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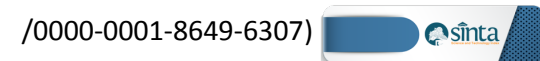
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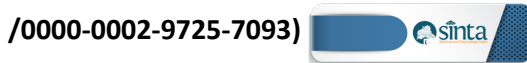
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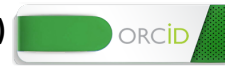
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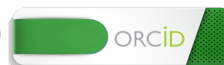
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# COMMERCIAL PROPERTY DEVELOPMENT PROGRAM OF HIGHEST AND BEST USE STUDY IN INDUSTRIAL AREA SIER SURABAYA

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## ABSTRACT

*Part of SIER (Surabaya Industrial Estate Rungkut) Area is planned to become CBD (Central Business District) in accordance with the direction of the Surabaya City Government. The land use is changed due to the decrease of carrying capacity of the infrastructure in the environment around SIER, caused by density increase since MERR (Middle East Ring Road) was opened in 2012. In addition, some of the areas that became CBD areas are part of the PT SIER area (97.4 ha). Hence, studies need to be carried out to determine alternative land functions. Since CBD is generally dominated by commercial properties, this research focuses on commercial property development programs carried out within the scope of the HBU (Highest and Best Use) Study. This research was conducted through location, site, and market analysis, completed with recommendation for property type in SIER location. The results of this study are the best and highest value proposals for the development of commercial property functions (apartments, offices, shopping areas, and hotels), so that the investment is not high risk. In addition, the result can be used as a policy orientation for all interested parties, especially PT SIER in the development of CBD in its area, related to the development stage that is adjusted to the interests and market conditions.*

**Keywords:** Commercial property, Highest and Best Use, Central Business District, SIER.

## A. INTRODUCTION

### Background

SIER (Surabaya Industrial Estate Rungkut) Industrial Area which started operation in 1974, lately was more developed by the construction of hotels, apartments, housing and commercial buildings in surrounding areas. In the last five years, the environment around SIER Industrial Area was developed relatively fast due to the opening of MERR (Middle East Ring Road) Surabaya Road. This supports the development of Central Business District (CBD) in the area. With this potential, Surabaya city government will chance part of SIER to become CBD Area. Hence, Highest and Best Use (HBU) study is needed to understand property development program that can be applied for CBD-SIER Area.

### Objective

In general, this study is expected to support Surabaya city government and PT. SIER in developing SIER main area as CBD area. This study will also used as policy orientation for PT. SIER and other related parties, to develop CBD inside SIER Industrial Area, as well as to provide development alternative for 97.4 ha land (from total area of 246 ha) through the highest and best use of land.

## B. METHODOLOGY

Study development activity scope is preparation, survey activity, data compilation (planning and design), and analysis stage (location, physical/site, market, and development concept), covering data collection, data compilation, problem identification, analysis method and analysis tools.

Analysis methods used are:

1. Location Analysis is done by reviewing SIER Industrial Area master plan, accessibility, transportation network, land use around the site, land proximity, and facilities around the site.
1. Site Analysis is conducted by reviewing site boundaries, site dimension, site circulation, site accessibility, and city planning for the site.
2. Market Analysis is conducted by reviewing market for development plan, to understand market target up to determination of best product concept with competitive price. Analysis tools used are supply and demand, market segmentation and target, market positioning proposed project, and benchmarks.
3. Development Concept Analysis  
Outputs from development concept are property type, building area, unit composition, unit area and CBD-SIER area zonation.

## C. THEORITICAL REVIEW

### Highest and Best Use (HBU)

The Appraisal Institute of Canada defines Highest and Best Use (HBU) as property use analysis that is proper and legal, physically feasible, properly supported and financially feasible, and creating highest value (Beckwith, 2010).

HBU Study has four criteria, which are:

1. physical possibility

2. legal permissibility
3. financial affordability
4. Maximum profitability which results in highest property value

HBU Study is relatively the same with Feasibility Study. The difference is that HBU Study is done when the development function has not been determined, whereas Feasibility Study is done when the property determination is available. The Project is feasible if its estimated value exceeds cost. (Miles, 1996)

### Supply and Demand

1. Supply. Influencing factors are goods price, other related goods price, production cost, number of sellers, and government policy.
2. Demand. Market demand influencing factors are among others: goods price, number of buyers, and number of sales. (Kotler, 1991)

### Land and Property

Land development needs to be studied using comprehensive - integral approach, not only for physical planning but also community planning, which can be done through market analysis related to competitiveness and market share. (Santoso, 2000). Commercial property is based on building or land to be developed, to gain profit from sales or rent. Property is divided into 4 major categories which are: residential, commercial, industrial, and open land. Apartment (ULI, 2003), eventhough is highrise building, is identified as multifamily housing building, and included in residential building. (ULI, 2004)



## D. ANALYSIS

### 4.1 Location Analysis

Table 1. Location analysis

No	Aspect	Conclusion
1	Regulatory Issues	SIER Industrial Area is included in Rungkut Development Unit, with development focus on housing, education, environmental protection and development for industrial purpose. This caused SIER Industrial Area to have potential for housing or residential property development.
2	Accessability and Transportation	Located in artery road and close to toll road, making SIER Industrial Area has the potential to be developed as property which needs mobility, such as office, hotel and residential.
3	Facility	There are various facilities n the radius 1-3 km of SIER Industrial Area. This shown that the needs of property type that will be developed will be fulfilled from the education to health facilities.
4	Proximity	Economy activity center (IDX BEI) is 12 km away. Airport can be reached in about 20 minutes (16 km away). This makes property to be developed has easy access to activitiy centers.
5	Surrounding Land Characteristics	Dominated by housing land use and rental house (boarding and rental house) due to high demand of housing needs for employees or workers, makes residential property has potential to be developed in SIER Industrial Area.
6	Surrounding Area Development	Development in the last 5 years in SIER Industrial Area are mostly commercial such as hotel and offices. Currently there are many developments of hotel and offices. Hence, hotel and offices are potential to be developed SIER Industrial Area.
7	SIER Industrial Area Condition	Complete utilities shown that SIER Industrial Area is ready to support various property types. Current land price is Rp 30.000.000/m <sup>2</sup> , a rapid increase compared to previous year price of Rp 10.000.000/m <sup>2</sup> . This shows that property that will be developed in SIER Industrial Area has good investment chance.

### 4.2. Site Analysis

The main road is an artery road from West to East, is located within the site which has a total area of 97.4 ha. Current site can be seen from land use in the site and industrial land ownership zone (Figure 3).

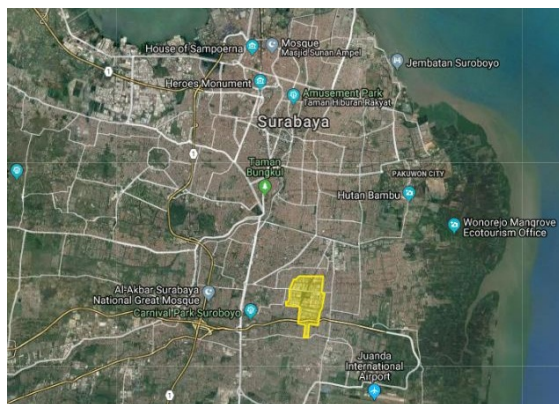


Figure 1. SIER area in Surabaya  
(Source : googlemap)

SWOT analysis is used to understand strength, weakness, opportunity, and threat from the site to be developed. This analysis will be useful in understanding strategy to utilize strength and opportunities and avoid threats that can arise (Table 2).



