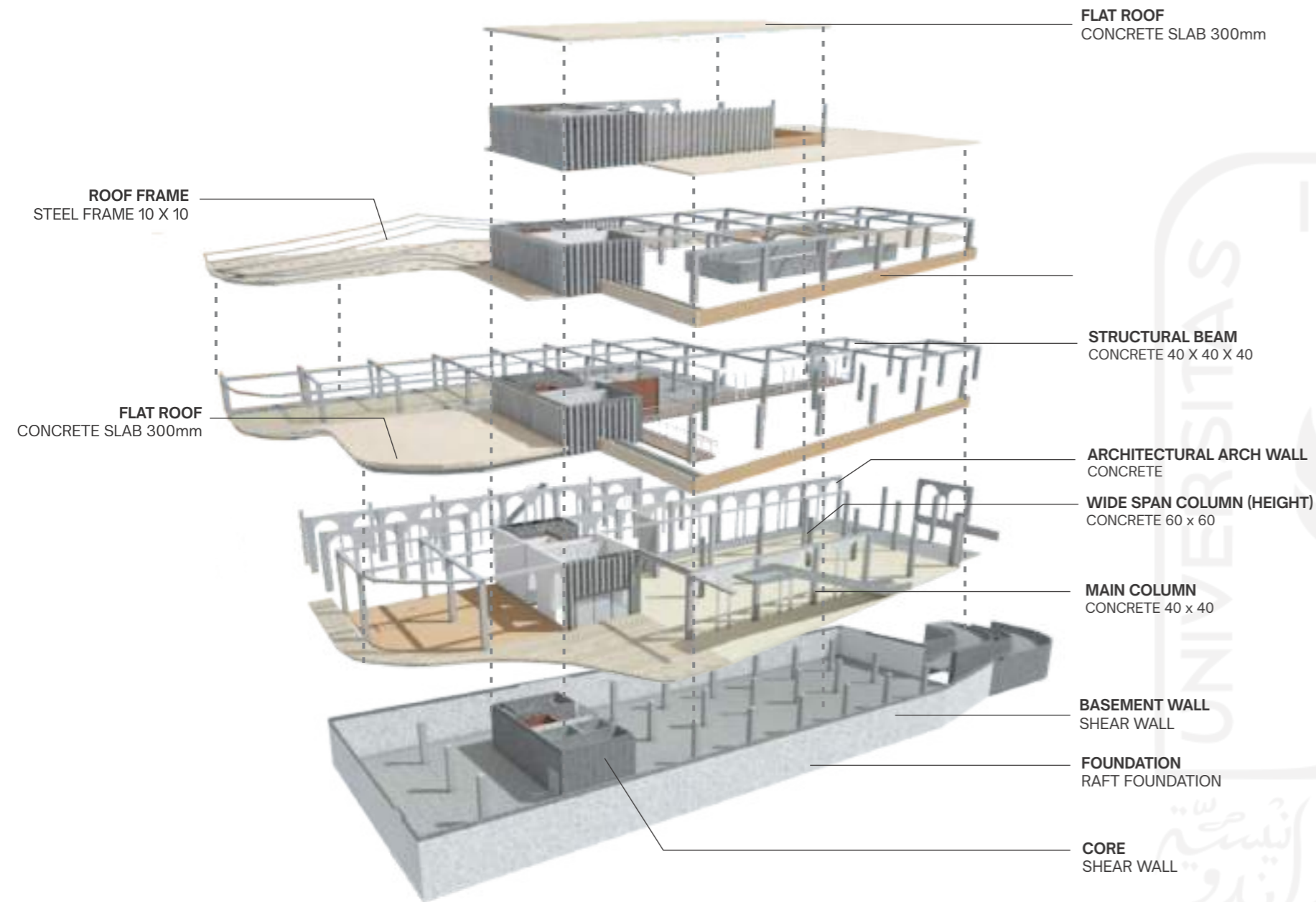


Figure 4.30 Magelang Community Center Structure System by author

The building consists of 4 floors including a rooftop and basement. Using frame structure concrete column and beam as the main structure with a grid of 6 m x 6 m wide of column. Foundation using raft foundation with share wall in the basement. Main column using concrete 40 cm x 40 cm. Column in mass 2 (Sigaluh Culinary) using concrete 30 x 30. And wide span column (height) using concrete diameter 60 cm x 60 cm beam using concrete 40cm x 40cm x 40cm. Rooftop structure using bitumen roofing with steel frame diameter 10 cm. Core in the center using shear wall also support main structure and connecting 2 masses.

4.1.9 MECHANICAL AND ELECTRICAL SYSTEM

The main source of electricity comes from PLN which is then channeled to the generator in the basement and the transformer. Then distributed to electrical lines and components. The cable line is divided into 3 parts to control if one part is shorted, the other part will still work properly.

The use of passive cooling in the design reduces the use of air conditioning. The height of the ceiling in the multi faith hall allows the distribution of hot air to a higher surface to make the room cooler. Semi-open space provides an ambiance of nature's participation in providing comfort and a situation between being outside and inside the room at once

