



FINAL PROJECT REPORT - RA.141581

PURPOSEFUL ARCHITECTUURE: IN CONTEXT OF URBAN PARK

BAYU RIZKY RAMADHAN
3213100025

TUTOR:
DEFRY AGATHA ARDIANTA, ST., MT

UNDERGRADUATE PROGRAM
DEPARTMENT OF ARCHITECTURE
FACULTY OF CIVIL ENGINEERING AND PLANNING
SEPULUH NOPEMBER INSTITUTE OF TECHNOLOGY
SURABAYA 2017



FINAL PROJECT REPORT - RA.141581

PURPOSEFUL ARCHITECTURE: IN CONTEXT OF INTEGRATED AREA

BAYU RIZKY RAMADHAN
3213100025

TUTOR:
DEFRY AGATHA ARDIANTA , ST., MT

UNDERGRADUATE PROGRAM
DEPARTMENT OF ARCHITECTURE
FACULTY OF CIVIL ENGINEERING AND PLANNING
SEPULUH NOPEMBER INSTITUTE OF TECHNOLOGY
SURABAYA 201

PAGE OF APPROVAL

**PURPOSEFUL ARCHITECTURE: IN CONTEXT OF
INTEGRATED AREA**



Written by :

BAYU RIZKY RAMADHAN
NRP : 3213100025

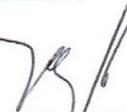
Has been defended and approved
By the examiner team of Final Project RA. 141581
Department of Architecture FTSP-ITS on 19th June 2016
Grade : A

Assigned

Tutor


Defry Agatha Ardianta, ST., MT.
NIP. 198008252006041004

Coordinator


Defry Agatha Ardianta, ST., MT.
NIP. 198008252006041004

Head Department of Architecture FTSP ITS

Ir. I Gusti Ngurah Antaryama, Ph.D.
NIP. 196804251992101001
DEPARTemen
ARSITEKTUR

STATEMENT OF ORIGINALITY

I, the undersigned below,

Name : Bayu Rizky Ramadhan

N R P : 3213100025

Final Project Title : *Purposeful Architecture In Context of Integrated Area*

Term : Final Semester Year 2016 / 2017

Hereby certify that the final project that I created is the result of my own work and actually done by myself (original), is not a mere duplication of the work of others. If I do a plagiarism of the work of the student / others, then I am willing to accept the academic sanctions to be imposed by the Department of Architecture FTSP – ITS.

Thus, statement I created with full consciousness and will be used as a requirement to complete the final project RA. 141581

Assigned



Bayu Rizky R.
NRP. 3213100025

PREFACE

Greatest gratitude to Allah SWT along with the completion of this proposal arrangement with the title “Teleological architecture in context of public spaces” on the final project proposal course at Architecture major ITS (2016-2017).

This proposal was proposed by the writers in context of fulfilling the academics requirements on the course of final project proposal (2016-2017) architecture major, faculty of civil engineering and planning Institut Teknologi Sepuluh Nopember, Surabaya.

This writing could be completed with the help and supports of broad sets of people which has both direct and indirect involvement, for that reason the writers would like to express gratitude towards:

1. Dr. Ir. Murni Rachmawati, MT., as the coordinator of final project proposal course.
2. Defry Agatha Ardianta, ST, MT., as the TUTOR
3. All friends and parties that have become much of a help suggesting reference, facilities, supports and helps which surely means a lot for the writer especially in the process of arranging this proposal.

May the result of this final project proposal could meritorious for those who read it, The writers are very aware that there are still many shortcoming of this proposal, for that reason critique and advice are profoundly appreciated in the interest of this proposal completion.

ABSTRACT

Interaction has become one of the most important thing in our daily life, between individuals and the other individuals, the quality of an interaction is one that we can't easily quantify since it has everything to do with uncountable quality.

Essentially architecture always present because of the necessity of human being. The necessity of every human being is inevitably linked towards the interaction, most problem that a high density city has is that the interaction between each city occupant is limited by their daily routines. This proposal will try to undergo the problem of interaction between the city occupants towards the other city occupants and the city occupants towards their built environment.

In Jan Gehl book "the study of public life" he stated that interaction has a very important role in creating a vibrant city. And in context of public spaces, Jan Gehl has shown the result of his study in the form of written text about how city occupants tends to interact with one another and how they tend to interact with their built environment. Designing a vibrant public space means designing social life, and designing social life also means designing interaction.

Keyword: INTREACTION

TABLE OF CONTENT

PREFACE	i
TABLE OF CONTENT	iv
BAB I	1
ISSUE AND CONTEXT	1
1.1 BACK GROUND	1
1.2 ISSUE	3
1.3 CONTEXT	9
1.4 PROPOSED ARCHITECTURAL OBJECT	9
1.5 PRECEDENT	10
1.6 SITE AND LOCATION	11
BAB II	13
PROGRAM AND SITE ANALYSIS	13
2.1 Architectural Programming	13
2.1.1 Object explanation	13
2.1.2 Target User	13
2.1.3 Type of Activities	13
2.1.4 Room Organization	15
2.1.5 Room standard	15
2.2 SITE ANALYSIS	18
2.2.1 Selected Site	18
2.2.2 Zoning and function Suitability	18
2.2.3 Future Development Study	19
BAB III	23
DESING METHOD	23

FINAL PROJECT REPORT

3.1 DESIGN METHOD	23
3.1.1 Design Variable	23
3.1.2 Eisenman Diagram	23
2.1.3 Diagram Aided Design	26
BAB IV.....	2
DESIGN CONCEPT	2
4.1 Design Exploration	2
3.2.2 The applied method of Diagram aided design.....	30
BAB V.....	35
DESIGN CONCEPT	35
5.1 Formal Exploration.....	35
5.2 Technical Exploration	40
BAB VI.....	55
CONCLUSION.....	55
BIBLIOGRAPHY	55

PICTURE LIST

Picture 1. 1 Streets Illustration	1
Picture 1. 3 James William	2
Picture 1. 2 Carl Lange	1
Picture 1. 4 Jane Jacobs	3
Picture 1. 5 Jan Gehl.....	4
Picture 1. 6 Brighton, England	5
Picture 1. 7 New York.....	5
Picture 1. 9 Activity Mapping.....	8
Picture 1. 10 Temperature Data	9

FINAL PROJECT REPORT

Picture 1. 12 Respond Data..... 10

Picture 1. 11 Facade Effect..... 10

Picture 1. 13 Impact of Building Height 11

Picture 2. 1 Eisenman Cartesian Diagram 26

Picture 2. 2 Eisenman structure diagram..... 26

Picture 2. 3 Activity Mapping 27

Picture 2. 4 Activity Diagram..... 27

Picture 2. 5 Street situation in front of the site. 18

Picture 2. 6 Japan Embassy around the site. 18

Picture 2. 7 View to the site from across the street. 18

Picture 2. 8 Land Use Guidance 19

Picture 2. 9 Future Study 19

Picture 2. 10 View Towards the site 20

Picture 2. 11 View across the Site 20

Picture 2. 12 Land use 21

Picture 2. 13 Street Structure 21

Picture 2. 14 Closed Access..... 21

Picture 3. 1 Program Arrangement..... 2

Picture 3. 2 Building form Concept 2

Picture 3. 3 Flexible spaces Illustration..... 29

Picture 3. 4 Flexible urban space 29

Picture 3. 5 Facade Design to Enhance `Interaction 29

Picture 3. 6 Diagram Aided Method 31

Picture 3. 7 Program 31

Picture 3. 8 Strong Single Axis..... 31

Picture 3. 9 Zoning approximation..... 32

Picture 3. 10 Single Axis Circulation..... 32

Picture 3. 11 Circular Office, Bjarke Ingles..... 32

Picture 3. 12 Inner Corridor 33

TABLE LIST

Table 3. 1 Public area 16

Table 3. 2 Office Area..... 16

Table 3. 3 Community Area..... 17

BAB I

ISSUE AND CONTEXT

1.1 BACK GROUND

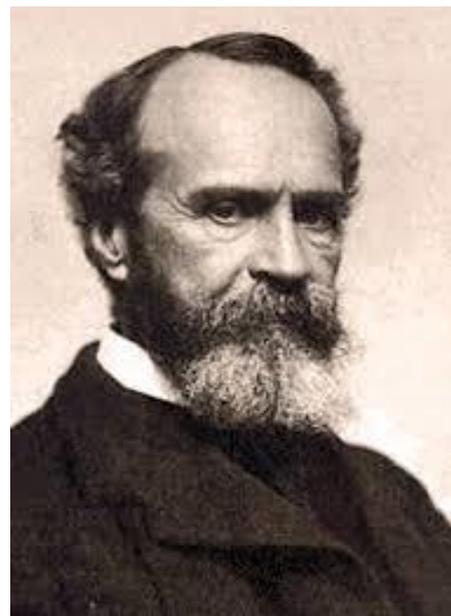
The presence of an architect as a planner could be seen from the presence of a good and vibrant places in the city. The quality of spaces provided for the people will vary based on how the people appreciate that spaces. As time goes by, the planning of an urban environment has very little to do with the people itself. The monotonous activities done by the people each and every day push the boundary and limitation for the need of public spaces that could help the high density city occupant to linger and interact with one another and with the urban environment.

Through the books “the death and life of great American cities”, Jane Jacobs manifest the shifting paradigm in modern era where the city planners and architect tends emphasize more on the building and the vehicle rather than the people. To balance the choking of public life with freeways, large building units and the division of function into zones, we have to create a spaces for the city occupant to linger, relieving them from their daily

activities inside the city itself. If this kinds of problems continues, it could roll up into a bigger balls which later comes to a high stressful index of the city which then of course decreasing the city performance. James-Lang, a Danish psychologist, Explain that stressful has a lot to do with the theory of emotion.



Picture 1. 2 Strees Illustration



Picture 1. 1 Carl Lange



Picture 1. 3 James William

Event ==> Arousal ==> Interpretation ==> Emotion

The above sequence summarizes the Theory of Emotion, a combination of concepts developed by William James (Picture 1.2), a psychologist from the United States and Carl Lange (Picture 1.2) According to the theory, when an event stimulates a person (arousal), the autonomic nervous system (ANS) reacts by creating physiological manifestations such as faster heartbeat, more perspiration, increased muscular tension, and more.

Once these physical events occur, the brain will interpret these reactions. The result of the brain's interpretation is an emotion. The psychological theories of stress gradually evolved from the Theory of Emotion. Emotions do not immediately succeed the perception of the stressor or the stressful event; they become present after the body's response to the stress. For instance, when you see an unfriendly spaces in one of the city corner, your heart starts to race, your breath begins to go faster, and then your eyes become wide open. According to James and Lange, the feeling of fear or any other emotion only begins after you experience these bodily changes. This means that the emotional behavior is not possible to occur unless it is connected to one's brain. Although this is a psychological theories it is somehow still seen as a relevant theories, as the example above which Lang mentioned has directly involve an architectural object in scale of a city that could affect the perception and emotion of the city occupant.

The necessity of society to have an interaction with the city through public spaces is important according to Jane Jacobs. The public spaces that could serve as the friendly spaces for the people to interact with one another could increase

the appreciation from the people towards that places as people feels more comfortable to linger in that spaces. This could be done by considering people as the users of that spaces to become the dominant parameters in designing the spaces. The fact that general psychology behinds peoples thought, decision, and processes influence how they act with the urban environment. It is also important to observe how they act against certain condition. By doing so, the planners will be able to better understand the users which later will affect the design, the necessity of a good and vibrant public spaces could affect the physical and psychological state of a person, the monotonous pattern which tends to exist in a high density daily life has driven people to a higher stress level, moreover the city malls which is growing viciously in the high density city can't be considered to be the problem solver for this cases.

Architect and planners should consider people as the main emphasize, therefor the terms "Teleological Architecture" appear. The term used by philosopher to define something with intended purpose, the term which later led to a design which later based on the users behavior

1.2 ISSUE



Picture 1. 4 Jane Jacobs

“Teleological architecture, purposeful architecture “

The term teleological architecture could appear to strengthen the public space role as an activity generator for urban inhabitant and a spaces for people to interact with one another. Most problem in high density city is the lack of social interaction between one another, according to the explanation of Jane Jacobs (Picture 1.4) in her books. The lack of social interaction makes the sense that anybody is strangers for everybody, in addition the people around those places will lose their sense of belonging towards the places itself for they are not intimately related towards its place. Although this seems to

be a small problem such thing could later calls up another problem such as, the diminished of safety and integration of the cities itself and discourage the natural developing city. It later reduce the feeling of community and increase the likely hood of crime. According to Jane Jacobs the planning of an architectural object or so in his terms an area of the city, should provide the familiarity so that people would feel safe inside its community. A spaces should function optimally in order to act as an activity generator for the urban inhabitant, it should provide the users for various opportunities of activities

The next big question which later appear is “how such things as teleological architecture could be implemented in design?” according to Jan Gehl, a purposeful design could be achieved through various process from architectural framework, Studying the existing condition (users) and analyze those condition will build up a strong design foundation. If an architect has understand how the users of an architectural object behave then the architectural object itself could also took part in shaping the behavior of the users, in his book “How To Study Public Life”, Jan Gehl (figure 3.1) also mentioned analyzing the situation could bring various dimension of

perspective, once we begin observing city life and its interaction with physical surroundings, even the most ordinary street corner can provide interesting knowledge about the interplay of city life and form - anywhere in the world. We can systematize our observations by asking a basic question like who, what and where.

The Issue about teleological architecture will be relevant in designing public spaces if the data of the users is collected by the question method which Jan Gehl mentioned in his books, the question methods are as follow:



Picture 1. 5 Jan Gehl

Question 1. How Many?

Making a qualitative assessment by counting how many people do something makes it possible to measure the potential activities and the interest of the city occupant towards those activities compares to the other activities, counting provides qualitative data, which can be used to qualify projects and as arguments one way or the other in decision-making processes and considered as convincing arguments.