Figure 2. Site in SIER area of 97.4 ha  
(Source : googlemap)

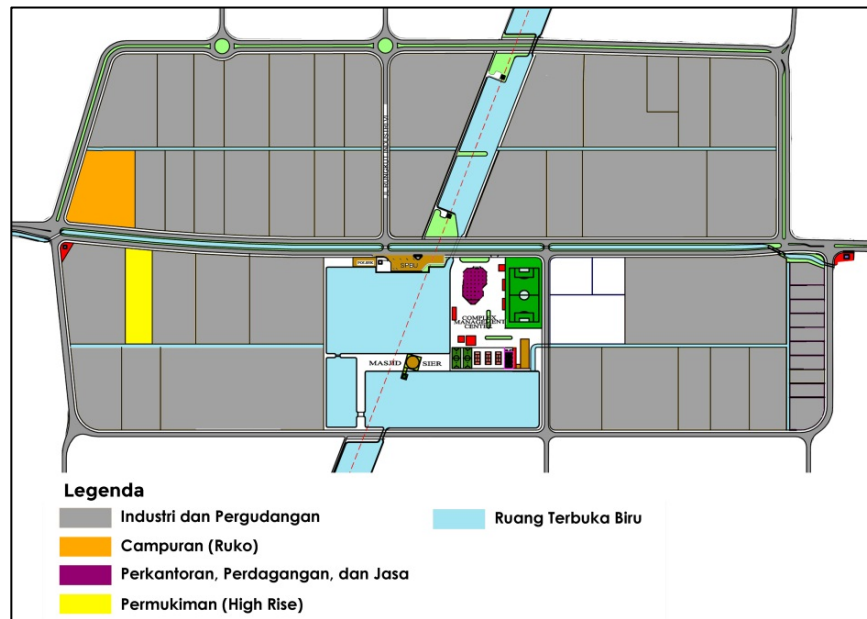


Figure 3. Land use SIER 97.4 ha

Table 2. Site Development - SWOT

			Strength	Weakness
			<ul style="list-style-type: none"> <li>Site has no contour</li> <li>Connected to toll entrance and exit gate</li> <li>Has dense tree populations (green)</li> <li>Has artificial lake</li> <li>Close to city center</li> </ul>	<ul style="list-style-type: none"> <li>There are industrial buildings within the site</li> <li>Buildings are mostly permanent</li> <li>Has mainroad, causing limited privacy</li> </ul>
Opportunity	S-O	W-O		
<ul style="list-style-type: none"> <li>Tenants are mostly big companies</li> <li>Commercial properties are available within the site</li> <li>Property development of Surabaya is from North to South. (SIER is located in the South of Surabaya)</li> </ul>	<ul style="list-style-type: none"> <li>Utilize artificial lake as attraction</li> <li>Development shall not disturb dense tree population</li> <li>Cooperate to develop site with big company tenants</li> <li>Develop commercial property that can attract market from city center</li> </ul>	<ul style="list-style-type: none"> <li>Negotiate with tenants for best alternative</li> <li>Estimate time needed for site development readiness</li> <li>Create different route for heavy vehicles and private vehicles</li> </ul>		
Threat	S-T	W-T		
<ul style="list-style-type: none"> <li>There are already other CBDs in Surabaya city center</li> </ul>	<ul style="list-style-type: none"> <li>Commercial development has to have uniqueness to differentiate with other CBDs</li> </ul>	<ul style="list-style-type: none"> <li>Development has to be done integrated with already developed industry in the surrounding</li> </ul>		



### 4.3. Surabaya City Macro Economy Analysis

#### Surabaya Commercial Property Condition

Commercial property supply development rate in Surabaya tends to decrease for apartment and offices property, eventhough there is still increase every year. From the third quarter of 2016 and third quarter fo 2017, office supply has the highest increase which is 30% (qtq). Property with contract development every year is hotel. Eventhough with lower number of supplies compare to office supplies, hotel tends to increase each year.

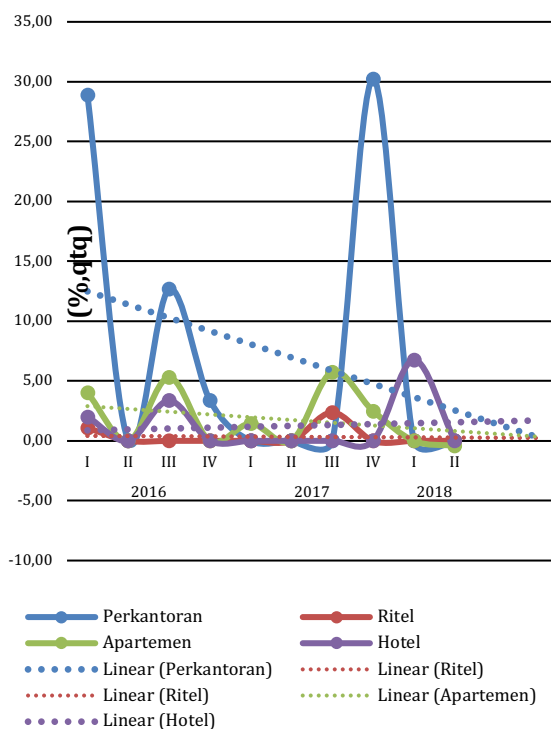


Figure 4. Surabaya commercial property supply condition in 2016-2018

(Source: Bank Indonesia.  
<https://www.bi.go.id>)

### 4.4. Benchmark Analysis

Benchmark analysis is used to measure and compare performance, as well as obtain results from best practices. Industrial areas used as benchmark have similar development concept with SIER Industrial Area, which are Gu'an New Industrial City, Vasanta Innopark-MM2100, and Jababeka City.

### 4.5. Micro Market Analysis

#### 4.5.1 Apartment

Most of apartments are located to the North of the site, such as in Wonocolo area and in the mixed-use development area.

To understand apartment market demand, rental price and take up rate from each competitor needs to be obtained. Unit rental price can represent market demand, as the higher the demand, hence the property product price will also be higher.

Based on Table 4, apartment rental rate is from Rp 10,000,000 to Rp 22,000,000/m<sup>2</sup>, and take up rate for each apartment is >60%. This shows that more than 60% apartment supply has been absorbed by market.

Table 3. Apartment unit supply around the site (radius 3 km)

Project Name	Status	Unit	Unit Size (m <sup>2</sup> )			
			Studio	1 BR	2BR	3 BR
My Tower Apartment	Strata	1.200		30	37	
Madison Avenue Tower A	Strata	2.500	19	33	48	
Tamansari Papilio	Strata	446	20		36	
Metropolis Apartment	Strata	831	24	33	49	73
Bess Mansion	Strata	723	23		41	
Skysuites SOHO	Strata	-	110	137		
The City Square Tower 2						
- Apartment	Strata	400	21	33		
- SOHO	Strata	8	224	228	241	

Tabel 4. Apartment demand around the site (radius 3 km)

Project Name	Status	Sell Price (Rp/m <sup>2</sup> )	Take Up Rate (%)
My Tower Apartment	Finishing	11.070.000	60%
Madison Avenue Tower A	Construction	20.630.000	70%
Tamansari Papilio	Operate	21.250.000	70%
Metropolis Apartment	Operate	10.410.000	90%
Bess Mansion	Construction	16.660.000	60%
Skysuites SOHO	Operate	22.720.000	60%
The City Square Tower 2 Apartment & SOHO	Construction	11.070.000	90%

### Market Competition

There are 7 apartments located within 3 km radius, with middle class market.

In addition to apartment competitors, competitiveness and market share also need to be analysed with Scoring Method. Competitiveness represents

competitiveness between projects, while market share shows supply that will be absorbed by market.

Based on criteria in Table 5, Scoring Method is done on competitors and proposed project condition.



Table 5. Apartment weighting criteria

Aspect	Criteria	Indicator	Weight
Location	Accessibility	On local road	1
		On collector road and within > 3 km from exit toll	2
		On collector road and within > 3 km from exit toll	3
		On artery road and within > 3 km from exit toll	4
		On artery road and within < 3 km from exit toll	5
	Public Transportation	No public transportation	1
		No existing public transportation, however plan is available	2
		Passed by 1 public transport	3
		Passed by > 1 public transport	4
		Passed by >1 public transport and plan for more	5
	Proximity	No activity center within 2 km radius	1
		There is 1 activity center within 2 km radius	2
		There are 2 activity centers within 2 km radius	3
		There are 3 activity centers within 2 km radius	4
		There are >3 activity centers within 2 km radius	5
Facility	Internal	Has standard facility	1
		Has 1 non-standard facility	2
		Has 2 non-standard facilities	3
		Has 3 non-standard facilities	4
		Has >3 non-standard facilities	5
	External	No facility within 200 m radius	1
		There is 1 facility within 200 m radius	2
		There are 2 facilities within 200 m radius	3
		There are 3 facilities within 200 m radius	4
		There are >3 facilities within 200 m radius	5
Building	Project Location	<i>Single Building</i>	1
		Together with 1 other property type	2
		Together with 2 other property types	3
		Together with 3 other property types	4
		In superblock	5
Concept	Concept Uniqueness	No concept	1
		Has concept but not unique	2
		Has unique concept	3
		Has unique concept as identity	4
		Has unique concept as identity, smart and green	5