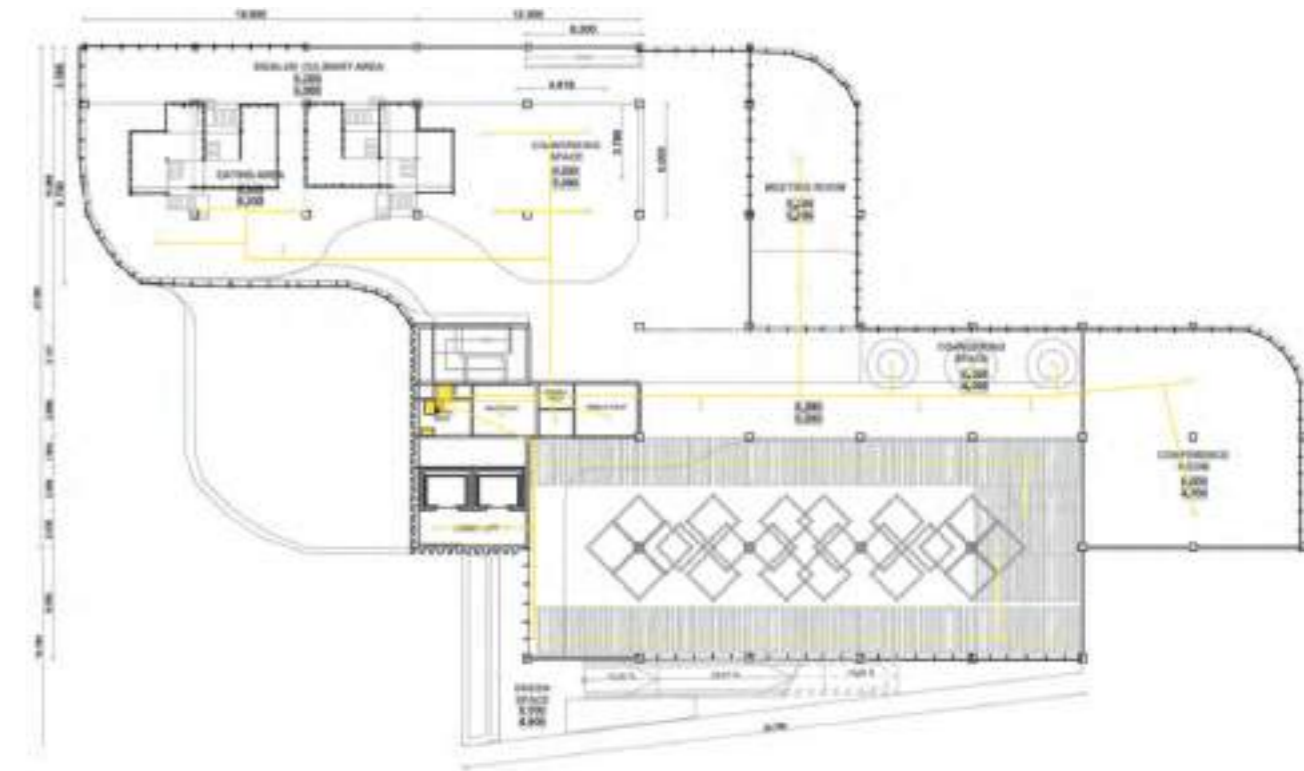


Figure 4.31 Electrical Plan by author

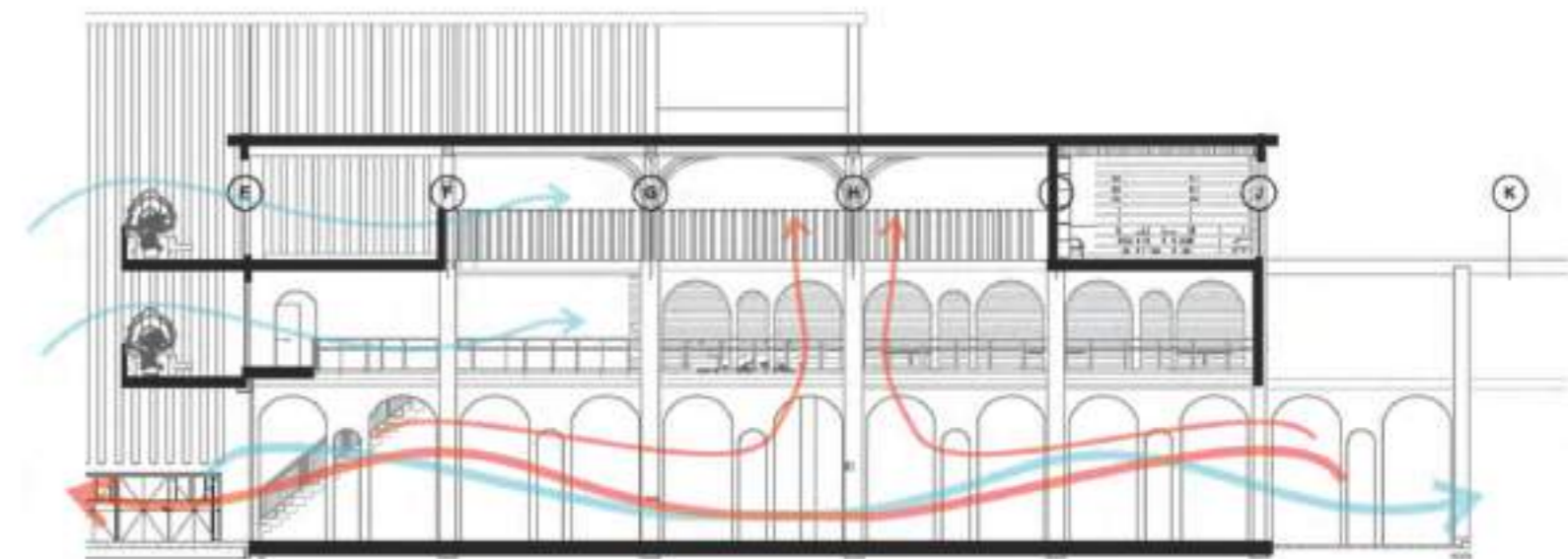


Figure 4.32 Passive Cooling System by author

4.1.10 INCLUSIVE AND SAFETY FOR DISABLE

The building provides a vertical transportation system with a universal design approach. Lift located near both entrances, making the distance for elders or disability much shorter. This lift can be used up to the 2nd floor, offering all users to use and explore the space in the building. Ramp located on the center of the building on the corner of multifaitth hall. The ramp can carry a wheelchair, safe for children and elders also shorter the time spend for another user to reach other facilities on the building.

The evacuation zone is divided into 2 parts which end at the meeting point on the front and rear side of the building. The meeting point is located near the entrance in the form of an open space that is safe from the circulation of vehicles. system. Provide fire cabinet (consist of apar, hose reel, fire safety and connect to the hydrant) , fire extinguisher placed on the public area that easy to be seen and accessible.

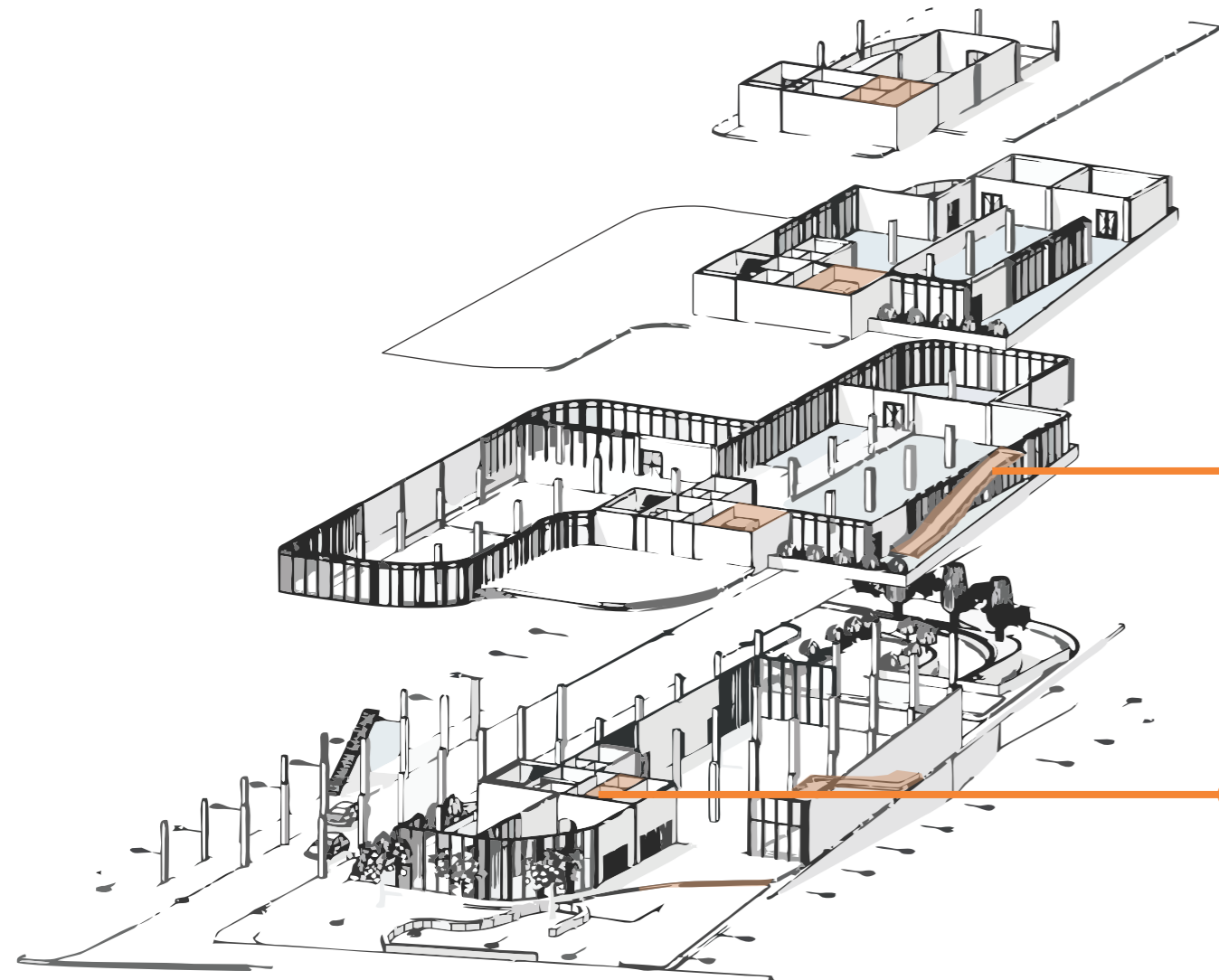
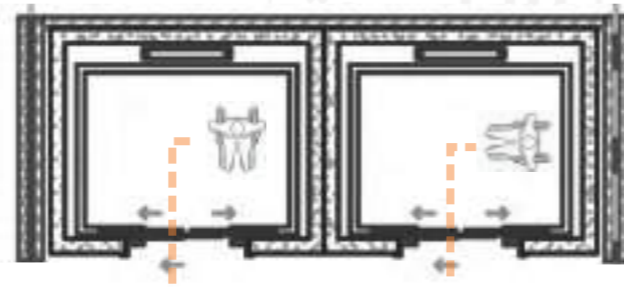