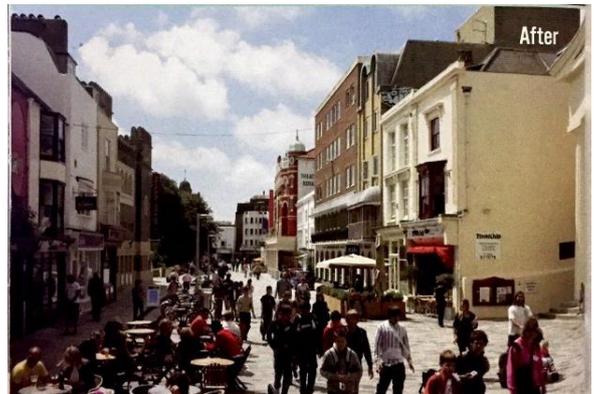
New Road, Brighton, England

How many people are walking and how many are stationary? In Brighton New Road, a public life study helped to determine use before and after improvements were made. The number of pedestrians rose by 62% after the street was converted into a pedestrian-priority street in 2006. The number of stationary activities increased by 600%.¹

This type of before-and-after headcount quantifies the extent to which the initiative is used. In Brighton, the numbers document that New Road has shifted status from a transit street to a destination. Statistics like these can be used as a good argument for prioritizing other pedestrian projects, both local and general.

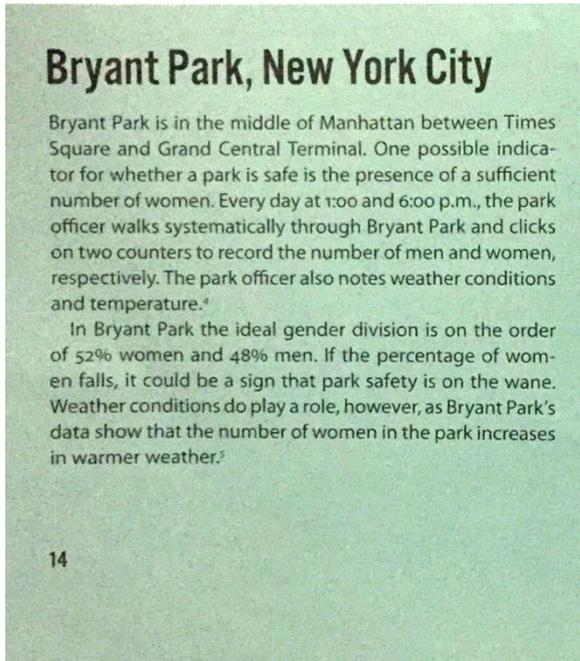


Picture 1. 6 Brighto, Engand



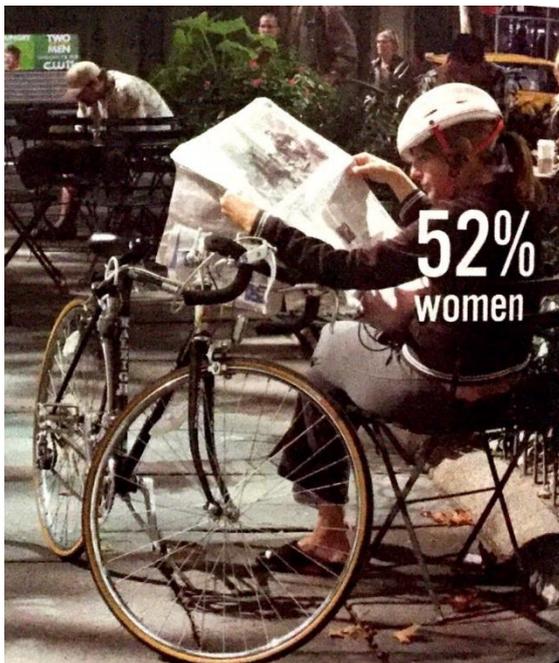
Question 2. Who?

Gathering knowledge about people's behavior in public space is a very general statement in context of 'who'. We say 'people', we mean widely different groups of people measured by various parameters. It is often relevant to be more specific about precisely who uses various public spaces. Basic knowledge about the behavior of various groups of people can be used to plan more specific ways of accommodating the needs of women, children, the elderly and disabled.



them unconsciously do not act as they intended. It is important to have basic and specific knowledge of where people move and stay in individual spaces. Studies of movement and staying can help uncover barriers and pinpoint where pedestrian paths and places to stay can be laid out. It is often relevant to study where people stay: on the edges, in the middle or evenly distributed in the space? In

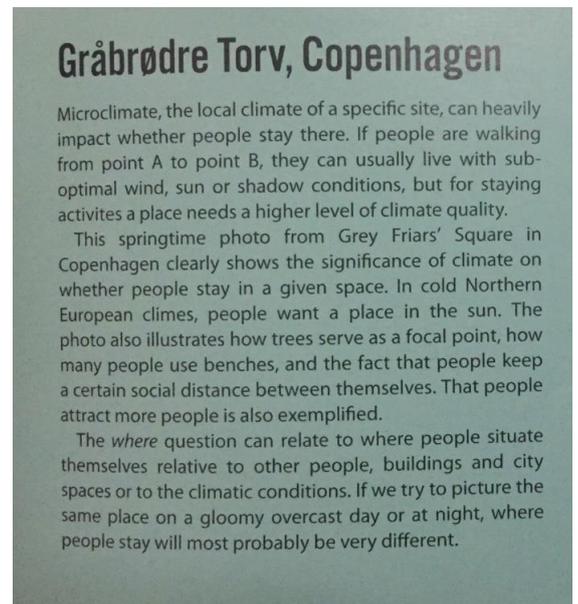
Public, semi-public or private zones?



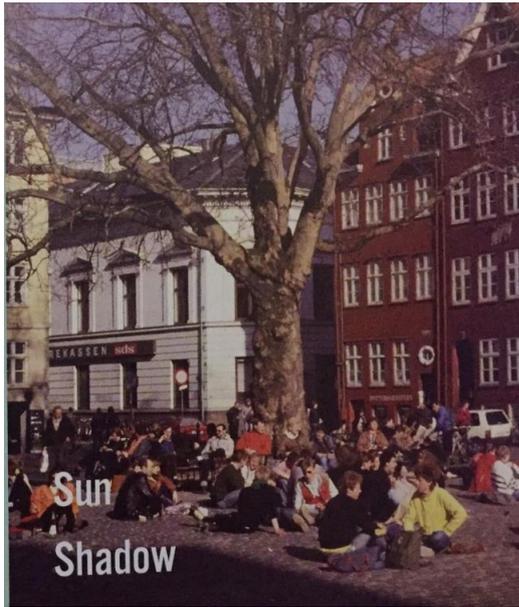
Picture 1.7 Bryant Park

Question 3. Where?

Planners and architect can design public space on the basis of where people are expected to go and to stay. However, people has a psychological state which make



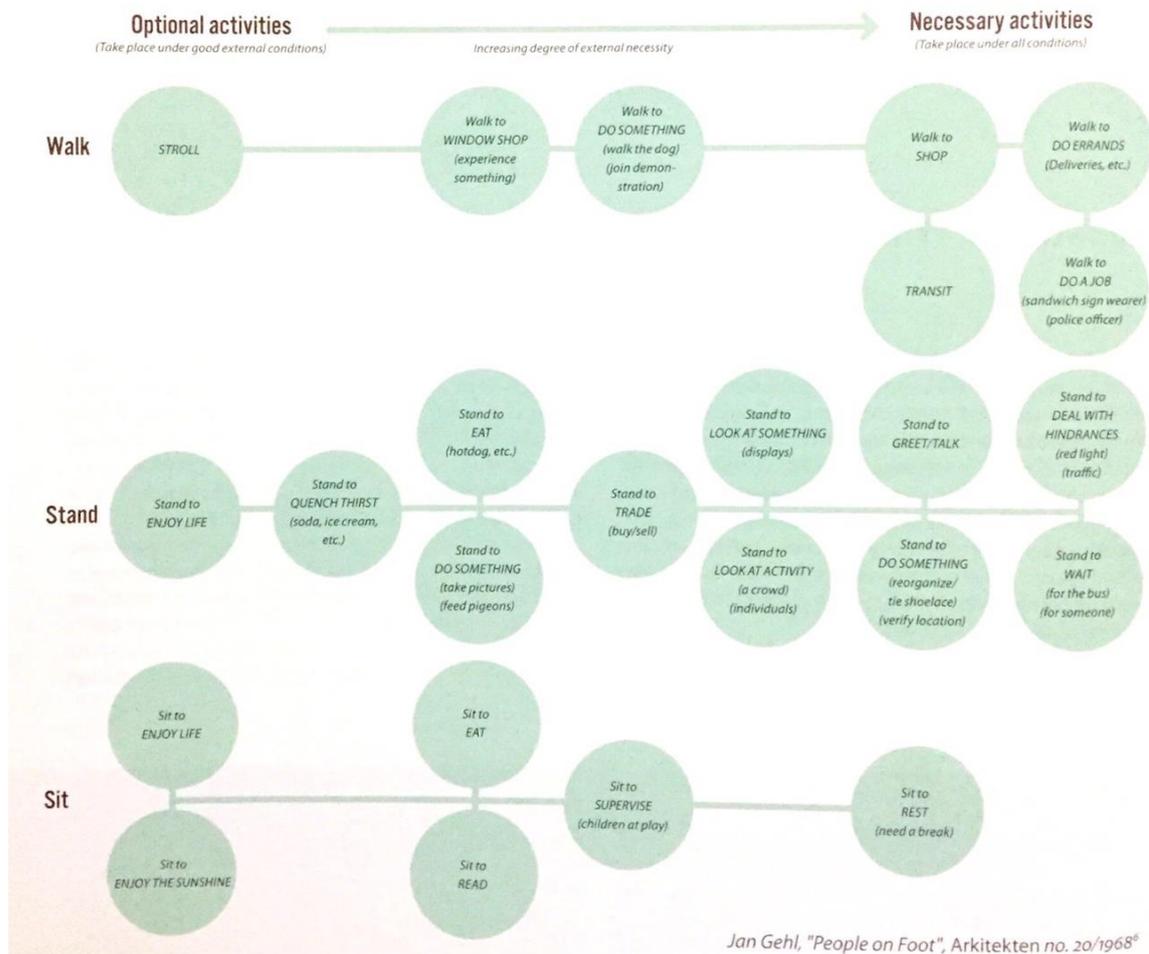
Picture 1.8 Copenhagen



physical activities, and the requirements these various activities make on the physical environments, although the list of the activity types could be endless. It is often most meaningful to note several activities at the same time. However, being systematic will sharpen the general awareness. It is important for public life studies to define the social activities in order to support the function of public space as meeting place.

Question 4. What?

Mapping what might happen in a certain place can provide specific knowledge of the types of the activities in that area, such as staying, commercial or



Picture 1. 8 Activity Mapping

Question 5. How long?

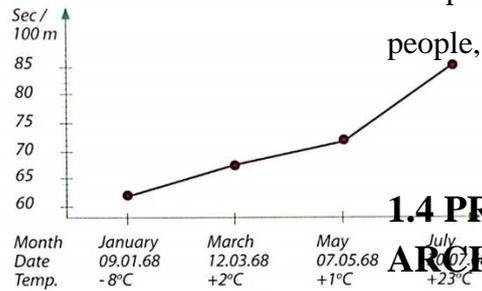
Walking speed and the amount of time spent staying can provide information about the quality of physical framework. It is often the case that people walks slower and stay longer in places relative to the qualities and pleasures offered. Time dimension

is essential to understanding life in public aspect, which makes ‘how long’ a ley question.in addition the passing of days, weeks and month, the individual study also concerns how long it takes people to cover a certain distance, how long they stay in a certain places, and how long the activity last.

as a planner are able to design a spaces for people, with intended purpose.

The average speed it took randomly selected pedestrians to cover 100 meters. Four registrations were made on Stroget, Copenhagen's pedestrian street, in January, March, May and July, respectively.

The photographs and captions are from an article by Jan Gehl entitled "People on Foot" in Arkitekten, 1968."



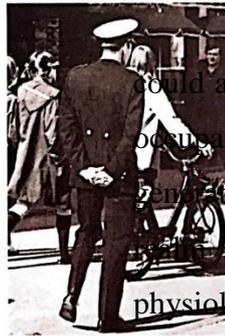
1.4 PROPOSED ARCHITECTURAL OBJECT



Fastest man: 100 m in 48 seconds.



A convoy has to follow its slowest member.



Slowest man: 100 m in 127 seconds.

Designing purposeful spaces which could accommodate the activities of a city occupant while also act as an activity generator. And learn how the unconscious of the human's psychology and physiology affecting their respond towards an architectural object.

Picture 1. 9 Temperature Data

1.3 CONTEXT

The key consideration for designing a public spaces for the people, are the people itself. How they act around their city, How they interact with one another, and how they precept spaces which later gave them the reference about what to do in that spaces. The thing about teleological architecture is closely related with the realm of human's psychology and physiology. The Design process should be done by researching the behavior of the city occupants towards a certain places with a certain conditions. By doing so we

1.5 PRECEDENT

These precedent is considered to be the relevant examples for this proposed architectural object, in addition the parameters to measure the respond of city

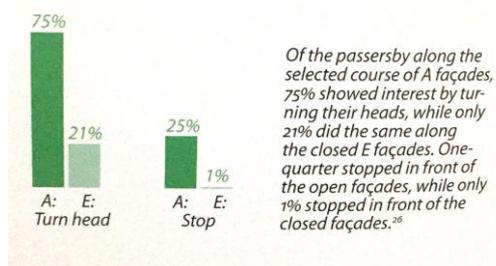


Picture 1. 11 Façade Effect

inhabitant towards a certain spaces condition in these precedent is more or less general and could be applied in general context

By using the question method, Jan Gehl are able to count and observe the respond of the city occupant towards a certain façade categories which directly touch the

front open public area. The human eye are primarily for horizontal vision, we seldom look up, although we occasionally look down to see where we are going. However most of what we take in visually is at eye-level, and in relation to buildings, it is primarily the ground level that catch our eye. This precedent is the study of transition between building and public space, and correspond to how many and which activities take place.