Table 6. Apartment and SOHO score

Project Name	Location			Location	Facility	Project Location	Concept	Score
	Accessibi- lity	Trans- porta- tion	Proximity					
	40%	30%	30%	20%	40%	20%	20%	
My Tower Apartment	5	4	3	4,1	2,5	1	1	2,22
Madison Avenue Tower A	4	4	3	3,7	3,5	3	2	3,14
Tamansari Papilio	5	4	3	4,1	4	4	4	4,02
Metropolis Apartment	2	4	3	2,9	2,5	2	3	2,58
Bess Mansion	4	4	3	3,7	4	3	3	3,54
Skysuites SOHO	3	1	3	2,4	3,5	4	5	3,68
The City Square Tower 2 Apartment & SOHO	2	2	3	2,3	3	4	3	3,06
<b>Proposed Project</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>4,1</b>	<b>4,5</b>	<b>5</b>	<b>5</b>	<b>4,62</b>

Table 7. Apartment competitiveness and market share

Project Name	Score	Competitiveness (%)	Market Share (%)
My Tower Apartment	2,22	56%	11%
Madison Avenue Tower A	3,14	79%	15%
Tamansari Papilio	4,02	101%	19%
Metropolis Apartment	2,58	65%	14%
Bess Mansion	3,54	89%	18%
The City Square Tower 2 Apartment	3,06	77%	14%
<b>Proposed Project</b>	<b>4,62</b>	<b>116%</b>	<b>21%</b>

Table 8. Apartment price and market share

Project Name	Score	Market Share (%)	Price/m <sup>2</sup> (Rp)
My Tower Apartment	2,22	9%	11.070.000
Madison Avenue Tower A	3,14	13%	20.630.000
Tamansari Papilio	4,02	17%	21.250.000
Metropolis Apartment	2,58	11%	10.410.000
Bess Mansion	3,54	15%	16.660.000
The City Square Tower 2 Apartment	3,68	15%	11.070.000
<b>Proposed Project</b>	<b>4,62</b>	<b>19%</b>	<b>21.295.433</b>

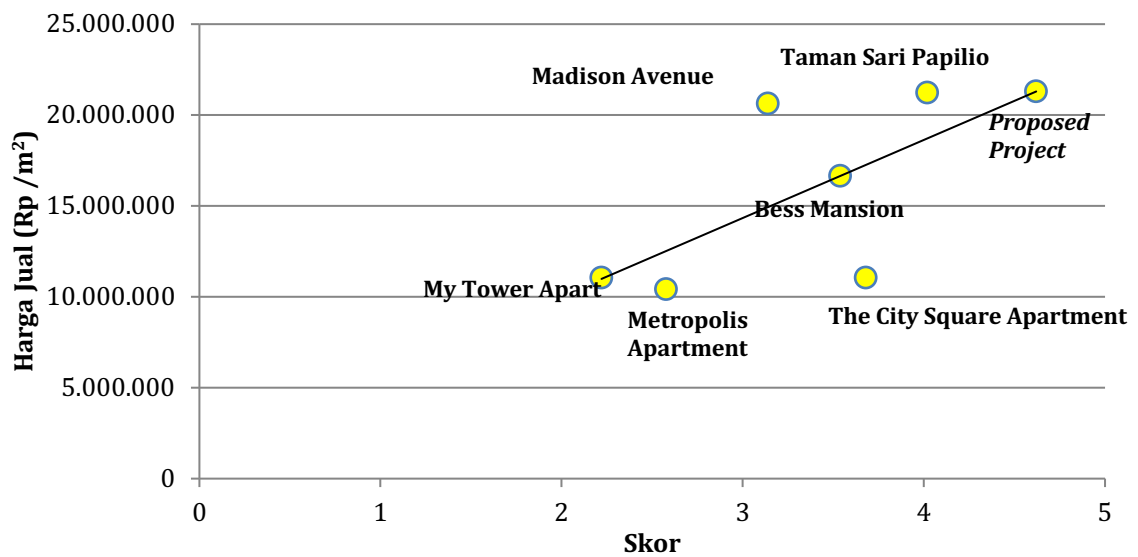


Figure 5. Apartment competitor and proposed project positioning

Based on weighting in Table 6, proposed project has highest score of 4.62, compared to others.

Table 7 shows that proposed project has highest competitiveness of 116%. This indicates that proposed apartment has high competitiveness compared to competitors.

Proposed project market share is 21% more than competitors. Almost all apartments have market share >10%, indicating that there is strong competition in apartment market. Hence, unique selling point need to be created to add property product value.

Based on Table 8, proposed project apartment selling price is Rp 21,300,000/m<sup>2</sup>.

From Figure 5, it is shown that proposed project has higher level than competitors. This indicates that

proposed apartment project can be market leader in apartment market.

### Market Absorption

Market absorption used forecast formula with x as score result dan y as unit number, to obtain number of units that can be absorbed by market.

Tabel 9. Market absorption apartment

Project Name	Score	Number of Unit
My Tower Apartment	2,22	1.200
Madison Avenue Tower A	3,14	2.500
Tamansari Papilio	4,02	446
Metropolis Apartment	2,58	831
Bess Mansion	3,54	723
The City Square Tower 2 Apartment	3,68	400
<b>Proposed Project</b>	<b>4,62</b>	<b>1.604</b>



Based on Table 9, at least 1,604 unit of proposed apartment project can be absorbed.

rent office supply area around the site is 54,000 m<sup>2</sup>. Demand for office can be estimated from selling rate or rent rate with rent price.

#### 4.5.2 Office

There are three office supplies, all with lease and single building type. Total

Table 10. Office supply around the site (radius 3 km)

Project Name	Location	Developer	Year Operation	Tenure	Condition	Single / Mixed-Use Building	Area (m <sup>2</sup> )	Grade
The Samator Office	Rungkut	Samator Land	2016	Lease	Operate	Single	35.000	A
Graha Pena II Office	Gayungan	Jawa Pos Group	2014	Lease	Operate	Single	12.000	A
PT. SIER Office	Rungkut	PT. SIER	1985	Lease	Operate	Single	7.600	B

Table 11. Office demand around the site (radius 3 km)

Project Name	Rent Price (Rp /m <sup>2</sup> /month)	Service Charge (Rp)	Rental / Take Up Rate (%)	Tenant List
The Samator Office	250.000	70.000	80%	Samator Gas Industri, Satyadhika Bakti
Graha Pena II Office	186.000	-	85%	Jawa Pos, J TV, Virtual Office
PT. SIER Office	70.000	40.000	75%	PT SIER, Bank Mandiri, Bank BNI, GBI Rungkut

Based on Table 11, rental and take up rate for office space is >75%, indicates high office space demand around the site. Most of offices around the site is lease base. The Samator Office has highest rent price fo Rp 250,000/m<sup>2</sup>/month. This is due to new project and integrated mixed-use terintegrasi in each building.

#### Market Competition

Office property competitor is based on class or grade. The area to be used as CBD has class A Office. Hence, the competitors of the proposed project are Graha Pena II and The Samator Office.

Based on weighting process, proposed project has highest score of 4.2, compared with other offices. Based on calculation, proposed project has highest competitiveness of 113% with

market share of 51%. It can be concluded that proposed project can be market leader.

#### Market Positioning

Market positioning analysis is done to obtain position of the proposed project in the market, by conducting calculation based on weighting result score using available market price. Proposed project rental rate will be calculated using forecast formula, with score as x variable and rental price as y variable. The result obtained for rental price and service charge that can be applied for the proposed project is Rp 425,000/m<sup>2</sup>/month.

Proposed project has higher position compared to competitors, indicates that proposed office project can be market leader.

## Market Absorption

Market absorption is calculated by forecast formula with x as score result and y as number of units, to obtain number of units that can be absorbed or accepted by market. From the calculation, it is obtained that 52,889 m<sup>2</sup> of proposed project area can be absorbed by market, hence this will be minimal area that can be offered to market.

## 4.5.3 Retail or Shopping Center

Total saleable area from shopping center is 489,900 m<sup>2</sup>. Shopping center consists of five shopping areas with regional service level, while the rest will have neighborhood service level, and the ownership is predominantly lease type.