Figure 4.33 Vertical Transportation Diagram by author

Wheelchair Accessible Ramp

Wheelchair-friendly ramp design is designed using the barrier-free design principle with the needs of disabilities. intended to facilitate vertical access for people with disabilities. The ramp is placed as close as possible to entrance for effective mileage and in case of emergency, the ramp is closer to the meeting point



Lift that can be used for all group of age, disabled people, wheelchair, carriage to the top floor. when the emergency lift will remain on for the priority of the elderly, children, and disabilities.

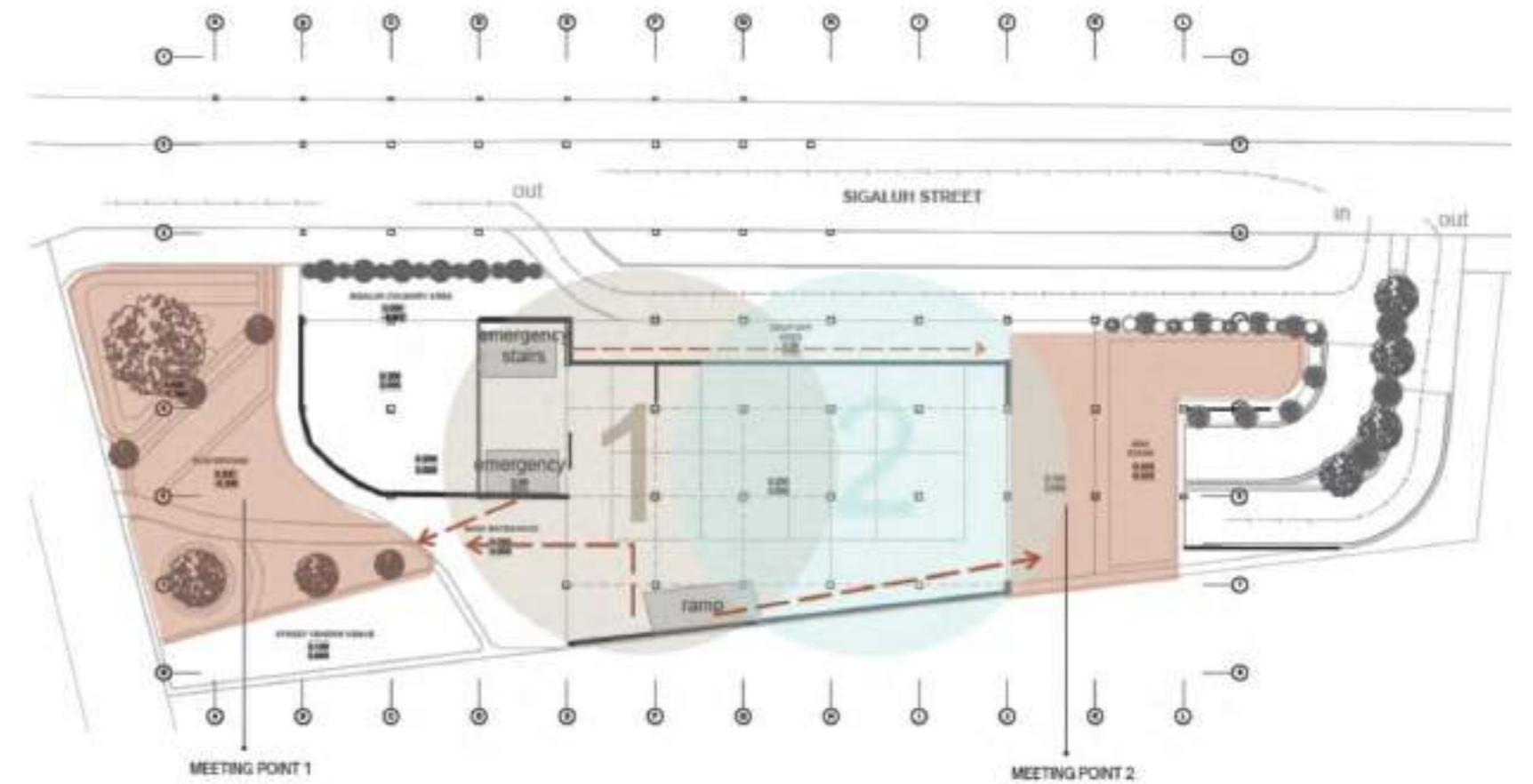


Figure 4.34 Meeting point and emergency route by author

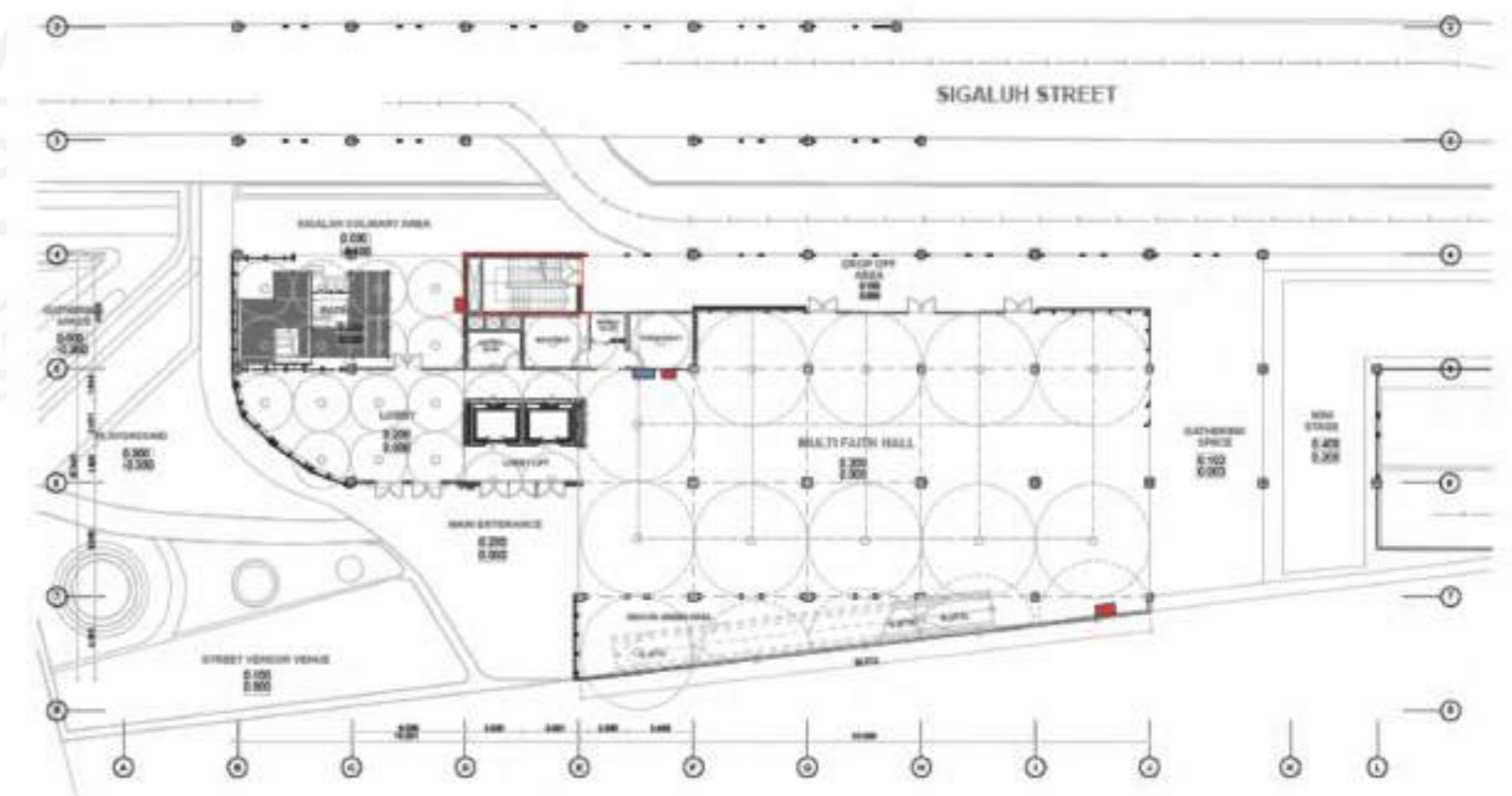


Figure 4.35 Sprinkler water system by author



PERSPECTIVE FROM SIGALUH STREET



MULTI FAITH HALL



MINI STAGE



ACTIVE PUBLIC GATHERING SPACE



SIGALUH CULINARY & CO-WORKING SPACE

Figure 4.36 Exterior and Interior of Magelang Community Center by author



chapter

05

design evaluation

A. Magelang Community Center in a redundant space that provides safety of movement and accessibility for children and elderly

The design has implemented a strategy to create a child and elderly-friendly environment, by providing space transformation in between, creating spaces with interconnected activities that children can participate in naturally, transparency in the opening and the availability of views that can observe the safety of children in children's play spots and the use of scale for playrooms child adapted to the child's anthropometric size.

B. Magelang Community Center to host religious communities where the communities can mingle with each other