Picture 1. 10 Respond Data

The study showed clearly that façade design can have great influence on the pattern of activities, there was

considerably greater level of activities in front of open façade than in segment with closed facades, People walk slower, turned their heads more often to look in shop window, and stop more frequently. And although people sometimes stopped to look at the shops, interestingly enough,

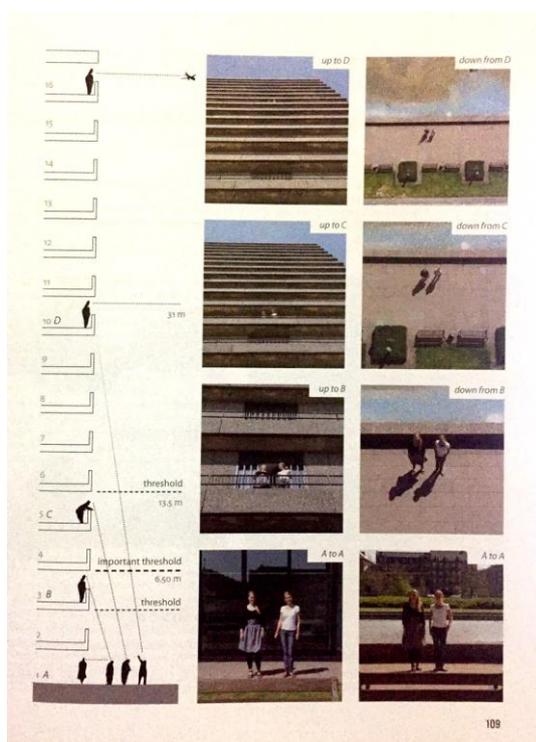
many of their stops were made somewhere besides an active façade.

In order to focus more closely on public life and its interaction with public spaces, it has been essential to learn more about human sense. We need this knowledge in order to carefully adapt the city to the human scale. The relation of Human sense and the scale of the city and public space, and quite another to test them in practice. Distance is a significant aspect of the work with human sense in relation to public space.

1.6 SITE AND LOCATION

According to the Issue of teleological architecture, it is best to consider a place with a high density and a high tendencies of stressful index, this was done to better understand the impact of this proposed object based on the issue the location criteria are as follows:

1. High density city.
2. Monotonous city activities pattern.
3. High stressful index.
4. Potential for city relieving spaces.
5. Could be easily reached within the city itself.



Picture 1. 12 Impact of Building Height

BAB II

PROGRAM AND SITE ANALYSIS

2.1 Architectural Programming

2.1.1 Object explanation

According to Jan Gehl & Birgitte Svare there are 2 types of interaction that happened correlating between public space and public life:

- Optional activities
- Necessary activities

This urban park is a series of public amenities which aim to provide a more intimate interaction between the urban inhabitants in order to facilitate the needs of optional activities and necessary activities, creating a vibrant urban climate which later leads to a better quality of life for the citizen. This urban parks will works as an activity catalyst providing the opportunities for the people to

interact between one another. This urban parks will also have a rentable co-working offices to keep the activities going there

2.1.2 Target User

This architectural object will not only works as activity catalyst, instead it could also works as the relieving space for the high density city citizen to and also accommodate various communities. Because of this object mainly act as an urban parks the users are not only the person who works at the office, but also the local communities. Located in the heart of Jakarta surrounded by various offices will also be a massive advantage, as the people may come past their work hours. Based on the explanation above, the target users are sorted into:

- a. Daily users : the office workers, food seller
- b. Event based User : Communities and City occupant

2.1.3 Type of Activities

Based on the site analysis and the land use guide form the local government of Jakarta, the proposed activities for this urban park are:

1. Co-working Offices area :
 - a. Rentable office area
 - Working
 - b. Office management area
 - Working

Given the proposed activities above the main space that will be designed in this architectural object are:

- Co working office : rentable office, toilet
- Office management area : management office, toilet

2. Urban park facilities area

- a. Sport area
 - Doing sports
 - Interacting
- b. Community area
 - Walking around
 - Eating
 - Interacting
 - Community gathering

Given the proposed activities above the main space that will be designed in this architectural object are:

- Soccer field : perimeter spaces, field
- Cafeteria : eating are, kitchen area, open area, toilet
- Amphitheater : seating area, stage area
- Outdoor workout facilities : field
- Communities spaces : common area

3. Other

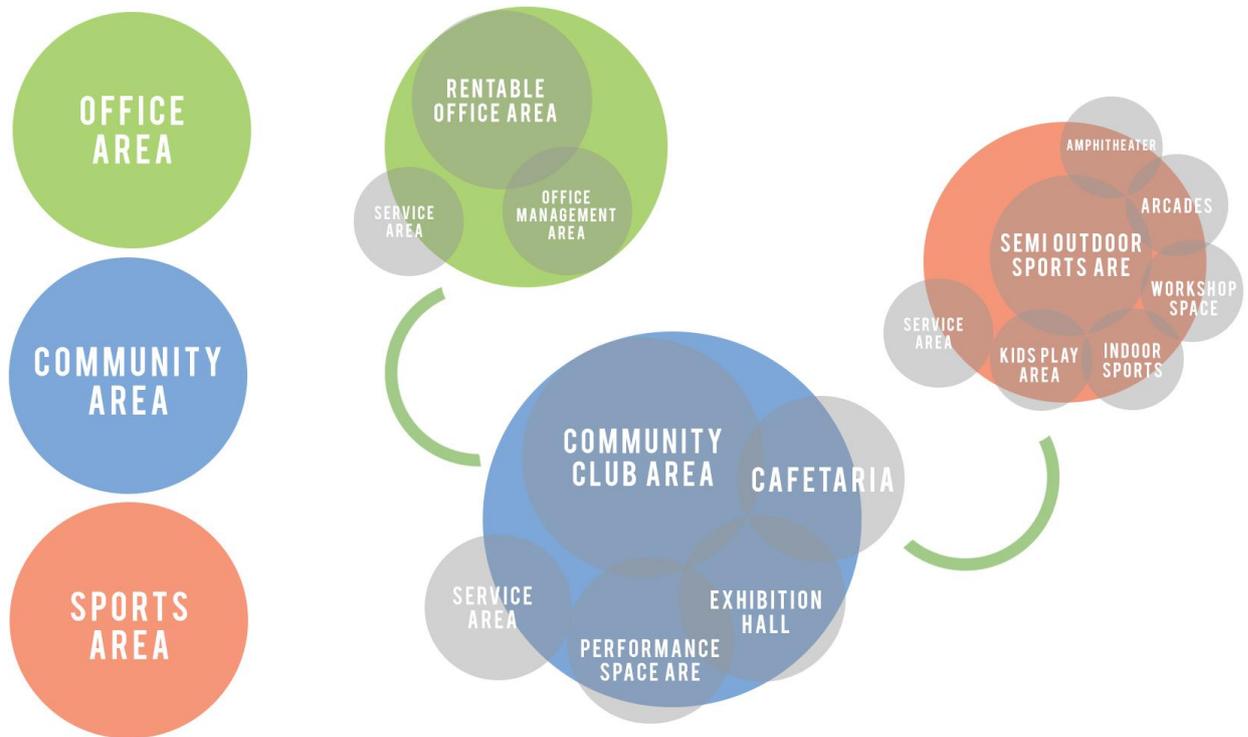
- a. Worker circulation

- b. Vehicle circulation
- c. Visitors circulation

Given the proposed activities above the main space that will be designed in this architectural object are:

- Worker parking area :
car parking, motorcycle parking, access road
- Visitors parking area :
car parking, motorcycle parking, access road
- Promenade : visitors circulation

2.1.4 Room Organization



2.1.5 Room standard

No.	Program	Source	Standard area	Capacity	Area (M ²)
1	Motorcycle parking	Time saver standard	1,7 m2/unit	150	255
2	Bicycle parking	Time saver standard	1,3 m2/ unit	100	130
3	Car parking	Time saver standard	15 m2/ unit	70	1.050

4	Circulation	Assumption	30% area		430
				Total area	1.865

Table 3. 1 Public area

No.	Program	Source	Standard area	Capacity	Area (M²)
1	Lobby	Neufret	1 m2/person	30	30
2	Receptionist	Neufret	1 m2/person	6	6
3	Toilet	Neufret	15m2	10	20
4	Praying area	Assumption	1 m2/person	20	2
5	Rentable office	Assumption	400 m2/ unit	10	4000
6	M. E.	Assumption			400
				Total area	4.458

Table 3. 2 Office Area

No.	Program	Source	Standard area	Capacity	Area (M²)
1	Community club area	assumption	120 m2/unit	10	1200
2	Exhibition hall	Neufret	220 m2/unit		220
3	Cafeteria	Neufret	300 m2		300
4	Performance space	Assumption	375 m2		375
5	toilet	Neufret	15 m2	30	60

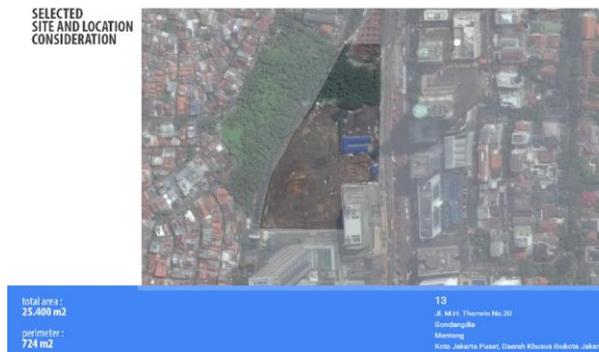
6	M. E.	Assumption			400
7	Circulation	Assumption	30%		765
				Total area	3.320

Table 3. 3 Community Area

No.	Program	Source	Standard area	Capacity	Area (M²)
1	Semi outdoor sports area	Neufret	700 m2/unit		700
2	Amphitheater	Neufret	550 m2/unit	1	550
3	Arcades/promenade	Neufret	100 m2	1	100
4	Workshop space	Assumption	200 m2	4	800
5	Indoor sports	Neufret	200 m2	1	200
6	Kids play area	Assumption	200 m2		200
7	toilet	neufret	15 m2	30	60
8	M. E.	Assumption			300
9	Circulation	Assumption	30%		870
				Total area	3.780

2.2 SITE ANALYSIS

2.2.1 Selected Site



Picture 2. 1 Street situation in front of the site.



Picture 2. 2 Japan Embassy around the site.

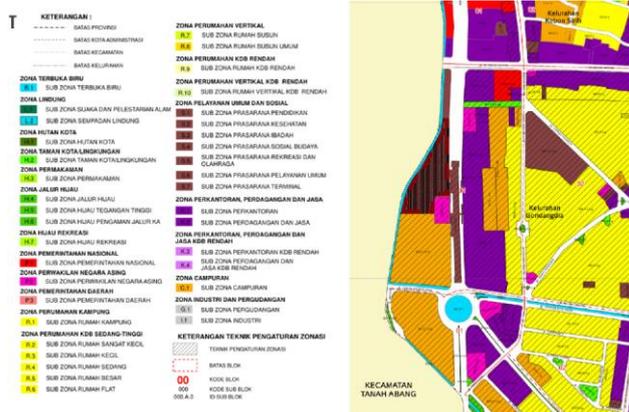
According to the Issue of teleological architecture, it is best to consider a place with a high density and a high tendencies of stressful index, this was done to better understand the impact of this proposed object based on the issue the location criteria are as follows:

6. High density city.
7. Monotonous city activities pattern.
8. High stressful index.
9. Potential for city relieving spaces.
10. Could be easily reached within the city itself.



Picture 2. 3 View to the site from across the street.

2.2.2 Zoning and function Suitability



Picture 2. 4 Land Use Guidance

a. Based on Jakarta zoning and area planning (RTRW)

Based on the Regional regulation about the zoning and space arrangement of this area

Is aimed to be the public facilities that could support the surrounding zoning which mostly includes office, mixed use, and dwelling.

b. Based on detail arrangement planning of Jakarta (RDTR)

Based on RDTR of Jakarta, This are should serve as a public spaces providing a relieving spaces for the area surrounding the site, the land function of this area is

also instructed to be the future pedestrian oriented area.

c. Building constrain on the given site

- Basic Building coefficient (KDB) : 55%
- Building Area coefficient (KLB) : 450%
- Maximum Building Height : 8 floor

2.2.3 Future Development Study



Picture 2. 5 Future Study

a. Transportation mode

Thamrin is located at the center part of jakarta which makes It an area with a high intensity street, the main transportation mode for jakarta is now taking so much attention since it is

now jakarta is considered to be one of the worst traffic experience city in the world, bringing this problem to the context the regional government of Jakarta is planning to develop a mono rail train along the thamrin city.

b. Pedestrian Oriented city

As the regional government of jakarta is planning to create a better public transportation it is most likely for jakarta to turn into a pedestrian oriented city, rather than a private transportation oriented city, and this point is of course should be considered as the key design guideline to provide the pedestrian the comfort that they seek.

c. Building Arrangement

The building around the site are dominated by midrise

and high-rise building, which mostly consist of office, followed by hotels, and mid class dwelling, The integration between one building and another are formed through ridged pedestrian ways along the urban corridors.



Picture 2. 6 View Towards the site



Picture 2. 7 View across the Site

d. Surrounding area

The site is instructed to be the recreational public space, coherently this area has an important role for the area surrounding itself as it is directly connected towards the surrounding area which includes dwellings (yellow), offices (purple), mixed use

(orange) and integrated with the future MRT station which already planned.



Picture 2. 8 Land use

e. Street Structure

Based on RTRW of Jakarta city, generally the street condition on this area is in a good condition, with a straight linear line following along the corridors of Mh. Thamrin Street. This street is categorized as a primary artery road.



Picture 2. 9 Street Structure

At the back of the site there is an inactive street, through

this area the site could be reach through the other side of the site, this street used to be the street that connects the small street around the mid class dwelling to the primary artery road.



Picture 2. 10 Closed Access

BAB III

DESING METHOD

3.1 DESIGN METHOD

3.1.1 Design Variable

The Issue about teleological architecture will be relevant in designing public spaces if the data of the users is collected by the question method which Jan Gehl mentioned in his books, the question methods are as follow:

Question 1. How Many?