Table 12. Retail or shopping center supply around the site

Project Name	Location	Developer	Year Operation	Tenure	Service Level	Salable Area (m <sup>2</sup> )	Tenant
Maspion Square	Wonocolo	Maspion Group	2003	Lease	Regional	20,000	Convention, Es Teler 77, Giant Hypermart, A&W Restaurant
Plaza Marina	Wonocolo	PT. Trijaya Kartika	2001	Lease / Strata	Neighborhood	9,900	Solaria, Mc. Donald, Minimart, Samsung Galaxy
Trans Studio Mini	Rungkut	CT Corp	2017	Lease	Neighborhood	40,000	Transmart
Galaxy Mall	Mulyorejo	PT. Sinar Galaxy	1996	Lease	Regional	120,000	SOGO, Batik Keris, Celebrity Fitness, Galaxy XXI
Marvell City Mall	Ngagel	PT. Assa Land	2015	Lease	Regional	60,000	CGV Blitz, Maxx Coffee, J.CO, Centro
Surabaya Town Square	Wonokromo	PT. Graha Megaria Raya	2008	Lease	Neighborhood	80,000	Giordano, Optik Melawai, Apple Center, Foodmart
Mall Ciputra World	Mayjen Sungkono	Ciputra Group	2011	Lease	Regional	90,000	Hypermart, XXI, Metro, Fun World
City of Tomorrow	Ahmad Yani	PT. Lippo Malls	2009	Strata / Lease	Regional	70,000	Acer Point, A&W Restaurant

Table 13. Retail or shopping center demand around the site

Project Name	Service Level	Location	Developer	Sell Price (Rp /m <sup>2</sup> )	Rent Price (Rp /m <sup>2</sup> /mth)	Service charge (Rp /m <sup>2</sup> /bln)	Occupancy Rate (%)
Maspion Square	Regional	Wonocolo	Maspion Group	-	150.000	45.000	85%
Plaza Marina	Neighborhood	Wonocolo	PT. Trijaya Kartika	15.000.000	200.000	75.000	80%
Trans Studio Mini	Neighborhood	Rungkut	CT Corp	-	150.000	-	80%
Galaxy Mall	Regional	Mulyorejo	PT. Sinar Galaxy	-	400.000	50.000	95%
Marvell City Mall	Regional	Ngagel	PT. Assa Land	-	300.000	50.000	70%
Surabaya Town Square	Neighborhood	Wonokromo	PT. Graha Megaria Raya	-	200.000	50.000	85%
Mall Ciputra World	Regional	Mayjen Sungkono	Ciputra Group	-	400.000	75.000	90%
City of Tomorrow	Regional	Ahmad Yani	PT. Lippo Malls	18.000.000	300.000	60.000	85%

Sumber: <http://www.kontan.co.id>

Based on the above table, sell price is Rp 15,000,000-Rp 18,000,000/m<sup>2</sup>, while shopping center rent fee is between Rp 150,000/m<sup>2</sup>/month and Rp 400,000/m<sup>2</sup>/month. Service charge per m<sup>2</sup> around the site is Rp 50,000-Rp 75,000. Occupancy rate of shopping center around the site is >70%, hence can be seen that the demand for shopping center is high.

### **Market Competition**

Shopping centers which have similar kind and type with the proposed retail will be considered as competitors, which are rental retail that has regional service level and still in construction > tahun 2010. Based on those criteria, there are 3 malls which are Galaxy Mall, Marvell City Mall, and Mall Ciputra World Surabaya.

After understanding shopping center competitors, competitiveness and market share based on Scoring Method also needs to be ascertained. Competitiveness represents competition level between projects, while market share indicates how much supply can be absorbed by market.

Competitor highest score is Galaxy Mall, which is one of the biggest malls in Surabaya, while proposed project has second highest score of 4.5.

Based on calculation, competition level with proposed project similar competitor is Galaxy Mall, indicates possibility of *head-to-head*. Galaxy Mall has slightly higher market of 27%, compared to *proposed project* of 26%. However, the percentage of each retail is almost the same.

### **Market Positioning**

Market positioning analysis is done to obtain position of the proposed project in the market, by conducting calculation based on weighting result score using

available market price. Proposed project rental rate will be calculated using forecast formula, with score as x variable and rental price as y variable. Based on calculation, recommended proposed project rental price is Rp 467,000/m<sup>2</sup>/month (including service charge). In the positioning, proposed project has higher level compared to its competitors, hence proposed shopping center project can be market leader.

### **Market Absorption**

Market absorption used forecast formula with x as resulted score and y as SLA area, to understand number of units that can be absorbed by market. Based on market absorption calculation with forecast formula, it is known that market can absorbed 119,653 m<sup>2</sup> of proposed project.

#### **4.5.4 Hotel**

Hotels in the surrounding area are mostly 3-star hotel, with the highest is 4-star hotel. There is no supply for >4-star hotel. In average, standard rooms is ± 20 m<sup>2</sup>, deluxe is >25 m<sup>2</sup>, superior is ±30 m<sup>2</sup>, executive 48 m<sup>2</sup>, junior suite is 44 m<sup>2</sup>, and suite is more than 50 m<sup>2</sup>.

Occupancy rate for the hotels is mostly good with more than 50%. Based on class, 3-star hotels have average occupancy rate of 65%, budget hotel of 75%, and 4-star hotel of 75%. This shows that demand for budget hotel and 4-star hotels is higher than 3-star hotel.

### **Market Competition**

Within 3 km radius from the site, there are seven 3-star hotels, five budget hotels, and three 4-star hotels. Based on market overview, it can be seen that market demand tends toward budget hotel and 4-star hotel, so that they will be considered as competitors. Competitiveness represents

competition level between projects, while market share shows how much supply that can be absorbed by market.

From data calculation, proposed project has highest score of 4.5, compare to its competitors. One of the strengths from the proposed project is development location will be changed into CBD. Based on weighting calculation for 4-start hotel competitors and proposed project, proposed project has higher score of 4.4, This is due to better location and facilities of the proposed project. In addition, proposed project will be developed as more than 4-star hotel.

Proposed project has highest competitiveness and market share, with 113% competitiveness and 24% market share. Hence, proposed project can be market leader.

### Market Positioning

Market positioning is used to understand proposed project location in the market, by calculation based on weighting score using available rental price. Proposed project rental price estimate is based on forecast formula, with score as x variable and rental price as y variable. Rental price for room at budget hotel is Rp 546,030 per night, while for 4-star hotel room is Rp 1,540,336 per night.

Proposed 4-star hotel project has highest position, compared to its competitors. This shows that proposed project can be market leader in 4-star hotels property.

### Market Absorption

Market absorption used forecast formula with x as resulted score and y as number of units, to obtain number of units that can be absorbed by market. Based on calculation, market can absorb 192 units of budget hotel and

295 units of 4-star hotel from proposed project.

## 4.6 Property Development Program

### Land Development Zonation

Based on zonation as presented in Figure 6, development composition programming on site is determined.



Figure 6. CBD-SIER area development location

CBD-SIER area is 97.4 ha. After deducted by area for road infrastructure and open space, land development area is 91.3 ha. It is assumed that 76% of the total area will be effective land that can be developed, which is 69.39 ha, and non-effective land is 24% or 21.91 ha. Zone with highest percentage is commercial zone with 82%, comprises of various property types, which are business park (21%), MICE (20%), mixed-use (22%), and super regional mall (37%).

Residential zone is 18% from total effective land or 12.49 ha. There are two property types that are proposed in residential zone, which are apartment (51%) and condovilla (49%). Non-effective land will be developed into recreation area (60%), park (10%), and facilities (30%).



Table 14. CBD-SIER Area Zonation Programming

CBD-SIER Area Programming	Area (ha)	Percentage (%)
Land development area	91,3	100%
<b>EFFECTIVE LAND (76%)</b>	<b>69,39</b>	<b>76%</b>
<b>Residential (18%)</b>	<b>12,49</b>	<b>18%</b>
Apartment	5,37	43%
My Tower Apartment	0,99	8%
Condovilla	6,12	49%
<b>Commercial (82%)</b>	<b>56,90</b>	<b>82%</b>
Business Park	11,95	21%
Business Park 1	2,15	18%
Business Park 2	3,35	28%
Business Park 3	6,45	54%
MICE	11,38	20%
Mixed-Use	12,52	22%
Mixed-Use 1	5,63	45%
Mixed-Use 2	6,88	55%
Super Regional Mall	21,05	37%
<b>NON-EFFECTIVE LAND (24%)</b>	<b>21,91</b>	<b>24%</b>
Recreation (60%)	13,15	60%
Park (10%)	2,19	10%
Facilities (30%)	6,57	30%

#### Property Development Stages

Considering HGB term due date and building physical condition, CBD-SIER Area development is proposed to consist of seven stages:

1. Stage 1, business park, mixed-use, and park development in 2.2 ha land and mixed-use 2 in 6.8 ha.
2. Stage 2, hybrid mall or super regional mall development of 21.05 ha and recreational area of 13.1 ha.
3. Stage 3, MICE development of 11.3 ha, comprises of meeting room, convention center, exhibition hall, and ballroom.
4. Stage 4, hybrid mall development which has been developed on stage 2. In addition, business park will start to be developed with an area of 3.3 ha.
5. Stage 5, 17-tower apartment in an area of 5.3 ha (10,000 unit). Followed by the start of development for business park and some facilities such as hospital,

government office and education facilities.