The diversity of religious festivals in the city of Magelang is a design benchmark, where the design provided is an interconnected space design between public space-multifaith hall and gathering space with a mini stage. The placement of the space creates a sequence path where this multifaith hall also functions as a movement path for several festivals. The uniqueness of multifaith hall is shown by applying the design on lighting, using natural elements, the transition between space, and interconnected between space that shown new ambiance and giving spiritual atmosphere.

C. Integrate a community center with street vendors in Sigaluh culinary

Integrating Sigaluh Culinary to reduce density and traffic on Jalan Sigaluh and Ahmad Yani. By raising the elevation of Sigaluh Culinary to become a building mass located above the highway, following existing regulations and not eliminating the essence of Sigaluh Culinary, it can free up roads that are usually made up of illegal parking and open pedestrian paths on Jalan Sigaluh. The opening of this space provides space for vehicles and pedestrians on their respective paths and reduces the buildup of road users and provides security for pedestrians passing through the Sigaluh area.

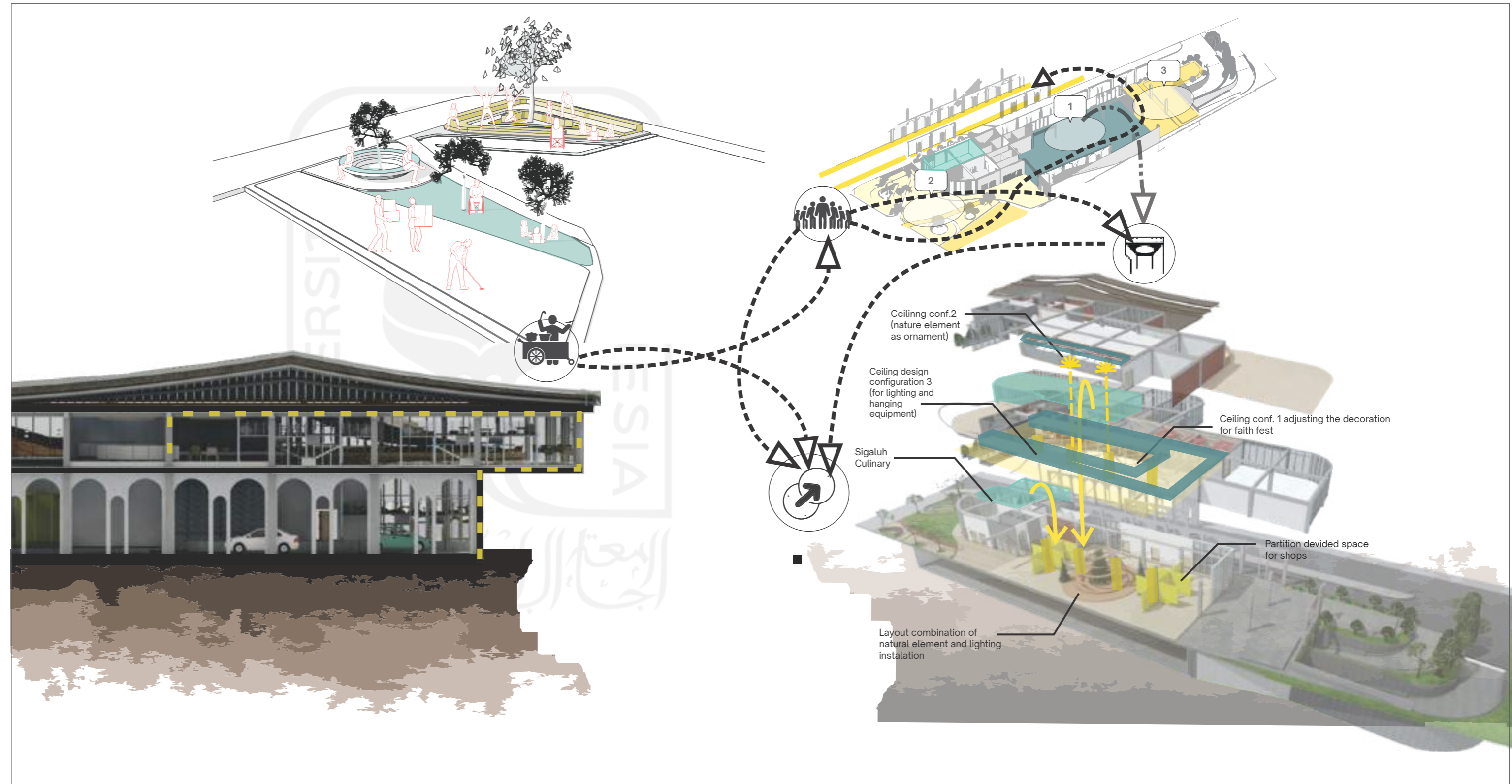


Figure 5.1 Magelang Community Center Interconnected Diagram by author



chapter

06

reflection.

6.1 Zoning by Private, Semi-Private and Public

QUESTION / COMMENT :

The separation of space zoning into private, semi-private, and public based on what and why this zone must be separated remembering that this building is intended for the public facilities ?

