

# CHAPTER I

## INTRODUCTION

### 1.1 Project Background

Nowadays, Indonesia as a developing country shows a significant movement in economy and business sectors. Business sector in Indonesia are grew rapidly and the most is at Jakarta the capital of Indonesia cause by a lot of domestic immigrant and international immigrant that sees an open business opportunities in the capital. This marked by a mass number of new building office construction in Jakarta.

On the other hand, highly prices of lands in Jakarta due to the capital land crisis become a limitation to many developing business company. This thing cause a lot of realtors begin to start building and leasing an office to many private parties to fulfill their needs.

For the location feasibility, Jakarta chosen because of this city is overwhelmed by enormous amount of workers both within the city and outside the city, both from domestic and international. The workers need a space that can contain them in a work spaces. Besides, Jakarta support business activities to increase domestic economics movement and already dedicated herself as a business area in Indonesia. Along with those advantages, office tower has potential to become a city product that will be desirable by a lot of businessman in the capital.

## **Initial Ideas**

This rental office tower project is a new building works which consisting a whole new design project of modern high rise office spaces in Jakarta that intended for business interests.

According to the highly population growth in Jakarta, the most function of this tower is to lease office spaces to private parties as a facility to accommodate their business space in Jakarta. This building will consist of rest activities such as restaurant, café, and lounge and also formal activities such as conference hall and others. The conference space is limited to small events such as product launching event, seminar and others.

As a high rise building, this building must have an appropriate system including structures and utilities. Due to the earthquake phenomenon in Indonesia, sustainable structure is needed as a part of this design project. Rental office tower is expected to accommodate people especially in the Jakarta business sector by offers a new work spaces.

This office tower design will be classified as Grade A classification Class office tower that will be classified depend on the quality and the facility like below:

- First-class design
- Excellent location
- Easy access to the building
- Attractiveness to the most creditworthy and prestigious tenants on the market
- Professional property management
- Underground parking lot providing enough parking space for the building

- Use of high-quality building materials
- Floor to ceiling height responding to the regulatory requirements for this type of buildings but not less than 2.70 m
- Flexibility of internal design (open space type)
- High-speed lifts with waiting time max up to 30 seconds. At least 2 lifts with a capacity of at least for 6 people
- HVAC system to provide heating, cooling and humidity control of the air
- Dual power supply with automatic switch
- Building Management System
- Luxury meeting rooms and a large impressive lobby
- Food and rest areas for staff /restaurant, café, fitness/ for the buildings designed for more than 250 people
- Modern window panes, high-quality window frames, sun-protection glass

The classifications above will become a specification for further programming and design manual to realize grade A classification office tower design.

## 1.2 Target and Objection

The target to be achieved along with this rental office tower is expected to be a good example in designing a good high rise building and can be realized, both in terms of design, spatial planning, circulation, utilities, and structures.

The objection is to build a facility to accommodate employment rapid grow in Jakarta and reducing unemployment rate by offers a new work spaces in Jakarta.

## 1.3 Problems

Below are scope of project in term of designing office tower in Jakarta :

- Project Description, both specific and global specification for grade A classification office tower include terminology, activity, specification, problem consideration to comparative study.
- Architectural programming include architectural analysis consist of activity study, facility, space, space needs, architectural image, building system, utility, structural and enclosure. Beside, architectural project will be explain through conceptual program, target and objection, and activity programming.
- Theory study consisting of terminology, project interpretation, design emphasis, and existing project application to the case of project

## **1.4 Methodology**

### **1.4.1 Data Collection Methodology**

Some of the methods used in this project are:

- **Literature Study:** Done by collecting and reviewing the theory and data relating to similar projects through the literature.
- **Field Survey:** Done by direct observation of similar projects and also the location of future projects.
- **Internet Survey:** Done by collecting additional data to complement existing primary data.
- **Interview:** Done by collecting data from competent and trusted agency or a person as an informant.

Through methods of literature studies, field surveys and interviews will be generated as the primary data and internet survey as the secondary data that will support the primary data.

### **1.4.2 Preparation and Analysis Methods**

Method of preparation and analysis performed using deductive and inductive methods.

- **Deductive:** Done by collecting data about office tower then analyzed the structure system so we get the required data in the design, such as sample design, spatial planning, facilities available, and necessary systems.
- **Inductive:** Conduct comparative studies with similar projects so we get examples of how the operational, design, and facilities in the five star convention hotel.

### 1.4.3 Programming Methods

Programming methods processes through analysis phase and synthesis phase. Programming as a stage of analysis, where information and data gathered are selected, classified and identified.

Analysis in the programming:

- Study on the users.

Study about the users who will use this rental office tower facility.

- Study on the user's activities includes their main activity, primary activity and additional activity.

Study about the user's activity to get information for the space requirement needed

- Study on the spaces includes space requirement, space connectivity, and term and condition for a space.

Study about the space requirement to gain information about the site space needed, the module of the building, and the structural system will be use.

- Study about system of utilities and structures.

To determine what kind of system (utilities & structures) that appropriate for the office tower project.

Analysis product:

- Conceptual foundation.
- Design Purposes.
- *Design Determinant*: users, activity, space requirement
- *Design Requirement*: architectural requirement, circumstances, building, structure and utilities.
- Space Programming: spatial, space pattern, building system.

#### 1.4.4 Architectural Design Methods

- Determine the architectural style applied.
- Determine architectural system and structure applied.
- Design approach through the study of shape, mass configuration, and building visual element.
- Development design such as working drawing 2D and 3D
- Design detail emphasis.
- Design presentation

#### 1.5 Project Systematic

Project Systematic in theoretical basis and programming in this project is done as follow:

##### CHAPTER I INTRODUCTION

Consist of project background, target and objection, project scope, methodology, project systematic.

## CHAPTER I PROJECT REVIEW

Consist of global review include global specification, development background, target to be achieved. Specific review consists of terminology, activities, design specification, location feasibility, comparative existing project study, and design problems, conclusion, limitation and assumption.

## CHAPTER III PRE ARCHITECTURAL PROGRAMMING ANALYSIS

Consist of architectural approach that contain activity and facility study, analysis building system approach from building structure, enclosure, technology, and utility, environment approach that consist location feasibility and site.

## CHAPTER IV ARCHITECTURAL PROGRAMMING

Programming concept consist of visual imaging, architectural performance, function, technology, design purpose, design determinant, design requirement, and architectural programs comprise of activity, structural system, utility, location Programming and site.

## CHAPTER V THEORY STUDY

Theory study of design emphasis and dominant problems to consider that comprise of interpretation review and design emphasis theory elaboration, observation study and design emphasis theory procedure.