6. Stage 6, condovilla development of 6.1 ha.
7. Stage 7, mixed-use 1 area development of 5.6 ha.



Figure 7. CBD-SIER area development stages

#### 4.8 Conclusions and Recommendations

##### Conclusions

1. Based on macro market analysis, supply of retail, hotel and apartment property is increasing, while supply of office is decreasing. Hotel and retail property tend to increase, whereas apartment and office tend to decrease, however, this decrease is not significant.
2. Micro market analysis results in property that can be developed at site. Based on the analysis, the property is retail with super regional service level, class A office, exhibition/convention hall, ballroom, budget hotel, four-star hotel, and middle and middle-upper class apartments.
3. Development concept analysis resulted in land zonation, which is planned to consist of two superblocks, one apartment complex, one condovilla complex, hybrid super regional mall, three business park complexes, MICE, facilities, and recreational facility.

## Recommendations

1. Communicate with tenants to convey CBD-SIER Area development plan, so that the timing of the development match with this study.
2. Cooperate with third-parties in developing areas in SIER.
3. Cooperate with big factories in developing SIER.
4. Develop SIER management concept in line with smart and green concept which later will be geared towards sustainable development.

## Acknowledgment

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# Commercial Property Development Program of Highest and Best Use Study in Industrial Area SIER Surabaya

*by I Gede Oka Pribadi*

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# **COMMERCIAL PROPERTY DEVELOPMENT PROGRAM OF HIGHEST AND BEST USE STUDY IN INDUSTRIAL AREA SIER SURABAYA**

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## **ABSTRACT**

Part of SIER (Surabaya Industrial Estate Rungkut) Area is planned to become CBD (Central Business District) in accordance with the direction of the Surabaya City Government. The land use is changed due to the decrease of carrying capacity of the infrastructure in the environment around SIER, caused by density increase since MERR (Middle East Ring Road) was opened in 2012. In addition, some of the areas that became CBD areas are part of the PT SIER area (97.4 ha). Hence, studies need to be carried out to determine alternative land functions. Since CBD is generally dominated by commercial properties, this research focuses on commercial property development programs carried out within the scope of the HBU (Highest and Best Use) Study. This research was conducted through location, site, and market analysis, completed with recommendation for property type in SIER location. The results of this study are the best and highest value proposals for the development of commercial property functions (apartments, offices, shopping areas, and hotels), so that the investment is not high risk. In addition, the result can be used as a policy orientation for all interested parties, especially PT SIER in the development of CBD in its area, related to the development stage that is adjusted to the interests and market conditions.

**Keywords:** Commercial property, Highest and Best Use, Central Business District, SIER.

## **A. INTRODUCTION**

### **Background**

SIER (Surabaya Industrial Estate Rungkut) Industrial Area which started operation in 1974, lately was more developed by the construction of hotels, apartments, housing and commercial buildings in surrounding areas. In the last five years, the environment around SIER Industrial Area was developed relatively fast due to the opening of MERR (Middle East Ring Road) Surabaya Road. This supports the development of Central Business District (CBD) in the area. With this potential, Surabaya city government will chance part of SIER to become CBD Area. Hence, Highest and Best Use (HBU) study is needed to understand property development program that can be applied for CBD-SIER Area.

### **Objective**

In general, this study is expected to support Surabaya city government and PT. SIER in developing SIER main area as CBD area. This study will also used as policy orientation for PT. SIER and other related parties, to develop CBD inside SIER Industrial Area, as well as to provide development alternative for 97.4 ha land (from total area of 246 ha) through the highest and best use of land.



## B. METHODOLOGY

Study development activity scope is preparation, survey activity, data compilation (planning and design), and analysis stage (location, physical/site, market, and development concept), covering data collection, data compilation, problem identification, analysis method and analysis tools.

Analysis methods used are:

1. Location Analysis is done by reviewing SIER Industrial Area master plan, accessibility, transportation network, land use around the site, land proximity, and facilities around the site.
1. Site Analysis is conducted by reviewing site boundaries, site dimension, site circulation, site accessibility, and city planning for the site.
2. Market Analysis is conducted by reviewing market for development plan, to understand market target up to determination of best product concept with competitive price. Analysis tools used are supply and demand, market segmentation and target, market positioning proposed project, and benchmarks.
3. Development Concept Analysis  
Outputs from development concept are property type, building area, unit composition, unit area and CBD-SIER area zonation.

## C. THEORITICAL REVIEW

### Highest and Best Use (HBU)

The Appraisal Institute of Canada defines Highest and Best Use (HBU) as property use analysis that is proper and legal, physically feasible, properly supported and financially feasible, and creating highest value (Beckwith, 2010).

HBU Study has four criteria, which are:

1. physical possibility

2. legal permissibility
3. financial affordability
4. Maximum profitability which results in highest property value

HBU Study is relatively the same with Feasibility Study. The difference is that HBU Study is done when the development function has not been determined, whereas Feasibility Study is done when the property determination is available. The Project is feasible if its estimated value exceeds cost. (Miles, 1996)

### Supply and Demand

1. Supply. Influencing factors are goods price, other related goods price, production cost, number of sellers, and government policy.
2. Demand. Market demand influencing factors are among others: goods price, number of buyers, and number of sales. (Kotler, 1991)

### Land and Property

Land development needs to be studied using comprehensive - integral approach, not only for physical planning but also community planning, which can be done through market analysis related to competitiveness and market share. (Santoso, 2000). Commercial property is based on building or land to be developed, to gain profit from sales or rent. Property is divided into 4 major categories which are: residential, commercial, industrial, and open land. Apartment (ULI, 2003), eventhough is highrise building, is identified as multifamily housing building, and included in residential building. (ULI, 2004)

## D. ANALYSIS

### 4.1 Location Analysis

Table 1. Location analysis

No	Aspect	Conclusion
1	Regulatory Issues	SIER Industrial Area is included in Rungkut Development Unit, with development focus on housing, education, environmental protection and development for industrial purpose. This caused SIER Industrial Area to have potential for housing or residential property development.
2	Accessability and Transportation	Located in artery road and close to toll road, making SIER Industrial Area has the potential to be developed as property which needs mobility, such as office, hotel and residential.
3	Facility	There are various facilities in the radius 1-3 km of SIER Industrial Area. This shown that the needs of property type that will be developed will be fulfilled from the education to health facilities.
4	Proximity	Economy activity center (IDX BEI) is 12 km away. Airport can be reached in about 20 minutes (16 km away). This makes property to be developed has easy access to activity centers.
5	Surrounding Land Characteristics	Dominated by housing land use and rental house (boarding and rental house) due to high demand of housing needs for employees or workers, makes residential property has potential to be developed in SIER Industrial Area.
6	Surrounding Area Development	Development in the last 5 years in SIER Industrial Area are mostly commercial such as hotel and offices. Hence, hotel and offices are potential to be developed SIER Industrial Area.
7	SIER Industrial Area Condition	Complete utilities shown that SIER Industrial Area is ready to support various property types. Current land price is Rp 30.000.000/m <sup>2</sup> , a rapid increase compared to previous year price of Rp 10.000.000/m <sup>2</sup> . This shows that property that will be developed in SIER Industrial Area has good investment chance.

### 4.2. Site Analysis

The main road is an artery road from West to East, is located within the site which has a total area of 97.4 ha. Current site can be seen from land use in the site and industrial land ownership zone (Figure 3).

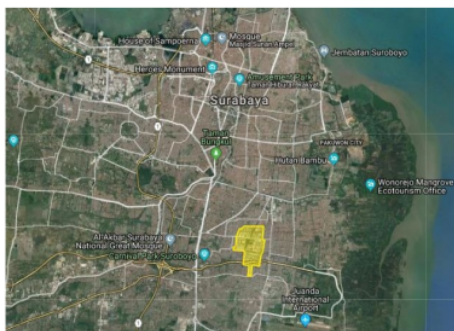


Figure 1. SIER area in Surabaya  
(Source : googlemap)

SWOT analysis is used to understand strength, weakness, opportunity, and threat from the site to be developed. This analysis will be useful in understanding strategy to utilize strength and opportunities and avoid threats that can arise (Table 2).