Initially, zoning was separated into 3 parts for users. public, namely the zone where space can be freely used by the public. semi-public, which can be rented by the public and private or for the religion community. However, several problems were raised if there was a public event and these private spaces could not be used or the zoning would block other activities. so that this zoning is removed and returned to the initial room program where the zone is divided based on the main activity of the building. public space, culinary zone, and rentable space zone.

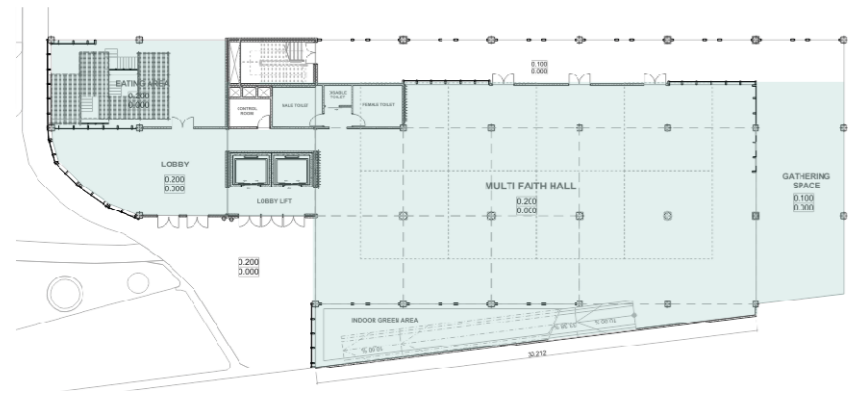


Figure 6.1
Ground Floor Zoning before evaluation by author

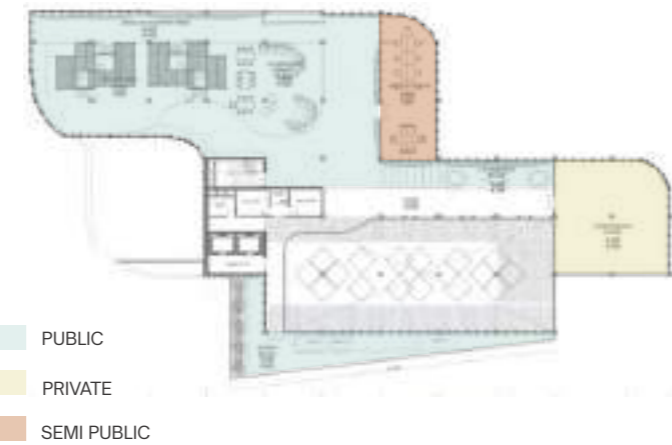


Figure 6.2
1st Floor Zoning before evaluation by author

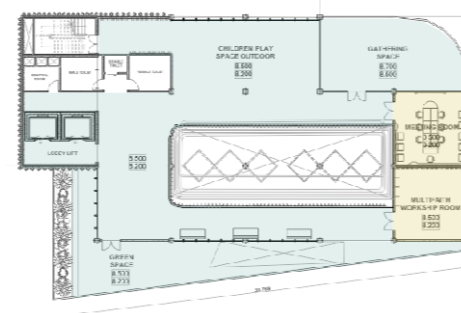


Figure 6.3
2nd Floor Zoning before evaluation by author



Figure 6.4
Ground Floor Zoning after evaluation by author



Figure 6.5
1st Floor Zoning after evaluation by author



Figure 6.6
2nd Floor Zoning after evaluation by author

6.2 Dedicated Space For Sigaluh Culinary

QUESTION / COMMENT :

Part of the building is designed on a road which according to the applicable regulations and building codes, it will be difficult to build or obtain a building permit above the road. While the main function of this building focuses on the “multifaith hall”, why does the building mass that is placed on the road only facilitate space for culinary areas and co-working spaces? Why not use it to expand the “multifaith hall” area?

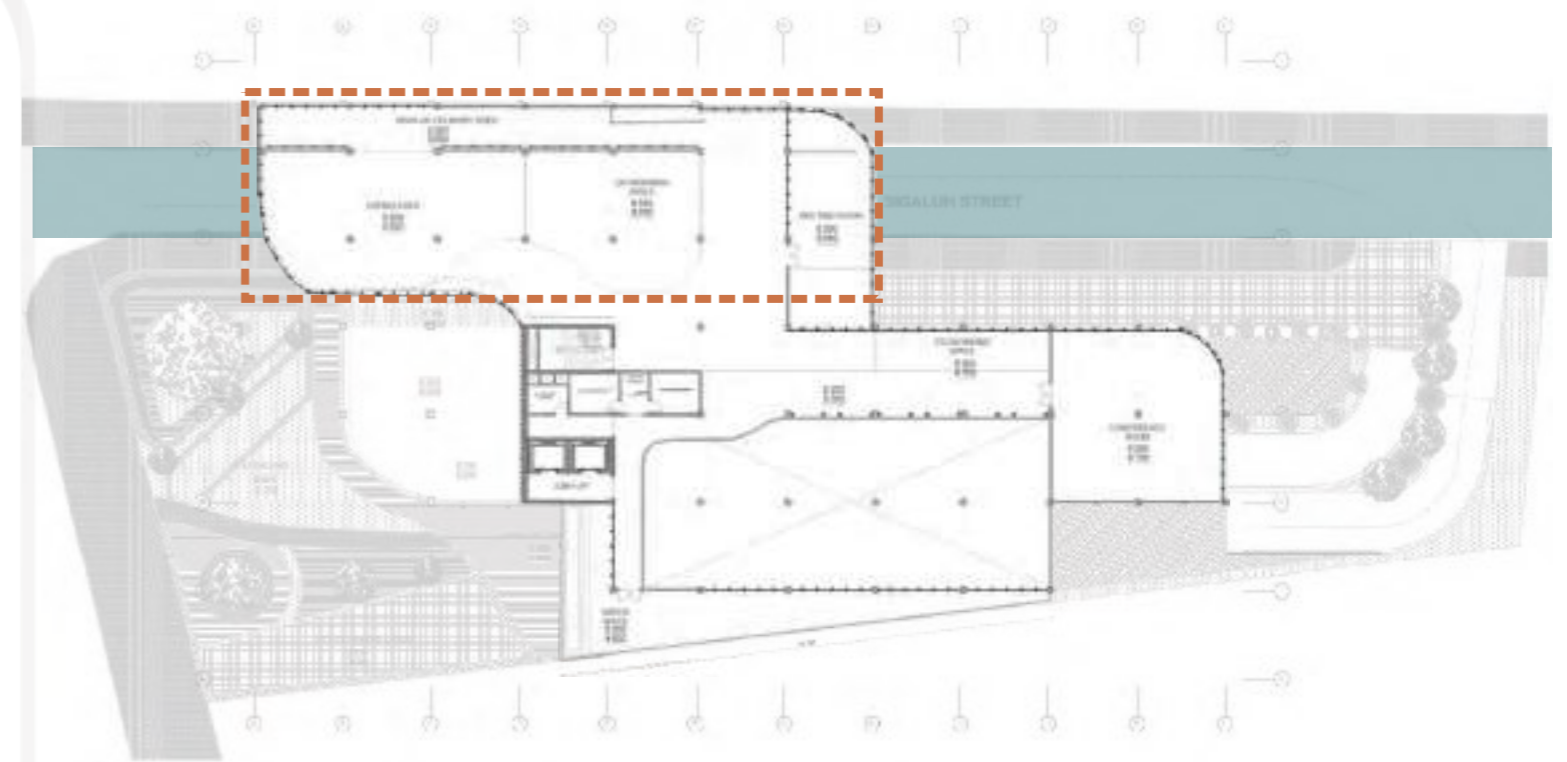


Figure 6.7 Sigaluh Culinary Mass Area on Sigaluh Street by author

Sigaluh Culinary is a program of the Magelang city government and the existence of the culinary already exists, making it an existing one that must be maintained. The mass design above the road is a solution to reduce spatial conflicts that can cause traffic and provide safety for pedestrians by removing the sidewalk blockade which is Sigaluh Culinary itself. Consideration why the use of the building mass designed on the road is only for Sigaluh Culinary because the original road area is an area belonging to Sigaluh Culinary or one that has been programmed by the government. So this mass area is specifically dedicated to the Sigaluh Culinary area. Because this program is owned by the government, licensing may be easier than using the existing mass function on the road to expand the multifaith hall which will belong to the community.