Making a qualitative assessment by counting how many people do something makes it possible to measure the potential activities and the interest of the city occupant towards those activities compares to the other activities, counting provides qualitative data, which can be used to qualify projects and as arguments one way or the other in decision-making processes and considered as convincing arguments.

Question 2. Who?

Gathering knowledge about people's behavior in public space is a very general statement in context of 'who'. We say 'people', we mean widely different groups of people measured by various parameters. It is often relevant to be more specific about precisely who uses various public spaces. Basic knowledge about the behavior of various groups of people can be used to plan more specific ways of accommodating the needs of women, children, the elderly and disabled.

Question 3. Where?

Planners and architect can design public space on the basis of where people are expected to go and to stay. However, people has a psychological state which make them unconsciously do not act as they intended. It is important to have basic and specific knowledge of where people move and stay in individual spaces. Studies of

movement and staying can help uncover barriers and pinpoint where pedestrian paths and places to stay can be laid out. It is often relevant to study where people stay: on the edges, in the middle or evenly distributed in the space? In public, semi-public or private zones?

Question 4. What?

Mapping what might happen in a certain place can provide specific knowledge of the types of the activities in that area, such as staying, commercial or physical activities, and the requirements these various activities make on the physical environments, although the list of the activity types could be endless. It is often most meaningful to note several activities at the same time. However, being systematic will sharpen the general awareness. It is important for public life studies to define the social activities in order to support the function of public space as meeting place.

Question 5. How long?

Walking speed and the amount of time spent staying can provide

information about the quality of physical framework. It is often the case that people walk slower and stay longer in places relative to the qualities and pleasures offered. Time dimension is essential to understanding life in public aspect, which makes 'how long' a key question. In addition, the passing of days, weeks and months, the individual study also concerns how long it takes people to cover a certain distance, how long they stay in a certain place, and how long the activity lasts.

3.1.2 Eisenman Diagram

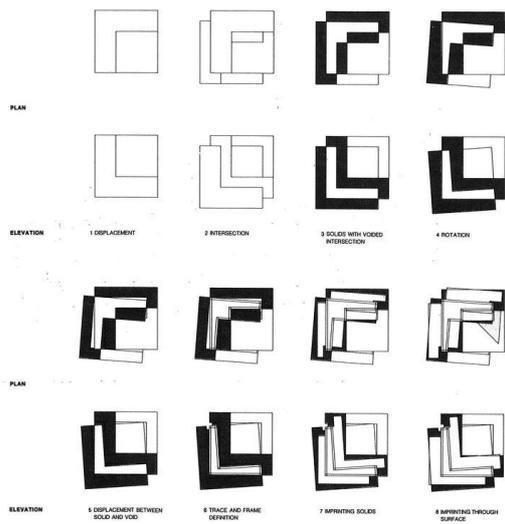
Peter Eisenman is an architect and educator. After years of practice in teaching, research and theoretical work he established his practice focused on the scale of the building. His first projects include prototype large-scale housing, single family houses and institutional facilities for education which resulted in dozens of awards for the relevant architectural production.

Behind his architectural discourse, Peter Eisenman seeks to generate form without interference from functionalist or constructive issues. The procedures have a clear syntactic position, ignoring any attempt to “semanticizing” the architecture. He does not claim a communicative status of architecture and his design process intended to be abstract, unrelated to any external references, free of contamination (Moneo, 2008, p. 141). In Eisenman’s words, the beginning, therefore, is not the actual site, but the traces of the site in the Derridean sense. His first projects started from an ideal grid, composed by abstract components such as point, line and plane, minimum elements that generate a Cartesian space, activated through formal impulses as rotation, stretching, compression, decomposition, and grafting, scaling, superposition, shifting and folding. Eisenman’s investigations thus required an initial ideal or generic form, which he often located in the cube, a neutral box that was typically (and somewhat less neutrally) designated as a *ninesquare* (Somol, 2007, p. 174).

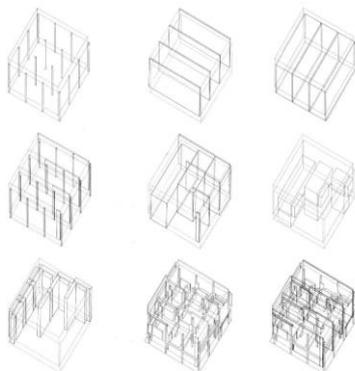
This ideal grid, which basically shows the neutrality of the space, conceptualized such as addition and subtraction, rotation and translation, layers, levels and shifts, give place to an architecture that intended to be as abstract as unrelated to any possible external references; an approach that ensure the autonomy and self-reflexivity of the architectural object. And it is the catalogue of these procedures that becomes the subject matter of architecture, a disciplinary precondition to a diagrammatic approach (Somol, 2007, p. 173). However, this geometric and formalistic design process differs from the static architectural diagram. It does not constitute a representation of all the design stages based on mental decisions, but it is a reflection of creative impulses, experimental operations, and the final object is as unpredictable as the whole process. A nonanalog thinking where the input data did not remain a single parameter and the output object is generated through several numbers of diagrams “in process” that create complexity.

In this sense, Eisenman's diagrammatic process, even in the 1980s, could be compared to the bases of the digital design conception of the architectural form. His analogical procedures have a parametric logic, whose motions on the grid are similar to the algorithmic (geometric) combinations in digital fabrication. Advancing the potential of registering site forces and movement via inflections in generic form, Eisenman's transformational diagramming techniques anticipate the need for (and predict the possibilities of) the later development of 3D modeling and animation software (Somol, 2007, p. 170). In a second phase of his work, the geometric or cube operations gave place to a diagrammatic process that transforms both figure and ground. In the Memorial to the Murdered Jews of Europe (1998-2005), for example, Eisenman arranged a grid pattern on a sloping field. The thousands of concrete pillars are the minimum elements that generate the tension on the Cartesian plane, but on the contrary of the folding and unfolding

operations which could disturb the matrix, the architect operated the transformations only in the vertical axis of the composition. The apparent linear model of repetition, which contradicts Eisenman's work, is combined to an undulating verticality. This strategy of reduplication produces something entirely new, an emergent organization that, although formalist, is truly related to the concept and subject of the memorial. The discourse of absence (The discourse of absence and presence is a Derridean notion), is explored in Eisenman's ground projects and it reinforces the idea of the trace, a "figure-figure urbanism" diagram which portrays different layers related to the city.



Picture 2. 11 Eisenman Cartesian Diagram



Picture 2. 12 Eisenman structure diagram

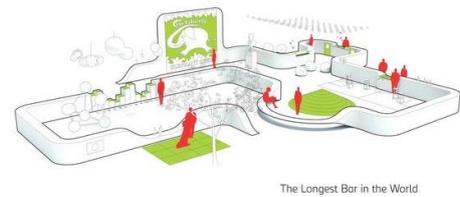
2.1.3 Diagram Aided Design

It has been said that Peter Eisenman considers architecture a form of shock therapy: whatever his intent, he has created one of the most controversial bodies of work of any contemporary American architect. This test is an exposition of Peter

Eisenman's design philosophy, illustrating his groundbreaking contributions to 20th-century American design. Eisenman's own essays and illustrations explain his diagram-based approach to design, whereby sites and structures can be manipulated in diagram form. Eisenman often use diagram as a design method, using a certain parameter to create the diagram, as shown on several works that he has done.

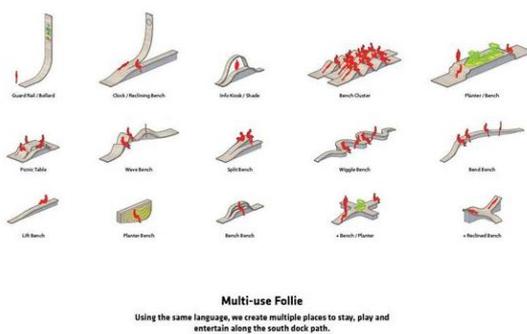
To bring this matter to the pertaining Issue I would like to use the research that was done by Jan Gehl within the scope of public life towards the methods of diagram. The five question that Jan Gehl asked on his research will be treated as the parameter that will affect the diagram. By using the Diagram Aided Design combined with Jan Gehl research about public life, we are able to better understand the possibilities of activities that could be listed as a diagram, the diagram which later produced through this process will then act as a design guideline that will shape the architectural object. The research that was done by Jan Gehl were merely resulting a theory that

still has a gap with the physical form of architecture, while the diagram method could help bridge the realm between the theories realm towards the 3 dimensional spatial space, This diagram method could also be used as an evaluation methods towards the designed object as it's may have a very close relation between one another.



Picture 2. 14 Activity Diagram

The uniqueness of this Diagram Aided Design could be easily stated by the parameter that we set, in most of Eisenman works, he has shown various diagram aided design with the help of parameter that he creates before he create the Diagrams.



Picture 2. 13 Activity Mapping

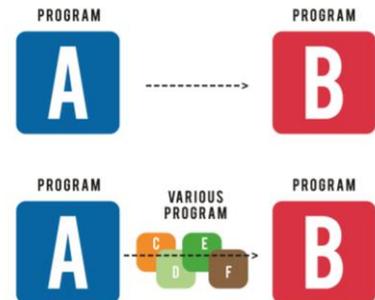
BAB IV

DESIGN CONCEPT

4.1 Design Exploration

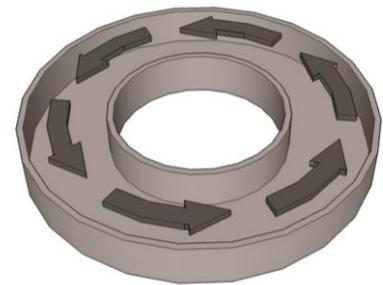
As it has been mentioned before, How several activities could be enhance by the design of an architectural object, providing more opportunities for interaction between the users and the other users or the users and the architectural object itself, the proposed design criteria are as follows :

- 1) This architectural object should provide the ease of interaction between the users by **arranging the room programming and the form of the architectural object** itself



Picture 3. 1 Program Arrangement

Instead of creating a straight forward program, when the users going from point A to point B, the users are going to pass the other program providing an opportunities for interaction between the user and the other user.

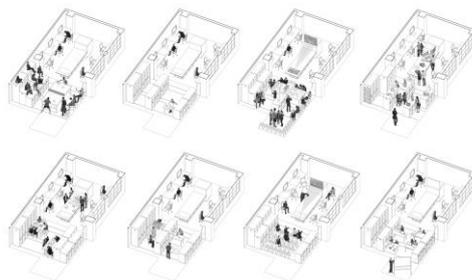


Picture 3. 2 Building form Concept

With the circular building shape the circulation of the building will allow the users to be contained in one seamlessly endless loop, allowing them to travel a certain distance to make them stop at the point where

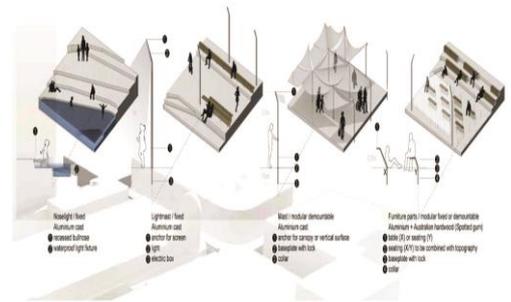
they begin, and also increasing the chance of interaction between the users.

- 2) This architectural object is a public space which could accommodate an incidental event



Picture 3. 3 Flexible spaces Illustration

Creating a flexible spaces in some parts of the site to accommodate the incidental event that often happened around the site, since this site has become a pretty busy area where a lot of city occupants often held a routine event around the site. By creating a flexible space, this architectural object could undergo the matter of space necessity around the site.



Picture 3. 4 Flexible urban space

- 3) This architectural object will enhance several activities with the active and passive facades arrangement

Façade Categories

Jan Gehl, *Cities for People*, 2010²²
(originally developed for public life study in Stockholm in 1990)²³

A – active
Small units, many doors
(15-20 doors per 100 m/328 feet)
Large variation in function
No blind and few passive units
Lots of character in façade relief
Primarily vertical façade articulation
Good details and materials

B – friendly
Relatively small units
(10-14 doors per 100 m/328 feet)
Some variation in function
Few blind and passive units
Façade relief
Many details

C – mixture
Large and small units
(6-10 doors per 100 m/328 feet)
Some blind and passive units
Modest façade relief
Few details

D – boring
Large units, few doors
(2-5 doors per 100 m/328 feet)
Almost no variation, uninteresting units
Few or no details

E – inactive
Large units, few or no doors
(0-2 doors per 100 m/328 feet)
No visible variation in function
Blind or passive units
Uniform façades, no details, nothing to look at

Picture 3. 5 Façade Design to Enhance Interaction

The example of façade design that could affect how people

behave around an architectural object and how would they interact with the object itself, as shown at the pictures 3.4.

4) This architectural object will use the **Jan Gehl research result** as the design and arrangement guideline, which includes several research points:

- Good places to stand
Activities in public spaces can be divided fundamentally into those that are transitory and those that are stationary, people tends to stand by the column along the facades. Studies like this have helped draw attention to the importance of building edges, where the conversation mostly take place.
- Tracing the direct path
This research could help to evaluate the room programming arrangement and their impact on the pedestrian preferred path, possible interaction between the users, and where to place direction.

- Sense and scale in practice
In order to focus more closely on public life and its interaction with public space, it has been essential to learn more about human sense, Distance is simply a significant aspect of the work with the human senses in relation to public space.

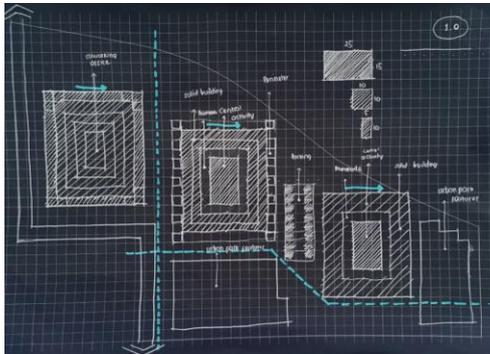
5) This architectural object will be able to **accommodate the needs** for the location chosen.