Figure 2. Site in SIER area of 97.4 ha  
(Source : googlemap)



Figure 3. Land use SIER 97.4 ha

Table 2. Site Development - SWOT

			<b>Strength</b> <ul style="list-style-type: none"> <li>• Site has no contour</li> <li>• Connected to toll entrance and exit gate</li> <li>• Has dense tree populations (green)</li> <li>• Has artificial lake</li> <li>• Close to city center</li> </ul>	<b>Weakness</b> <ul style="list-style-type: none"> <li>• There are industrial buildings within the site</li> <li>• Buildings are mostly permanent</li> <li>• Has mainroad, causing limited privacy</li> </ul>
<b>Opportunity</b> <ul style="list-style-type: none"> <li>• Tenants are mostly big companies</li> <li>• Commercial properties are available within the site</li> <li>• Property development of Surabaya is from North to South. (SIER is located in the South of Surabaya)</li> </ul>	<b>S-O</b> <ul style="list-style-type: none"> <li>• Utilize artificial lake as attraction</li> <li>• Development shall not disturb dense tree population</li> <li>• Cooperate to develop site with big company tenants</li> <li>• Develop commercial property that can attract market from city center</li> </ul>	<b>W-O</b> <ul style="list-style-type: none"> <li>• Negotiate with tenants for best alternative</li> <li>• Estimate time needed for site development readiness</li> <li>• Create different route for heavy vehicles and private vehicles</li> </ul>		
<b>Threat</b> <ul style="list-style-type: none"> <li>• There are already other CBDs in Surabaya city center</li> </ul>	<b>S-T</b> <ul style="list-style-type: none"> <li>• Commercial development has to have uniqueness to differentiate with other CBDs</li> </ul>	<b>W-T</b> <ul style="list-style-type: none"> <li>• Development has to be done integrated with already developed industry in the surrounding</li> </ul>		

### 4.3. Surabaya City Macro Economy Analysis

#### Surabaya Commercial Property Condition

Commercial property supply development rate in Surabaya tends to decrease for apartment and offices property, eventhough there is still increase every year. From the third quarter of 2016 and third quarter fo 2017, office supply has the highest increase which is 30% (qtq). Property with contract development every year is hotel. Eventhough with lower number of supplies compare to office supplies, hotel tends to increase each year.

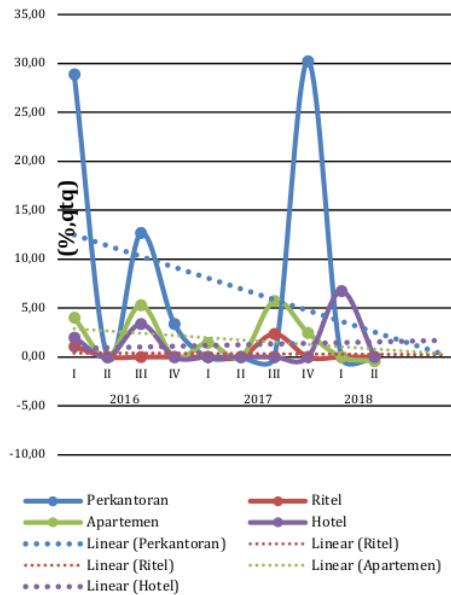


Figure 4. Surabaya commercial property supply condition in 2016-2018  
(Source: Bank Indonesia.  
<https://www.bi.go.id>)

### 4.4. Benchmark Analysis

Benchmark analysis is used to measure and compare performance, as well as obtain results from best practices. Industrial areas used as benchmark have similar development concept with SIER Industrial Area, which are Gu'an New Industrial City, Vasanta Innopark-MM2100, and Jababeka City.

### 4.5. Micro Market Analysis

#### 4.5.1 Apartment

Most of apartments are located to the North of the site, such as in Wonocolo area and in the mixed-use development area.

To understand apartment market demand, rental price and take up rate from each competitor needs to be obtained. Unit rental price can represent market demand, as the higher the demand, hence the property product price will also be higher.

Based on Table 4, apartment rental rate is from Rp 10,000,000 to Rp 22,000,000/m<sup>2</sup>, and take up rate for each apartment is >60%. This shows that more than 60% apartment supply has been absorbed by market.

Table 3. Apartment unit supply around the site (radius 3 km)

Project Name	Status	Unit	Unit Size (m <sup>2</sup> )			
			Studio	1 BR	2BR	3 BR
My Tower Apartment	Strata	1.200		30	37	
Madison Avenue Tower A	Strata	2.500	19	33	48	
Tamansari Papilio	Strata	446	20		36	
Metropolis Apartment	Strata	831	24	33	49	73
Bess Mansion	Strata	723	23		41	
Skysuites SOHO	Strata	-	110	137		
The City Square Tower 2						
- Apartment	Strata	400	21	33		
- SOHO	Strata	8	224	228	241	

Tabel 4. Apartment demand around the site (radius 3 km)

Project Name	Status	Sell Price (Rp/m <sup>2</sup> )	Take Up Rate (%)
My Tower Apartment	Finishing	11.070.000	60%
Madison Avenue Tower A	Construction	20.630.000	70%
Tamansari Papilio	Operate	21.250.000	70%
Metropolis Apartment	Operate	10.410.000	90%
Bess Mansion	Construction	16.660.000	60%
Skysuites SOHO	Operate	22.720.000	60%
The City Square Tower 2 Apartment & SOHO	Construction	11.070.000	90%

#### Market Competition

There are 7 apartments located within 3 km radius, with middle class market.

In addition to apartment competitors, competitiveness and market share also need to be analysed with Scoring Method. Competitiveness represents

competitiveness between projects, while market share shows supply that will be absorbed by market.

Based on criteria in Table 5, Scoring Method is done on competitors and proposed project condition.



Table 5. Apartment weighting criteria

Aspect	Criteria	Indicator	Weight
Location	Accessability	On local road	1
		On collector road and within > 3 km from exit toll	2
		On collector road and within > 3 km from exit toll	3
		On artery road and within > 3 km from exit toll	4
		On artery road and within < 3 km from exit toll	5
	Public Transportation	No public transportation	1
		No existing public transportation, however plan is available	2
		Passed by 1 public transport	3
		Passed by > 1 public transport	4
		Passed by >1 public transport and plan for more	5
	Proximity	No activity center within 2 km radius	1
		There is 1 activity center within 2 km radius	2
		There are 2 activity centers within 2 km radius	3
		There are 3 activity centers within 2 km radius	4
		There are >3 activity centers within 2 km radius	5
Facility	Internal	Has standard facility	1
		Has 1 non-standard facility	2
		Has 2 non-standard facilities	3
		Has 3 non-standard facilities	4
		Has >3 non-standard facilities	5
	External	No facility within 200 m radius	1
		There is 1 facility within 200 m radius	2
		There are 2 facilities within 200 m radius	3
		There are 3 facilities within 200 m radius	4
		There are >3 facilities within 200 m radius	5
Building	Project Location	<i>Single Building</i>	1
		Together with 1 other property type	2
		Together with 2 other property types	3
		Together with 3 other property types	4
		In superblock	5
Concept	Concept Uniqueness	No concept	1
		Has concept but not unique	2
		Has unique concept	3
		Has unique concept as identity	4
		Has unique concept as identity, smart and green	5

Table 6. Apartment and SOHO score

Project Name	Location			Location	Facility	Project Location	Concept	Score
	Accessi- bility	Trans- porta- tion	Proximity					
	40%	30%	30%	20%	40%	20%	20%	
My Tower Apartment	5	4	3	4,1	2,5	1	1	2,22
Madison Avenue Tower A	4	4	3	3,7	3,5	3	2	3,14
Tamansari Papilio	5	4	3	4,1	4	4	4	4,02
Metropolis Apartment	2	4	3	2,9	2,5	2	3	2,58
Bess Mansion	4	4	3	3,7	4	3	3	3,54
Skysuites SOHO	3	1	3	2,4	3,5	4	5	3,68
The City Square Tower 2 Apartment & SOHO	2	2	3	2,3	3	4	3	3,06
<b>Proposed Project</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>4,1</b>	<b>4,5</b>	<b>5</b>	<b>5</b>	<b>4,62</b>