6.3 Children's Space Safety On 2nd Floor

QUESTION / COMMENT :

Referring on Drawing Document on 2nd floor plan, the placement of children play space is lacking in a safety perspective. Considering the behavior of children who have curiosity, the position of the children's playroom is directly connected to the balcony corridor and emergency stair entrance will be dangerous because children can climb and fall. If the children's area is freed on the 2nd floor it will interfere the activities in the meeting room and workshop room (causing noises).

The initial consideration made in placing the children's space there is to provide flexibility to children, also close to the outdoor gathering space where they can enjoy the outdoor atmosphere, with parental supervision. But it is true that this poses a risk to the safety aspect and can also disrupt activities in the meeting room and workshop room. For this reason, design improvements were made.

The concept of flexible space for children is transformed into a safe but still seamless playroom where children can witness the continuity of activities that occur in the building. enclosed spaces and indoor playrooms are options that can provide safety for children. space is moved to the side that was previously a meeting room. On the other hand, the meeting room is made seamless and parallel to the workshop room. Meeting rooms are flexible for informal meetings, or even multi-functional. other rooms are closed so that they will not cause noise to each other, especially in the workshop room which is equipped with soundproofing material on the walls and ceiling.

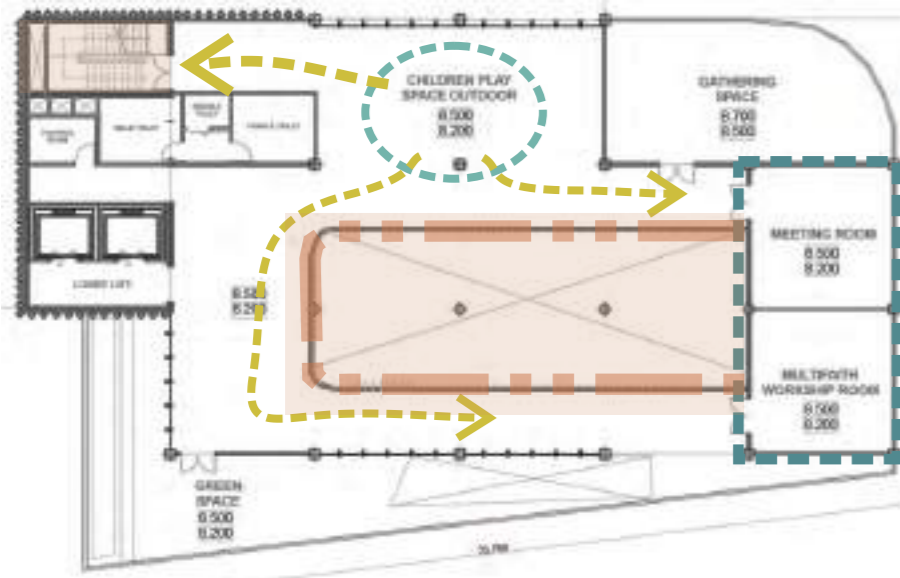


Figure 6.8 2ND Floor Plan before evaluation by author

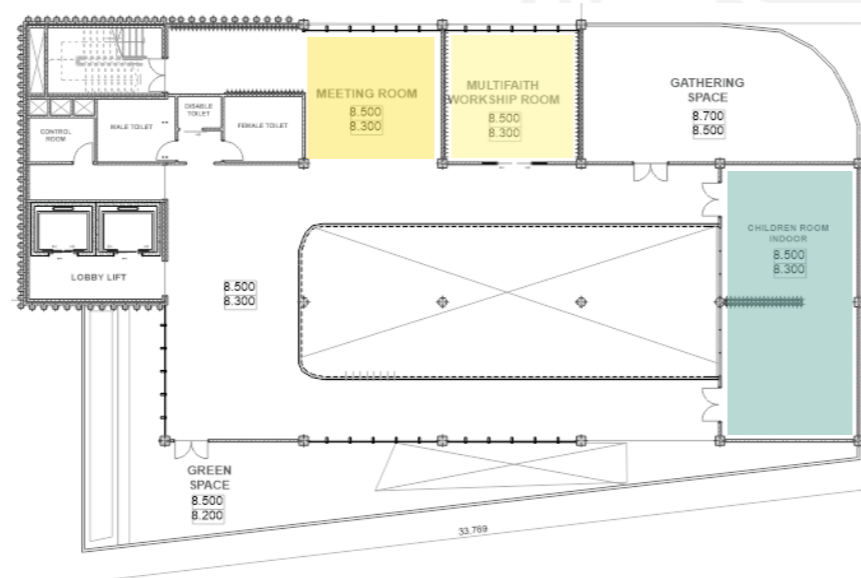


Figure 6.9 2ND Floor Plan after evaluation by author

6.4 Thermal Control In West and East Facade

QUESTION / COMMENT :

The facade of the building facing west and east uses clear glass, what about the thermal control?

Corrected the writing written on the facade material that the use of facades, especially on the glass facade on the west and east sides of the building which is directly facing the sun, the facade used is a curtain wall with steel frames and glass used with sunenergy glass. Sunenergy glass can reduce or even reflect sunlight. This glass only absorbs a certain color spectrum so it can block ultraviolet rays and can reduce the heat that enters the room. Meanwhile, for other facades facing west and east, the existing building and roof are designed to function as cantilevers to form shading.