From the given criteria above the writer proposed to elaborate the design concept in response to the 5 criteria points on the chapter before.

3.2.2 The applied method of Diagram aided design

The Diagram aided design is used to evaluate the proposed architectural form and room programming arrangement. By using the diagram aided design the writer will be able to see the interaction possibilities of the users and the other users, the users and the architectural object, the users and the surrounding environment. This kinds of method will also be

used as a design guideline for the architectural form and the room programming arrangement.

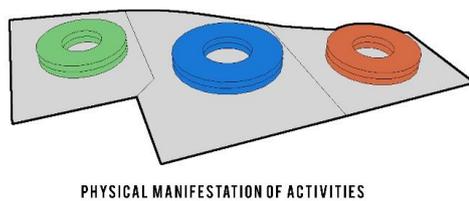


Picture 3. 6 Diagram Aided Method

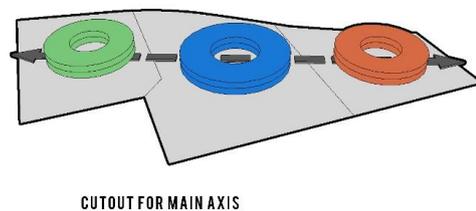


Picture 3. 7 Program

For example, the simple architectural element such as axis will have a wider impact on the users' interaction (good place to stand).

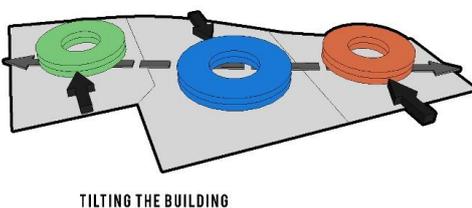


Picture 3. 8 Strong Single Axis



A. Zoning and circulation concept

The relation between space which shown on the room programming diagram will affect the location of the program itself. Those kinds of relation shown that there is one massive site axis which also act as main pathways. The pathway itself will be emphasized by different pathway materials in the design process.



The relation between every program location will have a simultaneous effect between one another which provide users with flexibilities to a certain spaces form the main pathways or main axis.

The Diagram will be shown as follows.



Picture 3. 9 Zoning approximation

As shown on the diagram, the program zoning is arranged based on the possibilities of interaction between one users to another.



Picture 3. 10 Single Axis Circulation

building itself will be guided by Jan Gehl research about sense and scale in practice, in order to trigger more social interaction between the users. Most building will consist of a 3-storey building, and each ground floor of the building will be seemingly lifted in order to blurs the definition of outdoor space and indoor spaces, this was done so to better fit the building to the surrounding designed landscape. The office building is designed to have a circular circulation pattern to provide more opportunities for the user interaction.



3. 11 Circular Office, Bjarke Ingles

Illustration of circular offices by bjarke ingles, The shape itself took a part in supporting social interaction between the building users.

B. Building concept

The buildings are consist of 3 main building the office, the community building and the activity building, The height of the



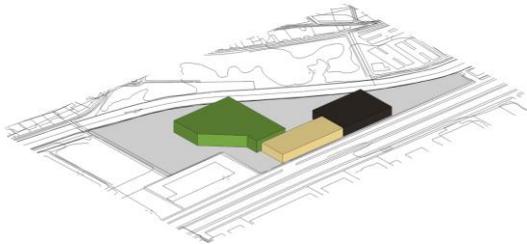
Picture 3. 12 Inner Corridor

The opening towards the center courtyard is reflecting the social interaction value, as the communal spaces is offsetting the circular office

BAB V

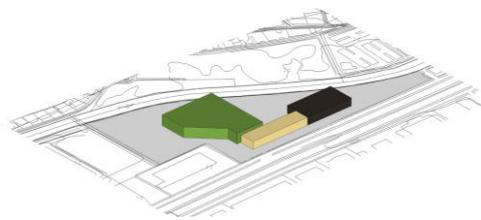
DESIGN CONCEPT

5.1 Formal Exploration



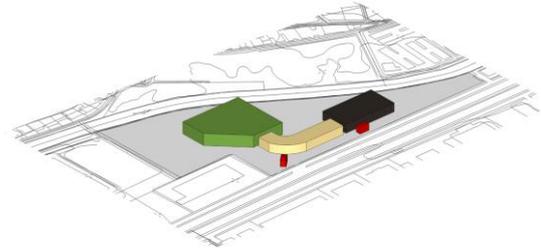
Dispersing Initial Zone

The office is resembled by green colors, the retail is resembled by yellow color and the sports facilities are resembled by grey color. This several building function is based on how Necessary activities and Optional Activities could become the activity catalyst for the site.



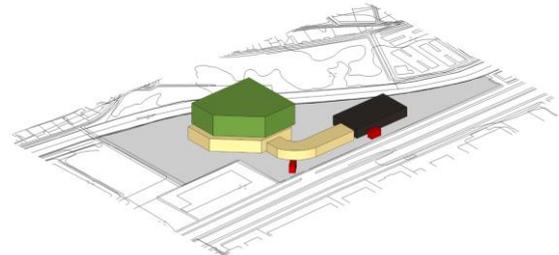
Providing Building Setback

The front side of the site is pushed backward to provide the citizen with comfortable promenade. This is also done to properly follow the local regulation



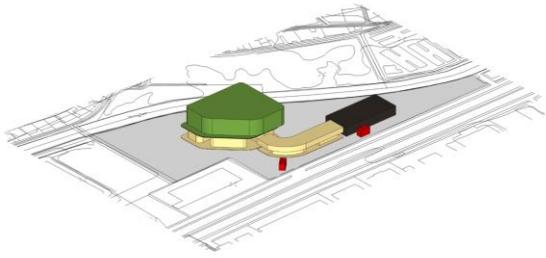
Reconsidering MRT Exit

With the presence of MRT exit in front of the site, the building is then adjust it shape to better receive the potential crowd area.



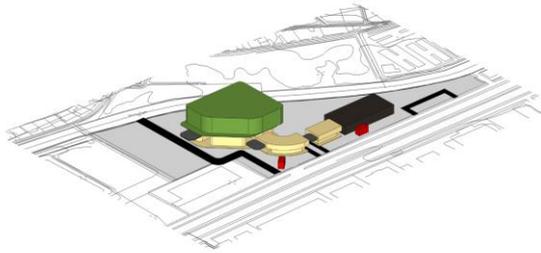
Extending the Retail Area

The retail function area are pulled to the office building area, the office function is then pulled upward and then tilted 8 m wide to define the building function.



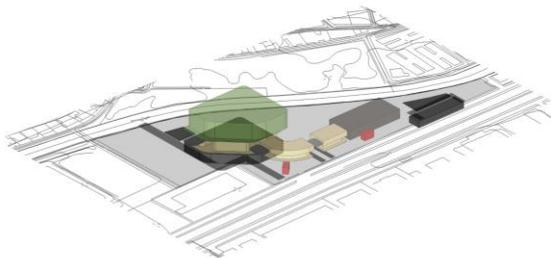
Composing permeability

The first floor is designed to have a more fluid circulation and creates the sense of openness to the surrounding area.



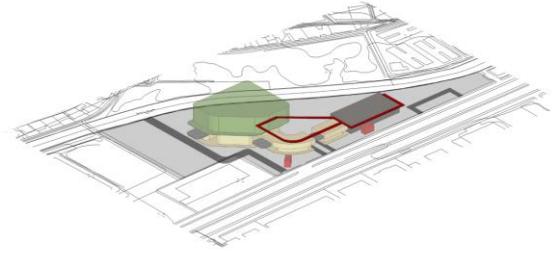
Defining Vehicle Circulation

The vehicle circulation is placed in both ends of the building to segregate the vehicle circulation and the pedestrian activities inside the site.



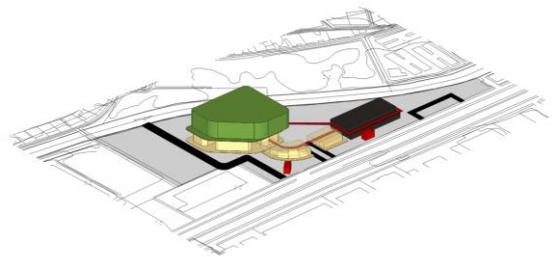
Considering Circulation Area

Although the MRT planning has provided the higher chance of people using public transportation to go to this site the parking area still considerably important for the needs of each building function



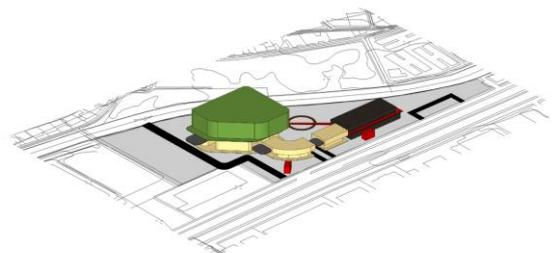
Integrating The Site

The elevated pathways are then formed to better integrate the whole building, this elevated pathways will also provide the pedestrian with a safer and more comfortable pathways to move throughout the site.



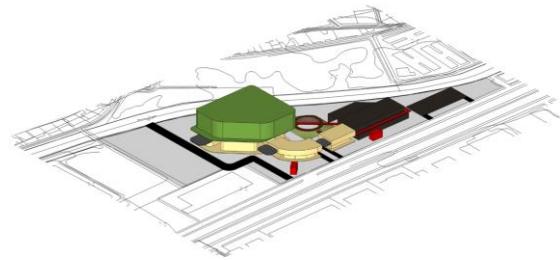
Adapting the Building Site

With the presence of elevated pathways the building will reconsider itself in order to better fit the function of the site.

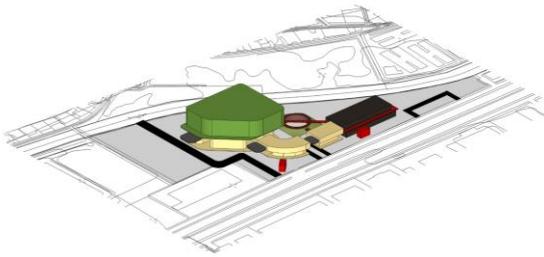


Infilling Function

Infilling the function between the shortcut pathways from one building area to another, creating the chance of composing activities around the elevated pathways.

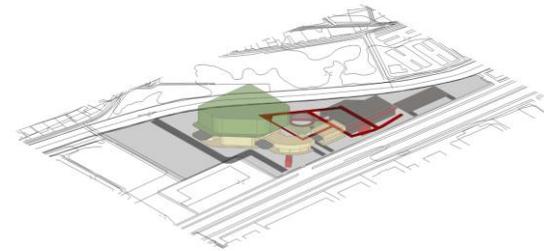


Providing Outdoor Sports Area



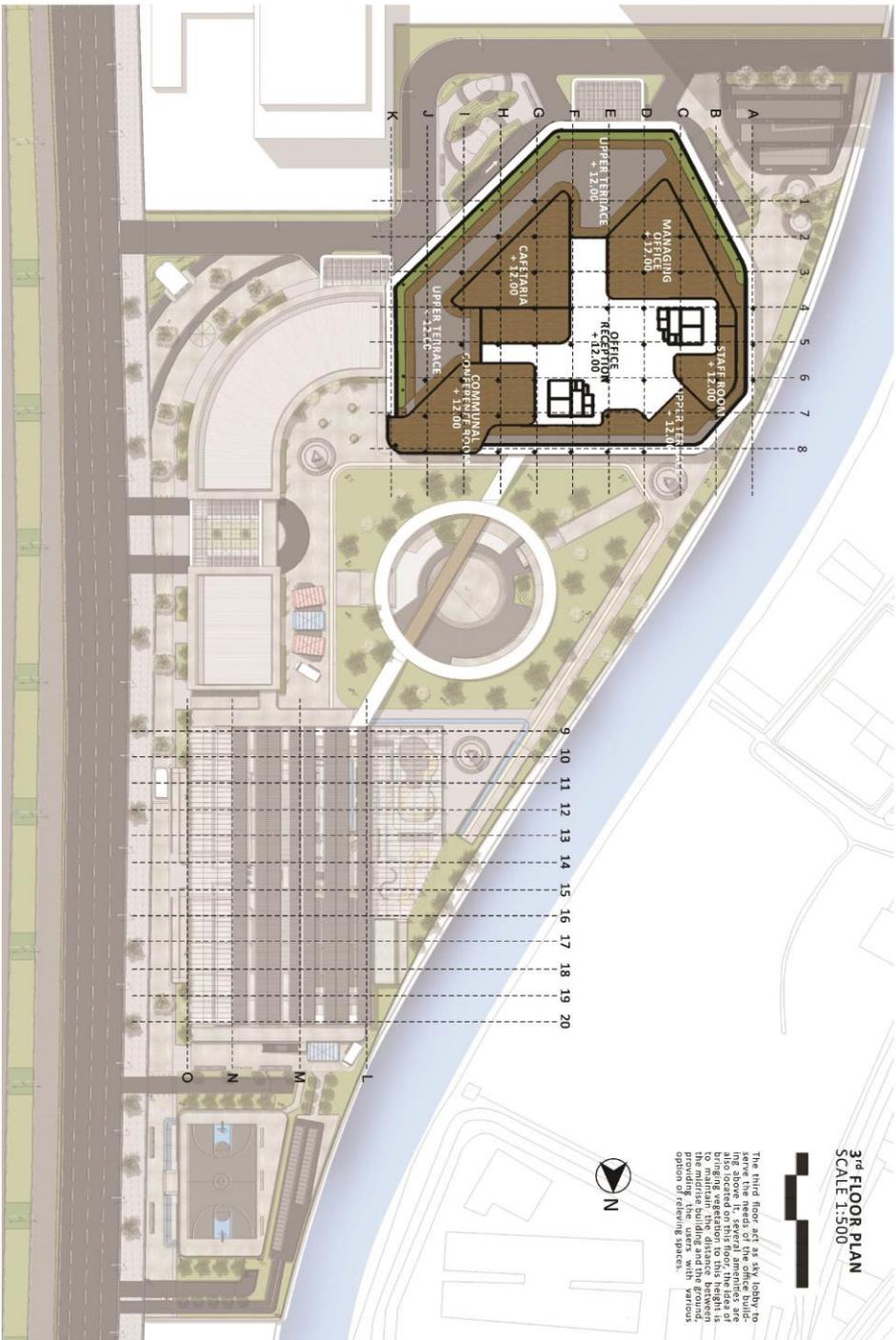
Adapting Landscape Element

The surrounding area of the infilled bridge is then shaped to unite this elements towards the landscape of the site, while also creates inner greeneries inside the site.