Table 7. Apartment competitiveness and market share

Project Name	Score	Competitiveness (%)	Market Share (%)
My Tower Apartment	2,22	56%	11%
Madison Avenue Tower A	3,14	79%	15%
Tamansari Papilio	4,02	101%	19%
Metropolis Apartment	2,58	65%	14%
Bess Mansion	3,54	89%	18%
The City Square Tower 2 Apartment	3,06	77%	14%
<b>Proposed Project</b>	<b>4,62</b>	<b>116%</b>	<b>21%</b>

Table 8. Apartment price and market share

Project Name	Score	Market Share (%)	Price/m <sup>2</sup> (Rp)
My Tower Apartment	2,22	9%	11.070.000
Madison Avenue Tower A	3,14	13%	20.630.000
Tamansari Papilio	4,02	17%	21.250.000
Metropolis Apartment	2,58	11%	10.410.000
Bess Mansion	3,54	15%	16.660.000
The City Square Tower 2 Apartment	3,68	15%	11.070.000
<b>Proposed Project</b>	<b>4,62</b>	<b>19%</b>	<b>21.295.433</b>

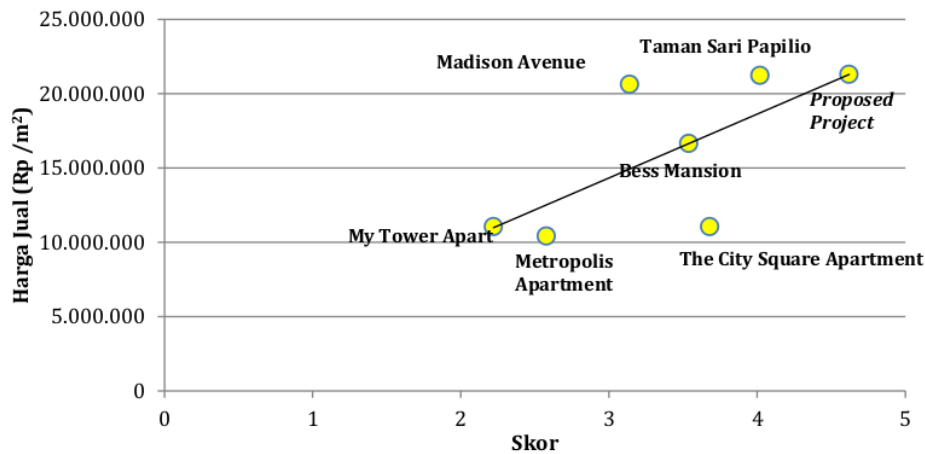


Figure 5. Apartment competitor and proposed project positioning

Based on weighting in Table 6, proposed project has highest score of 4.62, compared to others.

Table 7 shows that proposed project has highest competitiveness of 116%. This indicates that proposed apartment has high competitiveness compared to competitors.

Proposed project market share is 21% more than competitors. Almost all apartments have market share >10%, indicating that there is strong competition in apartment market. Hence, unique selling point need to be created to add property product value. Based on Table 8, proposed project apartment selling price is Rp 21,300,000/m².

From Figure 5, it is shown that proposed project has higher level than competitors. This indicates that

proposed apartment project can be market leader in apartment market.

#### Market Absorption

Market absorption used forecast formula with x as score result dan y as unit number, to obtain number of units that can be absorbed by market.

Tabel 9. Market absorption apartment

Project Name	Score	Number of Unit
My Tower Apartment	2,22	1.200
Madison Avenue Tower A	3,14	2.500
Tamansari Papilio	4,02	446
Metropolis Apartment	2,58	831
Bess Mansion	3,54	723
The City Square Tower 2 Apartment	3,68	400
<b>Proposed Project</b>	<b>4,62</b>	<b>1.604</b>

Based on Table 9, at least 1,604 unit of proposed apartment project can be absorbed.

rent office supply area around the site is 54,000 m<sup>2</sup>. Demand for office can be estimated from selling rate or rent rate with rent price.

#### 4.5.2 Office

There are three office supplies, all with lease and single building type. Total

Table 10. Office supply around the site (radius 3 km)

Project Name	Location	Developer	Year Operation	Tenure	Condition	Single / Mixed-Use Building	Area (m <sup>2</sup> )	Grade
The Samator Office	Rungkut	Samator Land	2016	Lease	Operate	Single	35.000	A
Graha Pena II Office	Gayungan	Jawa Pos Group	2014	Lease	Operate	Single	12.000	A
PT. SIER Office	Rungkut	PT. SIER	1985	Lease	Operate	Single	7.600	B

Table 11. Office demand around the site (radius 3 km)

Project Name	Rent Price (Rp /m <sup>2</sup> /month)	Service Charge (Rp)	Rental / Take Up Rate (%)	Tenant List
The Samator Office	250.000	70.000	80%	Samator Gas Industri, Satyadhika Bakti
Graha Pena II Office	186.000	-	85%	Jawa Pos, J TV, Virtual Office
PT. SIER Office	70.000	40.000	75%	PT SIER, Bank Mandiri, Bank BNI, GBI Rungkut

Based on Table 11, rental and take up rate for office space is >75%, indicates high office space demand around the site. Most of offices around the site is lease base. The Samator Office has highest rent price fo Rp 250,000/m<sup>2</sup>/month. This is due to new project and integrated mixed-use terintegrasi in each building.

#### Market Competition

Office property competitor is based on class or grade. The area to be used as CBD has class A Office. Hence, the competitors of the proposed project are Graha Pena II and The Samator Office.

Based on weighting process, proposed project has highest score of 4.2, compared with other offices. Based on calculation, proposed project has highest competitiveness of 113% with

market share of 51%. It can be concluded that proposed project can be market leader.

#### Market Positioning

Market positioning analysis is done to obtain position of the proposed project in the market, by conducting calculation based on weighting result score using available market price. Proposed project rental rate will be calculated using forecast formula, with score as x variable and rental price as y variable. The result obtained for rental price and service charge that can be applied for the proposed project is Rp 425,000/m<sup>2</sup>/month.

Proposed project has higher position compared to competitors, indicates that proposed office project can be market leader.

### Market Absorption

Market absorption is calculated by forecast formula with x as score result and y as number of units, to obtain number of units that can be absorbed or accepted by market. From the calculation, it is obtained that 52,889 m<sup>2</sup> of proposed project area can be absorbed by market, hence this will be minimal area that can be offered to market.

### 4.5.3 Retail or Shopping Center

Total saleable area from shopping center is 489,900 m<sup>2</sup>. Shopping center consists of five shopping areas with regional service level, while the rest will have neighborhood service level, and the ownership is predominantly lease type.

Table 12. Retail or shopping center supply around the site

Project Name	Location	Developer	Year Operation	Tenure	Service Level	Salable Area (m <sup>2</sup> )	Tenant
Maspion Square	Wonocolo	Maspion Group	2003	Lease	Regional	20,000	Convention, Es Teler 77, Gie Hypermart, A&W Restaurant
Plaza Marina	Wonocolo	PT. Trijaya Kartika	2001	Lease / Strata	Neighborhood	9,900	Solaria, Mc. Donald, Minimart, Samsung Galaxy
Trans Studio Mini	Rungkut	CT Corp	2017	Lease	Neighborhood	40,000	Transmart
Galaxy Mall	Mulyorejo	PT. Sinar Galaxy	1996	Lease	Regional	120,000	SOGO, Batik Keris, Celebrity Fitness, Galaxy XXI
Marvell City Mall	Ngagel	PT. Assa Land	2015	Lease	Regional	60,000	CGV Blitz, Maxx Coffee, J.CO, Centro
Surabaya Town Square	Wonokromo	PT. Graha Megaria Raya	2008	Lease	Neighborhood	80,000	Giordano, Optik Melawai, Apple Center, Foodmart
Mall Ciputra World	Mayjen Sungkono	Ciputra Group	2011	Lease	Regional	90,000	Hypermart, XXI, Metro, Fun World
City of Tomorrow	Ahmad Yani	PT. Lippo Malls	2009	Strata / Lease	Regional	70,000	Acer Point, A&W Restaurant

Table 13. Retail or shopping center demand around the site

Project Name	Service Level	Location	Developer	Sell Price (Rp /m <sup>2</sup> )	Rent Price (Rp /m <sup>2</sup> /mth)	Service charge (Rp /m <sup>2</sup> /bln)	Occupancy Rate (%)
Maspion Square	Regional	Wonocolo	Maspion Group	-	150.000	45.000	85%
Plaza Marina	Neighborhood	Wonocolo	PT. Trijaya Kartika	15.000.000	200.000	75.000	80%
Trans Studio Mini	Neighborhood	Rungkut	CT Corp	-	150.000	-	80%
Galaxy Mall	Regional	Mulyorejo	PT. Sinar Galaxy	-	400.000	50.000	95%
Marvell City Mall	Regional	Ngagel	PT. Assa Land	-	300.000	50.000	70%
Surabaya Town Square	Neighborhood	Wonokromo	PT. Graha Megaria Raya	-	200.000	50.000	85%
Mall Ciputra World	Regional	Mayjen Sungkono	Ciputra Group	-	400.000	75.000	90%
City of Tomorrow	Regional	Ahmad Yani	PT. Lippo Malls	18.000.000	300.000	60.000	85%

Sumber: <http://www.kontan.co.id>



Based on the above table, sell price is Rp 15,000,000-Rp 18,000,000/m<sup>2</sup>, while shopping center rent fee is between Rp 150,000/m<sup>2</sup>/month and Rp 400,000/m<sup>2</sup>/month. Service charge per m<sup>2</sup> around the site is Rp 50,000-Rp 75,000. Occupancy rate of shopping center around the site is >70%, hence can be seen that the demand for shopping center is high.