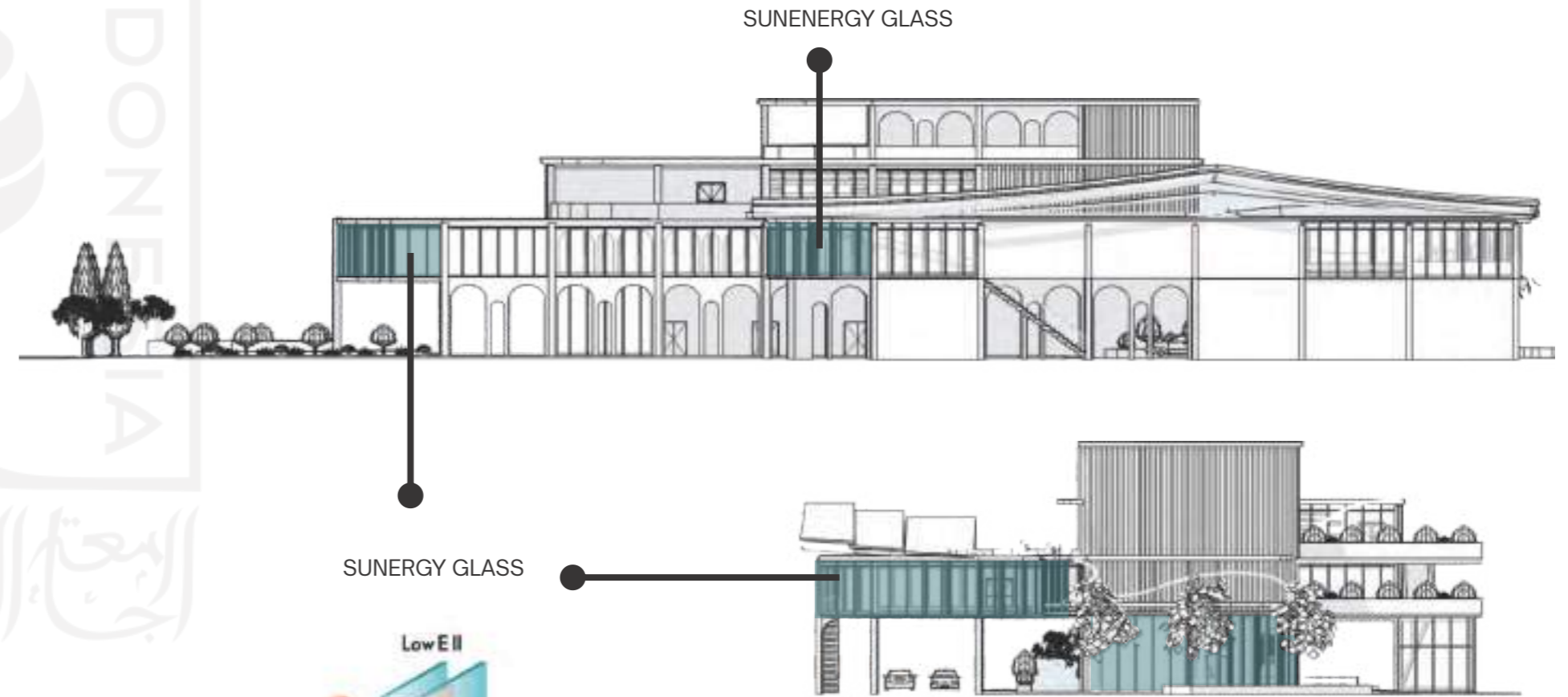


Figure 6.10 Thermal Control Facade by author

6.5 Multifaith Hall Expression

QUESTION / COMMENT :

How is the multifaith hall approach in design that distinguishes this hall from the common hall, is the goal of lighting integration to showing a common expression of religion or specific to a religion which is then integrated or showing the resulting spiritual atmosphere?

The lighting approach taken is an approach to create a spiritual ambient in the hall which symbolizes the place is dedicated to religious activities in the form of festivals. Although using the main hall is not for religious activities, but for festivals where the festival is known for its lively atmosphere or there will be many additional elements for decoration. For this reason, the multifaith hall design offers several lighting integration design models that can be adjusted to the desired activity and atmosphere. The hall can be made to have a spiritual impression by setting the lighting with the desired location of the light or by the common lighting situation that exists in the hall in general.

The architectural ornaments in the hall are designed to facilitate festival decoration needs. For example, a ceiling that is designed so that lanterns can be installed or columns can be installed with Garland. Since this hall is designed for various kinds of religious festivals, returning to the lighting system and other architectural elements offers a suitability of the festival situation so that a certain festival impression can be achieved.



Figure 6.11 Multifaith Hall in Mid Day by author

reference

- Lin Lin (2013). Non-Utility and Redundancy of Modern Architectural Space. Trans Tech Publications, Switzerland
doi:10.4028/www.scientific.net/AMM.438-439.1801
- Obudho, R.A., G.O. Aduwo (1989) "Slum And Squatter Settlement In Urban Centre Of Kenya: TOWARDS A PLANNING STRATEGY." The Netherlands Journal of Housing and Environmental Research, vol. 4, no. 1. JSTOR, www.jstor.org/stable/43932847
- Wiharnanto, Sri (2006). PENGARUH DISAIN ARSITEKTUR ELEMEN-ELEMEN RUANG PUBLIK TERHADAP KUNJUNGAN PENGGUNA KAWASAN Studi Kasus Kawasan Pusat Perdagangan Oleh-oleh Jalan Pandanaran Semarang. Tesis Program Pasca Sarjana Magister Teknik Arsitektur Universitas Diponegoro Semarang.
- Gehl, J. (2011). Life Between Buildings: Using Public Space. Island Press.
- May, T. (2013). The Urban Everyday: The History and Dynamics of Place Making: The Urban Everyday. Symbolic Interaction, 36(2), 234–236.
<https://doi.org/10.1002/symb.57>
- Koohsari, M. J., Karakiewicz, J. A., & Kaczynski, A. T. (2013). Public Open Space and Walking: The Role of Proximity, Perceptual Qualities of the Surrounding Built Environment, and Street Configuration. Environment and Behavior, 45(6), 706–736.
<https://doi.org/10.1177/0013916512440876>
- Agus, Risya (2015). Youth Center Dengan Pendekatan Arsitektur Regionalisme Di Kabupaten Magelang. Arsitektura, Vol. 13, No. 2
- Graner, Anya (2017). Why Should We Deal With Abandoned Urban Spaces?. URBANET.
- Shamionov, R.M (2018) . "Social Activity of Personality and Groups: Definition, Structure and Mechanisms". PERSONALITY AND SOCIAL PSYCHOLOGY, Vol 15, No 4. Pages 379-394,
<http://dx.doi.org/10.22363/2313-1683-2018-15-4-379-394>
- Samadi, Zalina (2008). "The Enhancement of Space In Between Buildings As Urban Recreational Development". ECER Regional Conference. Universiti Teknologi MARA Kelantan
- Manley, Sandra (2016). "Inclusive Design In The Built Environment. Who Do We Design For?". Training Book Section 7. Page 39-40.
- Laiprakobsup, Narongpon. (2007). INBETWEEN PLACE: THE EMERGENCE OF THE ESSENCE. Dissertation of Texas A&M University.
- Azhar, Jasim., Gjerde, Morten. (2016). Re-Thinking the role of Urban In-Between Spaces. Victoria University of Wellington, Wellington, New Zealand
- CABE. (2006). "The Principles of Inclusive design. (They include you) ". Commission for Architecture and the Built Environment
- Maisel, Jordana L. , Steinfeld, Edward., Basnak, Megan, Smith, Korydon., and Tauke, M. Beth. (2018). "Inclusive Design Implementation and Evaluation". Routledge, NewYork.
- Crompton, Andrew. (2013) The architecture of multifaith spaces: God leaves the building, The Journal of Architecture, 18:4, 474-496, DOI: 10.1080/13602365.2013.821149
- Kahn, Louis. and Vassella, Alessandro. (2013). Silence and light. Zurich: Park Books (2013)