CREATING JOGGING TRACK

The jogging track is later formed to even widen the chance of optional activities around the site which later could affect the function of the site.



FINAL PROJECT
RA.141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFREY AGATHA ARDIANTIA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :

D.



FINAL PROJECT
RA.141581
GENAP 2016-2017

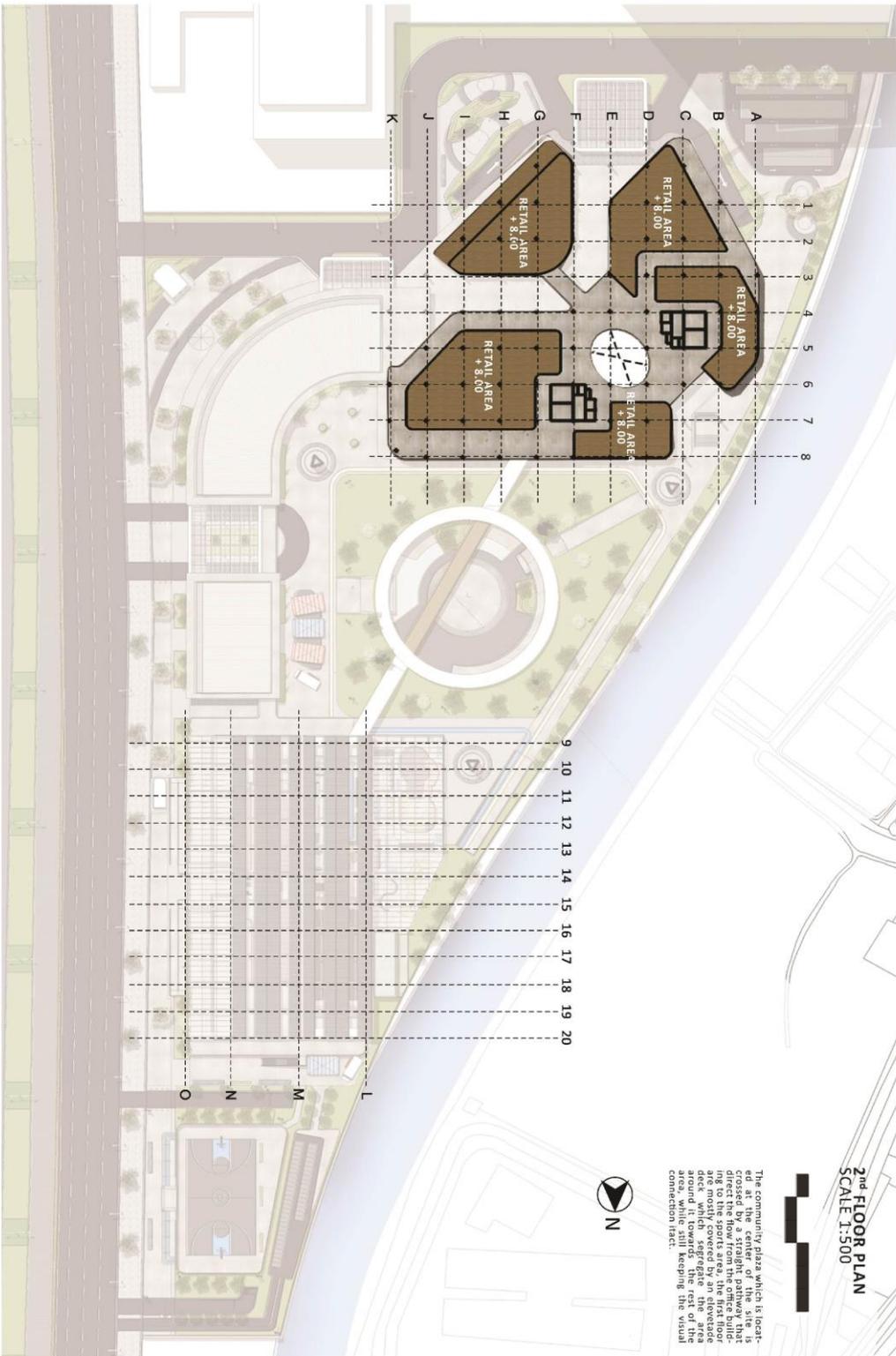
PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

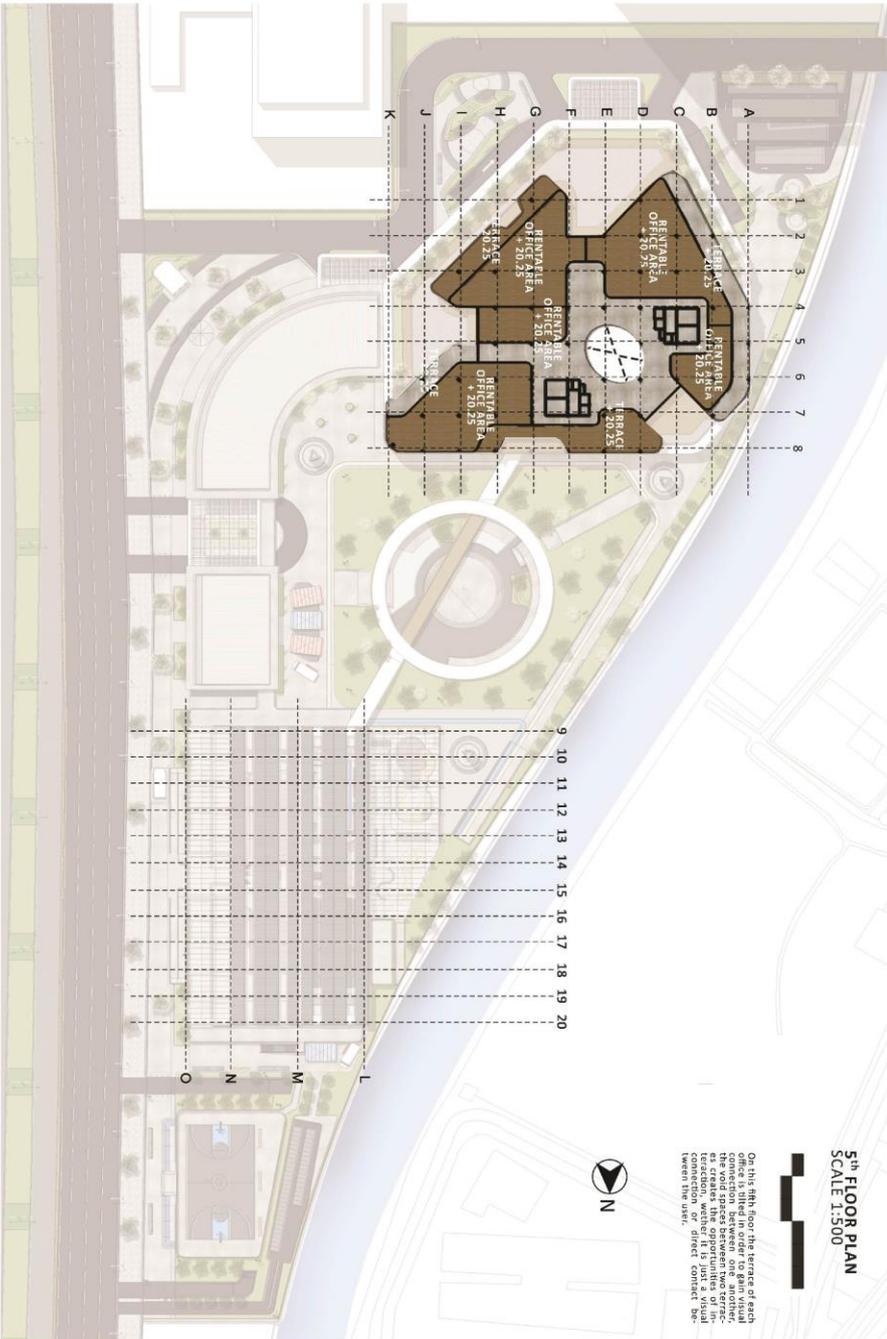
STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFRY AGATHA ARDIANTA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :





FINAL PROJECT
RA.141581
GEMAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFRY AGATHA ARDIANTA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :



FINAL PROJECT
RA. 141581
GENAP 2016-2017

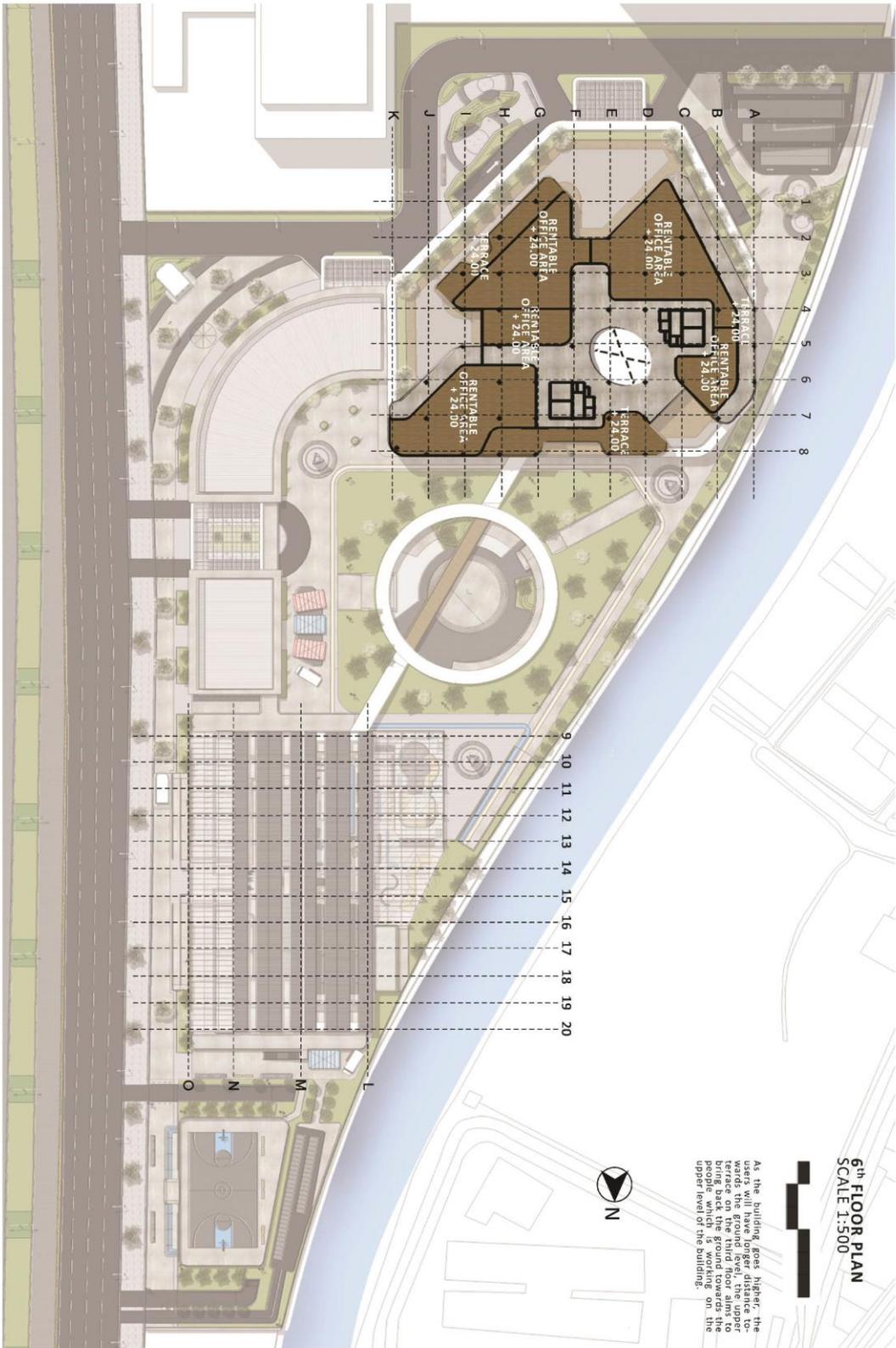
PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFERY AGATHA ARDIANTA S. T. M. T.