### **Market Competition**

Shopping centers which have similar kind and type with the proposed retail will be considered as competitors, which are rental retail that has regional service level and still in construction > tahun 2010. Based on those criteria, there are 3 malls which are Galaxy Mall, Marvell City Mall, and Mall Ciputra World Surabaya.

After understanding shopping center competitors, competitiveness and market share based on Scoring Method also needs to be ascertained. Competitiveness represents competition level between projects, while market share indicates how much supply can be absorbed by market.

Competitor highest score is Galaxy Mall, which is one of the biggest malls in Surabaya, while proposed project has second highest score of 4.5.

Based on calculation, competition level with proposed project similar competitor is Galaxy Mall, indicates possibility of *head-to-head*. Galaxy Mall has slightly higher market of 27%, compared to *proposed project* of 26%. However, the percentage of each retail is almost the same.

### **Market Positioning**

Market positioning analysis is done to obtain position of the proposed project in the market, by conducting calculation based on weighting result score using

available market price. Proposed project rental rate will be calculated using forecast formula, with score as x variable and rental price as y variable. Based on calculation, recommended proposed project rental price is Rp 467,000/m<sup>2</sup>/month (including service charge). In the positioning, proposed project has higher level compared to its competitors, hence proposed shopping center project can be market leader.

### **Market Absorption**

Market absorption used forecast formula with x as resulted score and y as SLA area, to understand number of units that can be absorbed by market. Based on market absorption calculation with forecast formula, it is known that market can absorbed 119,653 m<sup>2</sup> of proposed project.

#### **4.5.4 Hotel**

Hotels in the surrounding area are mostly 3-star hotel, with the highest is 4-star hotel. There is no supply for >4-star hotel. In average, standard rooms is ± 20 m<sup>2</sup>, deluxe is >25 m<sup>2</sup>, superior is ±30 m<sup>2</sup>, executive 48 m<sup>2</sup>, junior suite is 44 m<sup>2</sup>, and suite is more than 50 m<sup>2</sup>.

Occupancy rate for the hotels is mostly good with more than 50%. Based on class, 3-star hotels have average occupancy rate of 65%, budget hotel of 75%, and 4-star hotel of 75%. This shows that demand for budget hotel and 4-star hotels is higher than 3-star hotel.

### **Market Competition**

Within 3 km radius from the site, there are seven 3-star hotels, five budget hotels, and three 4-star hotels. Based on market overview, it can be seen that market demand tends toward budget hotel and 4-star hotel, so that they will be considered as competitors. Competitiveness represents

competition level between projects, while market share shows how much supply that can be absorbed by market.

From data calculation, proposed project has highest score of 4.5, compare to its competitors. One of the strengths from the proposed project is development location will be changed into CBD. Based on weighting calculation for 4-star hotel competitors and proposed project, proposed project has higher score of 4.4, This is due to better location and facilities of the proposed project. In addition, proposed project will be developed as more than 4-star hotel.

Proposed project has highest competitiveness and market share, with 113% competitiveness and 24% market share. Hence, proposed project can be market leader.

#### Market Positioning

Market positioning is used to understand proposed project location in the market, by calculation based on weighting score using available rental price. Proposed project rental price estimate is based on forecast formula, with score as x variable and rental price as y variable. Rental price for room at budget hotel is Rp 546,030 per night, while for 4-star hotel room is Rp 1,540,336 per night.

Proposed 4-star hotel project has highest position, compared to its competitors. This shows that proposed project can be market leader in 4-star hotels property.

#### Market Absorption

Market absorption used forecast formula with x as resulted score and y as number of units, to obtain number of units that can be absorbed by market. Based on calculation, market can absorb 192 units of budget hotel and

295 units of 4-star hotel from proposed project.

## 4.6 Property Development Program

### Land Development Zonation

Based on zonation as presented in Figure 6, development composition programming on site is determined.



Figure 6. CBD-SIER area development location

CBD-SIER area is 97.4 ha. After deducted by area for road infrastructure and open space, land development area is 91.3 ha. It is assumed that 76% of the total area will be effective land that can be developed, which is 69.39 ha, and non-effective land is 24% or 21.91 ha. Zone with highest percentage is commercial zone with 82%, comprises of various property types, which are business park (21%), MICE (20%), mixed-use (22%), and super regional mall (37%).

Residential zone is 18% from total effective land or 12.49 ha. There are two property types that are proposed in residential zone, which are apartment (51%) and condovilla (49%). Non-effective land will be developed into recreation area (60%), park (10%), and facilities (30%).

Table 14. CBD-SIER Area Zonation Programming

CBD-SIER Area Programming	Area (ha)	Percentage (%)
Land development area	91,3	100%
<b>EFFECTIVE LAND (76%)</b>	<b>69,39</b>	<b>76%</b>
<b>Residential (18%)</b>	<b>12,49</b>	<b>18%</b>
Apartment	5,37	43%
My Tower Apartment	0,99	8%
Condomilla	6,12	49%
<b>Commercial (82%)</b>	<b>56,90</b>	<b>82%</b>
Business Park	11,95	21%
Business Park 1	2,15	18%
Business Park 2	3,35	28%
Business Park 3	6,45	54%
MICE	11,38	20%
Mixed-Use	12,52	22%
Mixed-Use 1	5,63	45%
Mixed-Use 2	6,88	55%
Super Regional Mall	21,05	37%
<b>NON-EFFECTIVE LAND (24%)</b>	<b>21,91</b>	<b>24%</b>
Recreation (60%)	13,15	60%
Park (10%)	2,19	10%
Facilities (30%)	6,57	30%

#### Property Development Stages

Considering HGB term due date and building physical condition, CBD-SIER Area development is proposed to consist of seven stages:

1. Stage 1, business park, mixed-use, and park development in 2.2 ha land and mixed-use 2 in 6.8 ha.
2. Stage 2, hybrid mall or super regional mall development of 21.05 ha and recreational area of 13.1 ha.
3. Stage 3, MICE development of 11.3 ha, comprises of meeting room, convention center, exhibition hall, and ballroom.
4. Stage 4, hybrid mall development which has been developed on stage 2. In addition, business park will start to be developed with an area of 3.3 ha.
5. Stage 5, 17-tower apartment in an area of 5.3 ha (10,000 unit). Followed by the start of development for business park and some facilities such as hospital,

government office and education facilities.

6. Stage 6, condovilla development of 6.1 ha.
7. Stage 7, mixed-use 1 area development of 5.6 ha.



Figure 7. CBD-SIER area development stages

#### 4.8 Conclusions and Recommendations

##### Conclusions

1. Based on macro market analysis, supply of retail, hotel and apartment property is increasing, while supply of office is decreasing. Hotel and retail property tend to increase, whereas apartment and office tend to decrease, however, this decrease is not significant.
2. Micro market analysis results in property that can be developed at site. Based on the analysis, the property is retail with super regional service level, class A office, exhibition/convention hall, ballroom, budget hotel, four-star hotel, and middle and middle-upper class apartments.
3. Development concept analysis resulted in land zonation, which is planned to consist of two superblocks, one apartment complex, one condovilla complex, hybrid super regional mall, three business park complexes, MICE, facilities, and recreational facility.

### Recommendations

1. Communicate with tenants to convey CBD-SIER Area development plan, so that the timing of the development match with this study.
2. Cooperate with third-parties in developing areas in SIER.
3. Cooperate with big factories in developing SIER.
4. Develop SIER management concept in line with smart and green concept which later will be geared towards sustainable development.

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