chapter

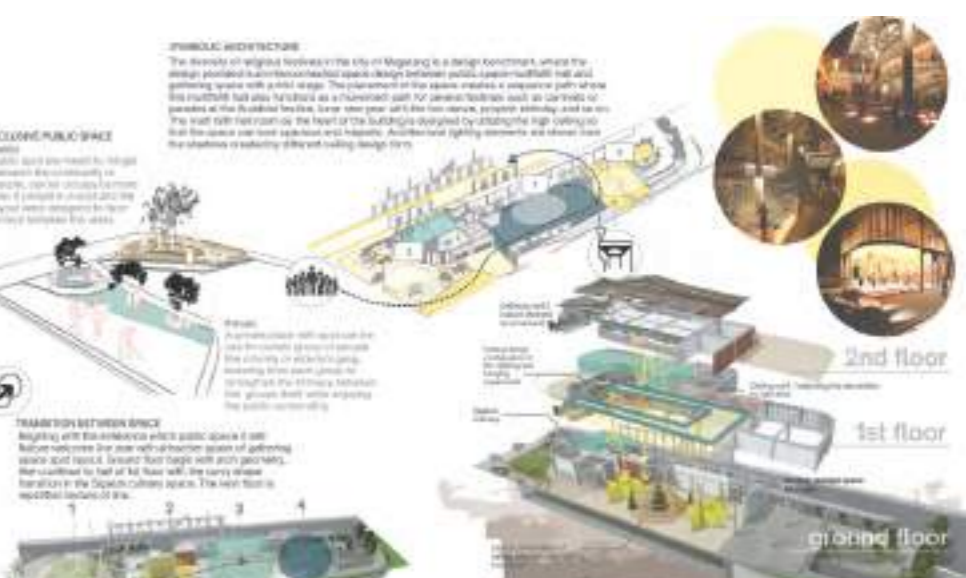
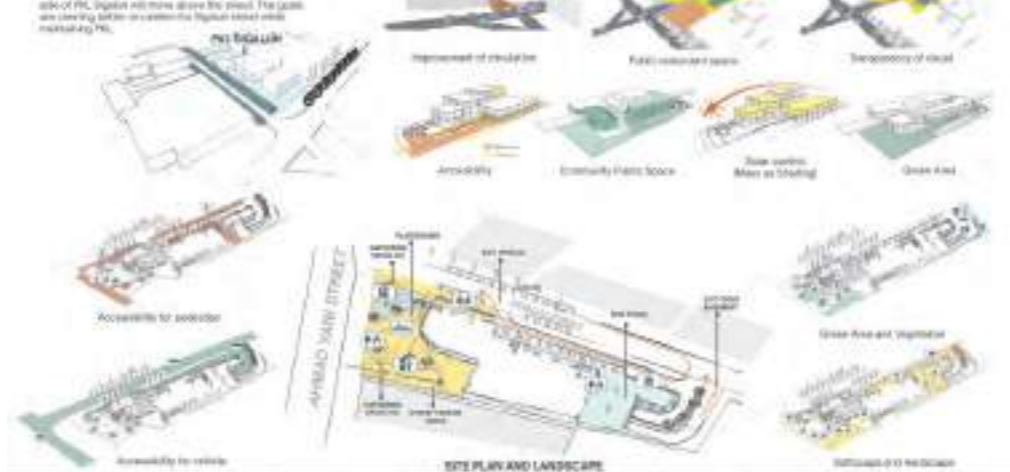
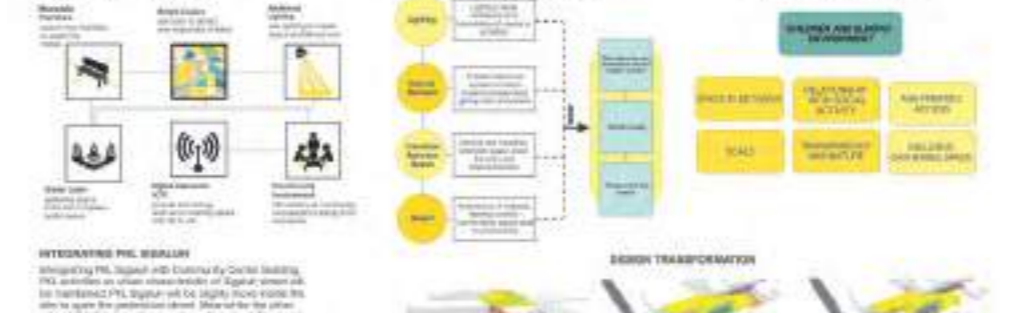
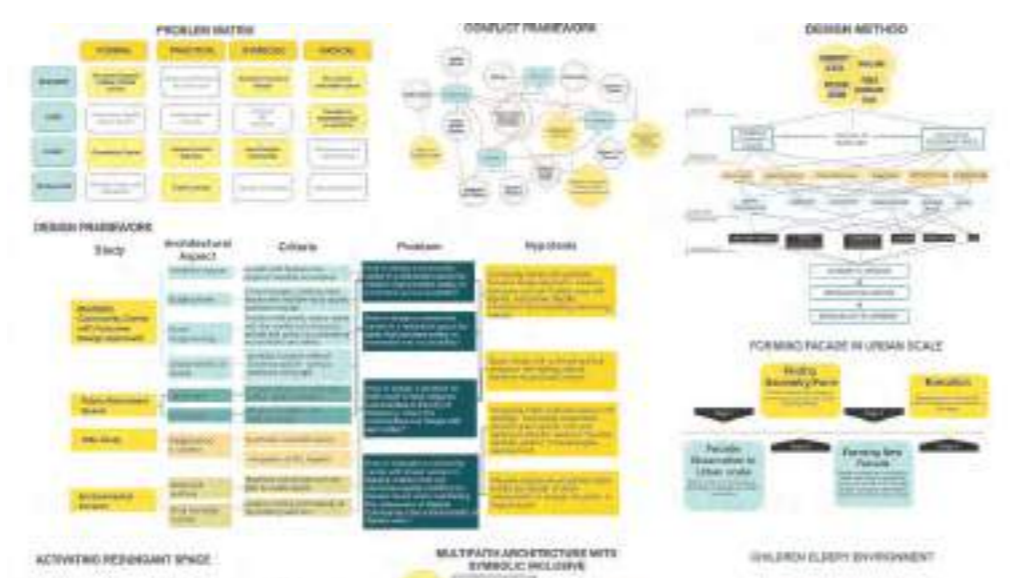
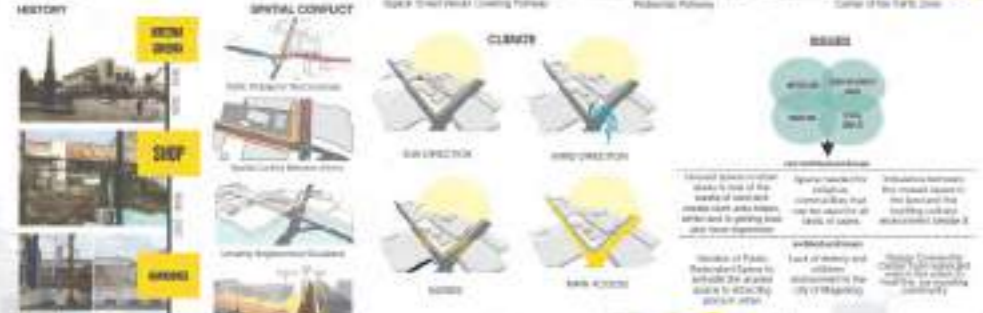
07

attachement

MAGELANG COMMUNITY CENTER

Design of Community Center to Re-Activate The Urban Redundant Space in Magelang Through Inclusive Design Approach

Begin with the issue of urban land and the high price of land in urban areas, causing social inequity conflicts. Take a case in which the urban land in Magelang is not used for its intended purpose, which can result in inequity or unproductive areas which give the impression of being urban. Create a public space that is inclusive, environment friendly, and socially oriented. The approach is to activate the urban land that is redundant in the urban area, which can be used as a public space. The approach is to be carried out through the use of inclusive design. The approach is to be carried out through the use of inclusive design. The approach is to be carried out through the use of inclusive design.





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AssalamualaikumMr. Wb.

Dengan ini, menerangkan Bahwa:

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Judul Karya Ilmiah : DESIGNING COMMUNITY CENTER TO RE- ACTIVATE URBAN
REDUNDANT SPACE IN MAGELANG WITH INCLUSIVE DESIGN

Karya ilmiah yang bersangkutan di atas telah melalui proses cek plagiasi menggunakan **Turnitin** dengan hasil kemiripan (*similarity*) sebesar **4 (Empat) %**.

Demikian Surat Keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

WassalamualaikumMr. Wb.

Yogyakarta, 21 Juni 2021
Direktur



Joko S. Prianto, SIP., M.Hum