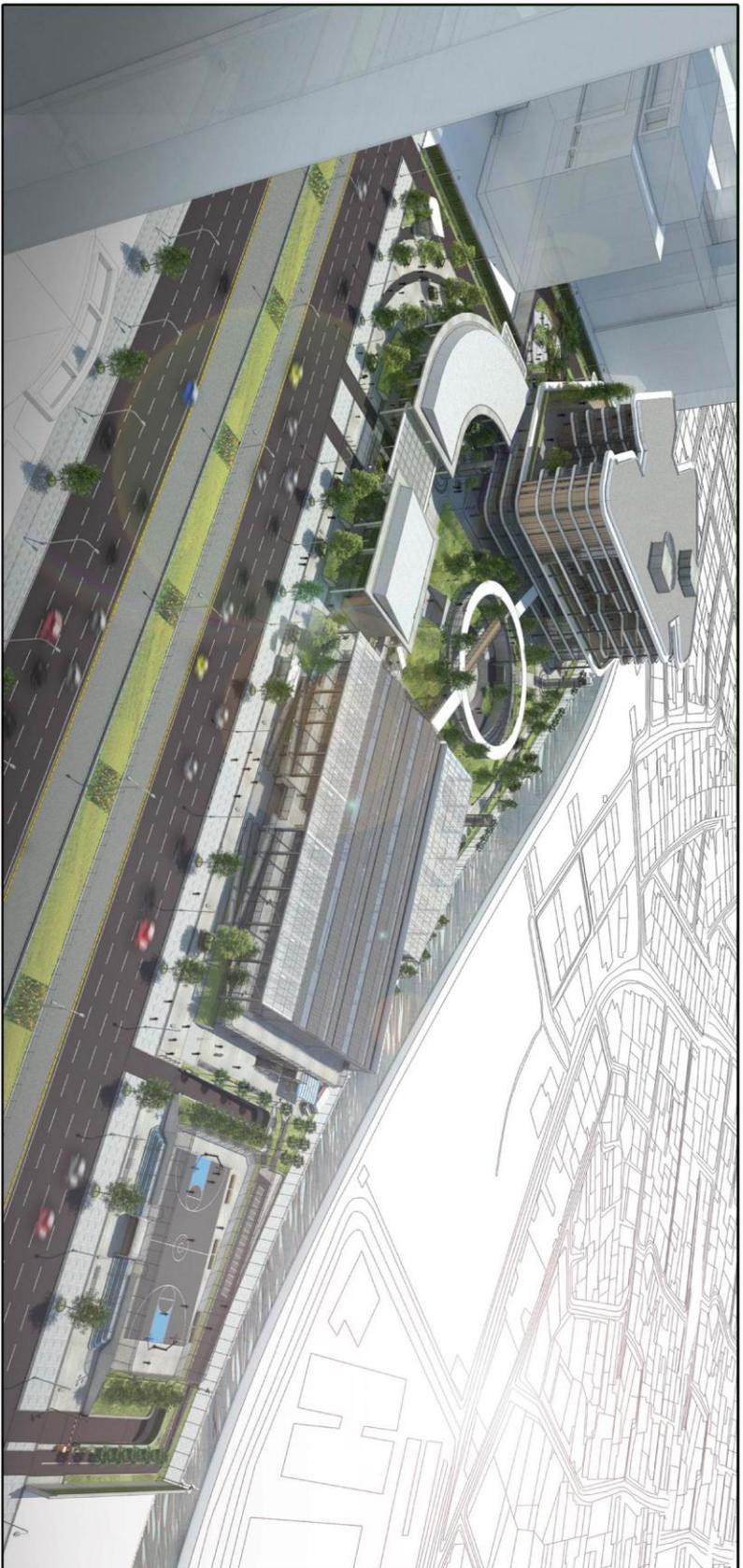
SIGN.
TUTOR :

COORDINATOR :



5th FLOOR PLAN
SCALE 1:500

As the building goes higher, the users will have longer distance towards the ground level, the upper bring back the ground towards the people which is working on the upper level of the building.



**SEQUENTIAL
INTERSECTION**
PURPOSEFUL ARCHITECTURE: IN CONTEXT OF INTEGRATED AREA
**BIRD EYE PERSPECTIVE :
INTEGRATED URBAN PARK**

The office tower is emphasized as the tallest building on the site, the office building is connected to the sports area by a bridge that connects the office building, community plaza and the sports area. By creating a shortcut bridge, the circulation of people and vehicles is easier, and other will be fluidly arranged.



FINAL PROJECT
RA.141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DERRY AGATHA ARDIANTA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :



**SEQUENTIAL
INTERSECTION**
PURPOSEFUL ARCHITECTURE IN CONTEXT OF INTEGRATED AREA
INTEGRATED URBAN PARK

BIRD EYE PERSPECTIVE :

The office tower is emphasized as the tallest building on the site, the office building is connected to the sports area by a bridge that connects the office building, community plaza and the sports area, by creating a shortcut bridge, the circulation between the office building and sports area will be fluidly arranged.



FINAL PROJECT
RA: 141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFFRY AGATHA ARDIANTA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :



SCALE 1:500

WEST ELEVATION
SCALE 1:500



NORTH ELEVATION
SCALE 1:500



BUILDING ELEVATION

the building elevation is mostly dominated by the concrete slab and glass. The office is stacked on top of each other. The other material for the building facade is also dominated by concrete slab and glass.



FINAL PROJECT
RA. 141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFRIY AGATHA ARDIANTA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :



SEQUENTIAL INTERSECTION

Within this 25,000 m² squared area, the building will not only support the activities of surrounding urban inhabitants, the community circle in the connected spaces on the street is the space for various various of inhabitant activities.

NORMAL EYE PERSPECTIVE :
VIEW FROM THE CIRCLE



FINAL PROJECT
RA.141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFRY AGATHA ARDIANTA S.T., M.T.

SIGN:
TUTOR :

COORDINATOR :



rather than creating an inactive perimeter circulation around the site, this project creates a series of active walkways around the site, allowing the users around the site experience the site throughout their trip.



SEQUENTIAL INTERSECTION

PURPOSEFUL ARCHITECTURE: IN CONTEXT OF INTEGRATED AREA

NORMAL EYE PERSPECTIVE :
THE BACK OF THE CIRCLE



FINAL PROJECT
RA: 141581
GENAP 2016-2017

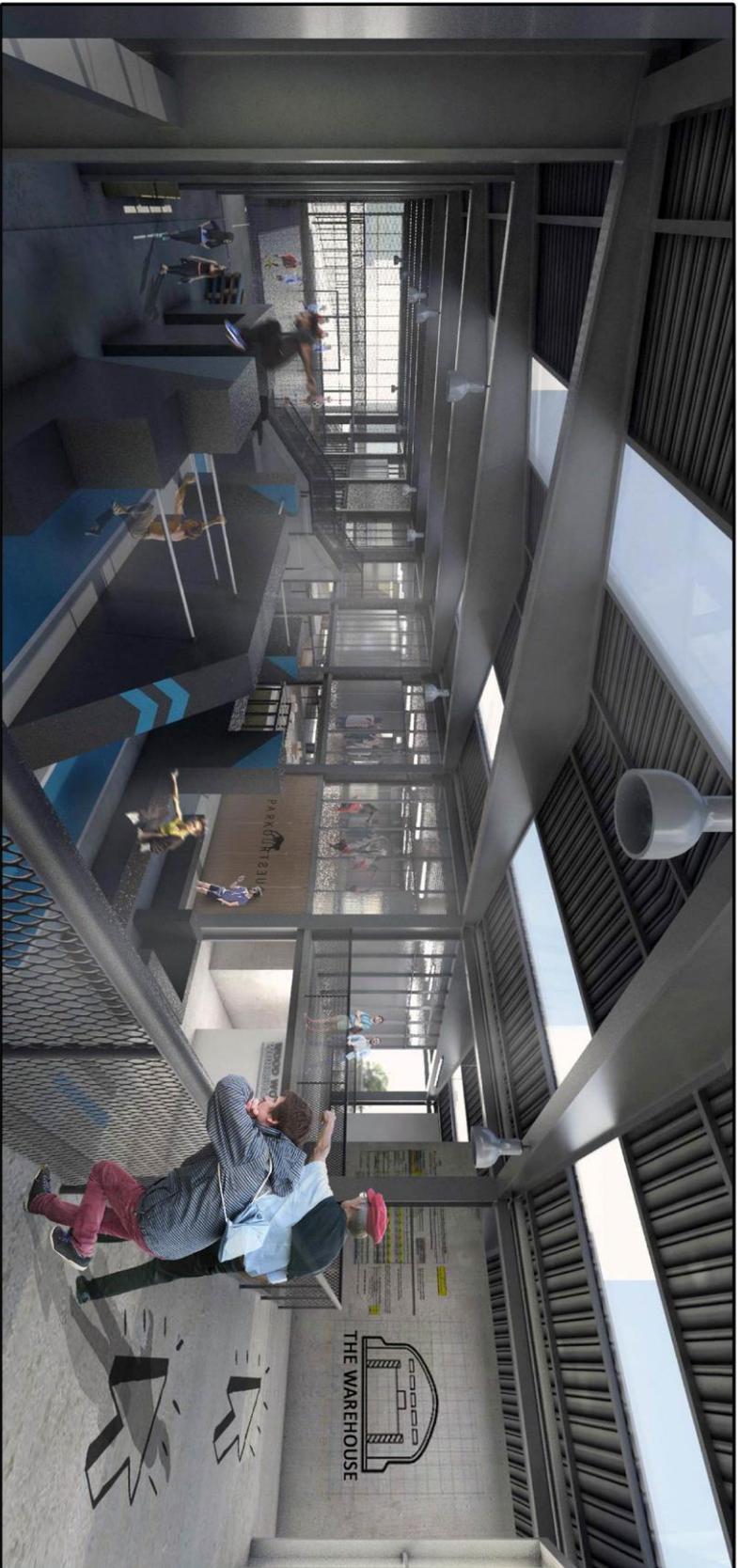
PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFRY AGATHA ARDIANTA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :



SEQUENTIAL INTERSECTION

PURPOSEFUL ARCHITECTURE IN CONTEXT OF INTEGRATED AREA

the sports hub appear with a more sub-
lime way around the city, taking shape
of a sports hub itself holds various sports
activities thus redeem the city demand
of proper sports facility, the integration
of purposeful architecture in context of
the presence of an elevated deck which
connects the whole building in this
area.

NORMAL EYE PERSPECTIVE :
THE SPORTS HUB



FINAL PROJECT
RA: 141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFFRY AGATHA ARDIANTA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :



SEQUENTIAL INTERSECTION

PURPOSEFUL ARCHITECTURE IN CONTEXT OF INTEGRATED AREA

NORMAL EYE PERSPECTIVE : THE LIFTED BASKETBALL PARK

The site appears with various constraints from the city itself, one of them was parking spaces, while the program of this area could become something that can improve the surrounding city life, this lifted basketball court sits upon a basement, integrating utility and aesthetic value of this given site.



FINAL PROJECT
RA. 141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAVU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFRY AGATHA ARDIANTYA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :



SEQUENTIAL INTERSECTION

NORMAL EYE PERSPECTIVE :
BENDED RETAIL WALKWAY

one of the unique things from this site is, there are two MRT stations currently being built underneath Jakarta traffic, this will also give advantage for the site to be more accessible. The shape of the retail is also bended to respond the form towards the site.



FINAL PROJECT
RA.141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFREY AGATHA ARDIANTA S. T. M. T.

SIGN :
TUTOR :

COORDINATOR :



SEQUENTIAL INTERSECTION

PURPOSEFUL ARCHITECTURE IN CONTEXT OF INTEGRATED AREA

NORMAL EYE PERSPECTIVE :
SPORTS HUB AMENITTES



FINAL PROJECT
RA.141581
GENAP 2016-2017

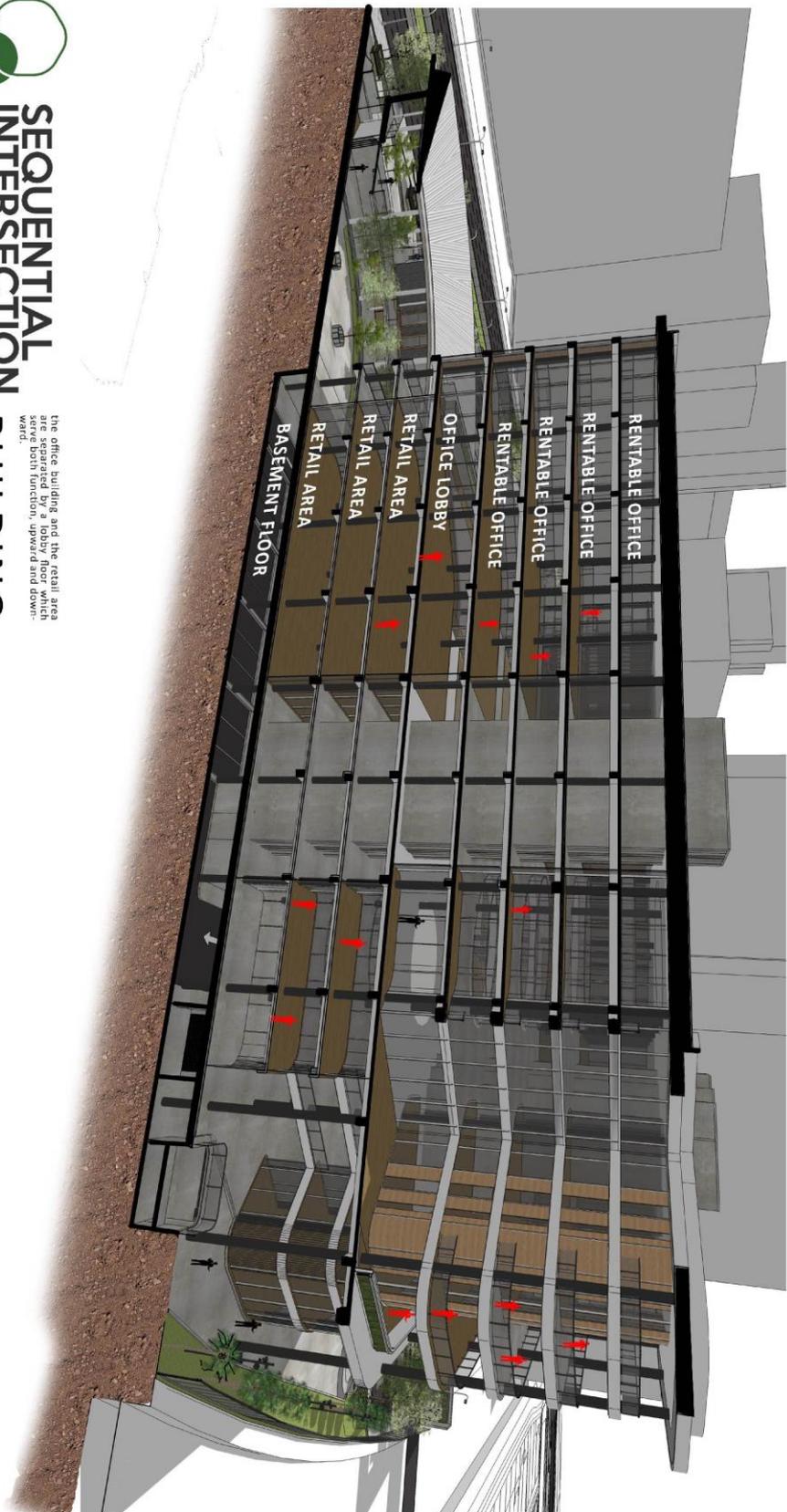
PROJECT TITLE :
PURPOSEFUL ARCHITECTURE IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFRIY AGATHA ARDIANTIA S.T. M.T.

SIGN :
TUTOR :

COORDINATOR :



the office building and the retail area are separated by a lobby floor which serve both function, upward and downward.

SEQUENTIAL INTERSECTION
PURPOSEFUL ARCHITECTURE IN CONTEXT OF INTEGRATED AREA

SPORTS HUB LOBBY

BUILDING SECTIONAL CUT



FINAL PROJECT
RA. 141581
GENAP 2016-2017

PROJECT TITLE ::
PURPOSEFUL ARCHITECTURE: IN CONTEXT OF INTEGRATED URBAN PARK

STUDENTS NAME ::
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR ::
DEFRY AGATHA ARDIANTA S.T., M.T.

SIGN:
TUTOR:

COORDINATOR:



SITE PLAN
SCALE 1:500

Various functions are dispersed throughout the site, creating a strong connection between one another inside the site itself. The circulation is then act an integrating elements for this whole 3 main buildings.



FINAL PROJECT
RA. 141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFERY AGATHA ARDIANTIA S.T., M.T.

SIGN :
TUTOR :

COORDINATOR :

5.2 Technical Exploration



FINAL PROJECT
RA 141581
GENAP 2016-2017

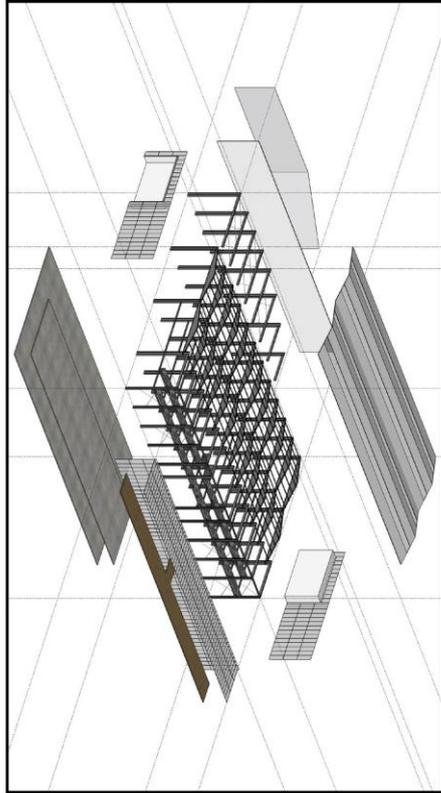
PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAVU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFERY AGATHA ARDIANTYA S.T. M.T.

SIGN :
TUTOR :

COORDINATOR :



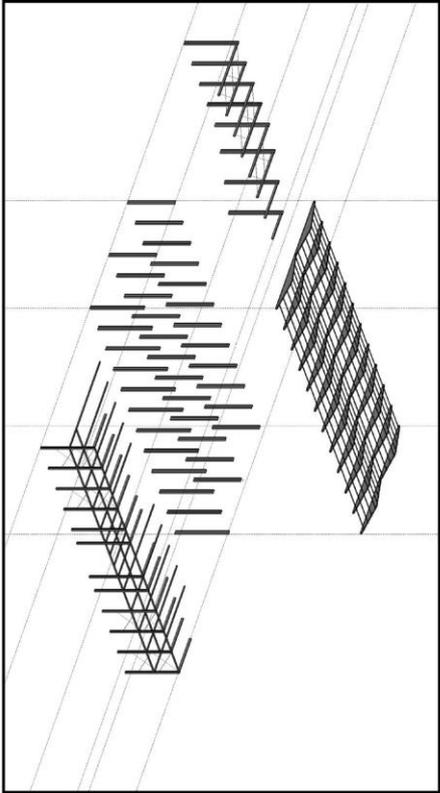
BUILDING MORPHOLOGY

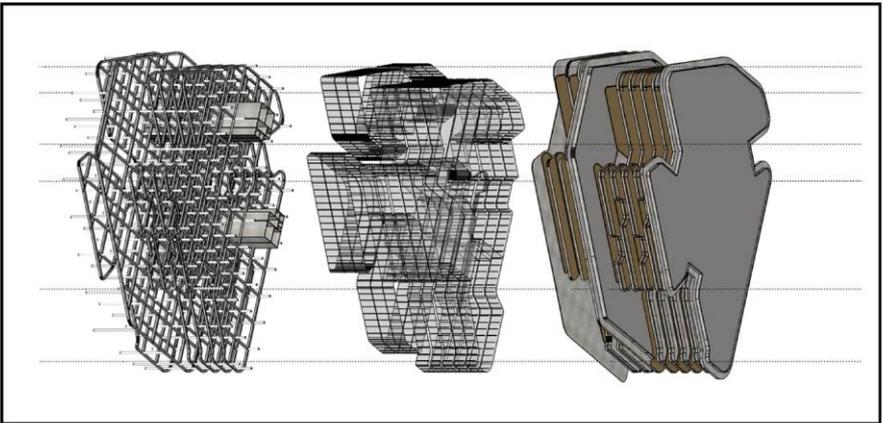
The building is consists of various different level which there formed a warehouse shape building. The sports activities that is designed inside of this building is a tennis court, badminton court, and table tennis. The steel structure is then chosen, the building envelope is dominated by a segmented facade which allow the activities inside the building to be partly exposed to the surrounding area, creating the outside of the building, at the back of the building there is also an outdoor sports area which is designed to have a closer relation with outdoor sports.

The roof is tilted 15 degree to handle the high intensity of the rain in tropical climate, the roof is also covered by translucent material to allow the natural light to be used by the activities inside the building.

PORTAL STRUCTURAL SYSTEM

This building use portal system with wide grid which allows the building contain the sports activities. The steel structure is also chosen to provide a more column spacing of the building also an elevated deck which connects this building with the entire all system. Elevated decks are also use steel structure.





FLOOR PLAT

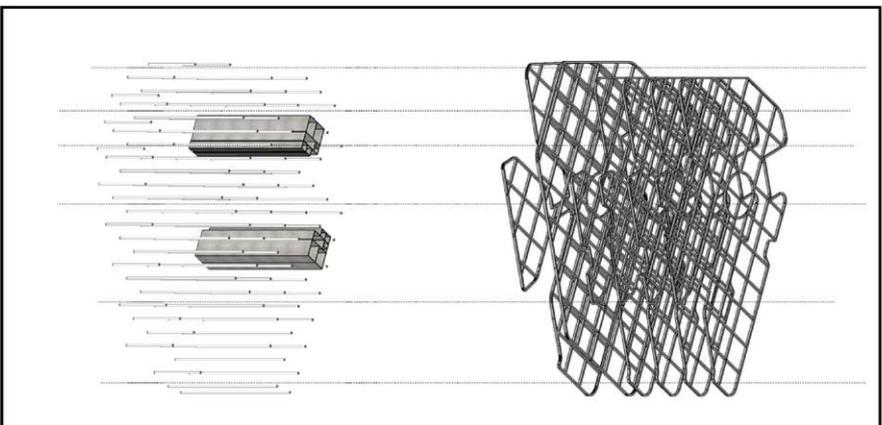
The floor plate of this building is made up of cast concrete from the top of the column with 8m grid, the use of concrete as the floor plate will allow the room to be easily managed, the office which differs them from one another. The terrace was designed to provide the ease of interaction between user will have a similar spatial experience everyday.

BUILDING ENVELOPE

The building envelope is made up glass, gripping the upside and the bottom side while work as a frame for the glass to grip one another, the use of glass spaces of the building, whereas the spaces that may be needing more private spaces could cover up the glass segments with blinds or curtain.

STRUCTURAL SYSTEM

The structural system is made up of steel structure forming a portal with 8x8 m grid, the beams are supported by the column and the column is fixed to sit firmly on top of the beam. The 8x8 m grid is chosen by considering the possibilities of basement, creating a more efficient way to arrange the parking car underground.



BEAM SYSTEM

The steel beam is connected to the greater cell, the beam diameter is 20cm diameter, steel beam used for their flexibility, by using the steel beam system it will allow a more fluid floor.

BUILDING CORE

The building core is divided into two section with exact same function, and core is consist of 10 columns, the core is also located inside the building core, by placing this utilitarian function, the building could be easily maintained.



FINAL PROJECT
RA.141581
GENAP 2016-2017

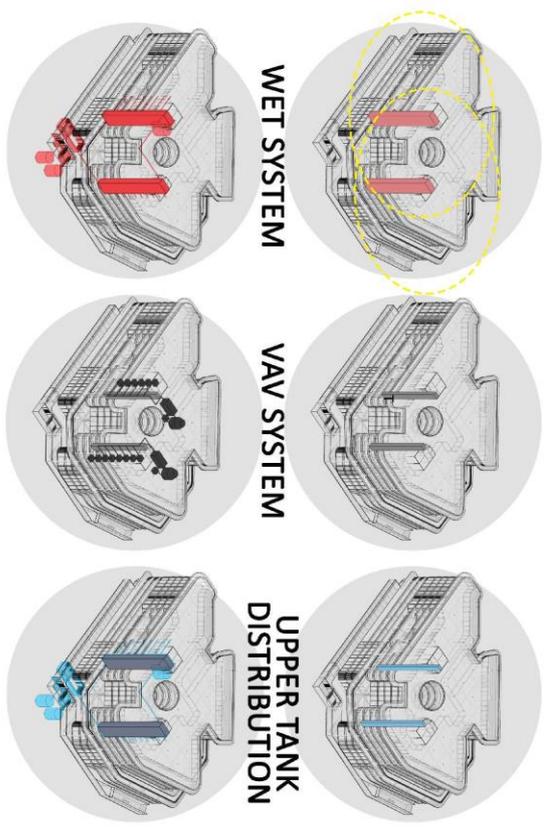
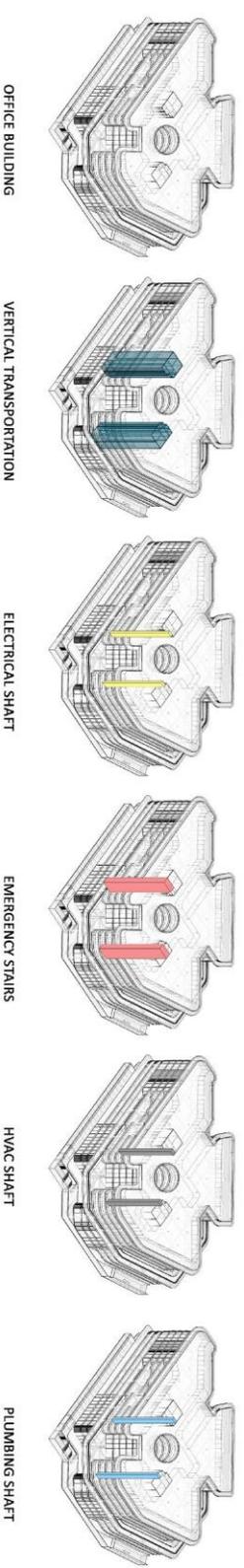
PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAVU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFFRY AGATHA ARDIANTA S.T, M.T.

SIGN :
TUTOR :

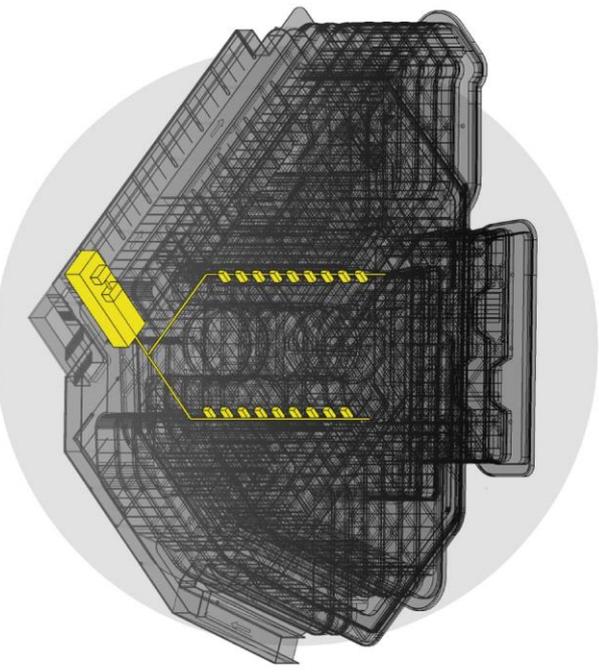
COORDINATOR :



the wet system sprinkler system will allow the building to have a fire protection system

The air conditioner used VAV system which allow to different room has a different temperature by the help of VAV unit.

to provide the building with water supply the this building will have two plumbing shaft each covering half of the building water demand.



ELECTRICAL SYSTEM AND POWER HOUSE



FINAL PROJECT
RA.141581
GENAP 2016-2017

PROJECT TITLE :
PURPOSEFUL ARCHITECTURE: IN CONTEXT
OF INTEGRATED URBAN PARK

STUDENTS NAME :
BAYU RIZKY RAMADHAN
NRP 3213 100 025

TUTOR :
DEFERY AGATHA ARDIANTA S.T. M.T.

SIGN:
TUTOR :

COORDINATOR :

BAB VI

CONCLUSION

The idea was to arrange a mixed use area in order to accomplish a certain goals which has been set upon right from the start, which one of them is to trigger an interaction between one users and the other users. The integration between one another function is arranged throughout the sequence and all of the program is arranged so that the idea of a more familiar public spaces could be achieved and earned.

BIBLIOGRAPHY

Gehl, J. and Svarre, B. (2013). *How to Study Public Life*, Island Press

Gehl, J (1987) *Life between Buildings: Using Public Space*, translated by Jo Koch, Van Nostrand Reinhold, New York

Eissenman, P. (1999) *Diagram Diaries*, universe architecture series

<http://www.sindikot.co.id/> pemkot Jakarta

Tschumi, B. (1994) *Architecture and disjunction*, the MIT press

Bachelard, G. (1958) *The Poetic of Space*, Maria jolas

Alberto Pérez-Gómez, Juhani Pallasmaa, and Steven Hol (1994) *Question of Perceptio*