

BAB V

KESIMPULAN DAN SARAN

A. Kesimpulan

Dari hasil penelitian dan pembahasan tersebut di atas dapat disimpulkan beberapa hal sebagai berikut :

1. Aspek Teknis

- a. Dalam masa pra konstruksi, perencanaan pembangunan Springhill Condotel Lampung telah sesuai dengan standar zoning yang ditetapkan oleh Pemerintah Kota Bandar Lampung.
- b. Dari masa konstruksi, pelaksanaan bangunan telah sesuai dengan peraturan yang berlaku.
- c. Perkiraan masa pasca konstruksi, fasilitas parkir telah sesuai dengan peraturan (Keputusan Direktorat Jenderal Perhubungan Darat).
- d. Ditinjau berdasarkan aksesibilitasnya, maka Proyek Springhill Condotel Lampung dinyatakan sangat strategis sebagai lokasi perumahan dengan jarak tempuh rata-rata 15 menit menuju pusat – pusat kegiatan.

2. Hasil Optimasi

Untuk mendapatkan keuntungan maksimal, maka komposisi optimal dari tipe Springhill Condotel Lampung yang dibangun adalah condotel sebanyak 185 unit, apartemen sebanyak 70 unit, dan penthouse sebanyak 6 unit.. Dimana komposisi *existing* yang ada yaitu tipe condotel sebanyak 185 unit (tetap), apartemen sebanyak 71 unit, dan penthouse sebanyak 7 unit.

3. Aspek Finansial

- a. Berdasarkan komposisi optimal maka analisis finansial proyek Springhill Condotel Lampung belum bisa memberikan nilai yang menguntungkan, dilihat dari hasil analisis diketahui bahwa :
- 1) *Net Present Value* (NPV) sebesar Rp 49.313.445.456,00, dimana lebih besar dibandingkan dengan NPV kondisi existing sebesar Rp 45.152.700.006,00.
 - 2) Nilai *Internal Rate of Return* (IRR) yang didapatkan adalah 9,22%, dimana lebih besar dibandingkan dengan IRR kondisi existing sebesar 9,10%.
 - 3) Nilai *Benefit Cost Ratio* (BCR) didapatkan nilai 1,226, dimana lebih besar dibandingkan dengan BCR kondisi existing sebesar 1,208.
 - 4) Dengan mengikuti komposisi jumlah unit rumah sesuai dengan penelitian ini maka pengembang dapat memperoleh laba yang lebih banyak sebesar Rp. 4.160.745.451,00.
 - 5) Dengan menggunakan analisis sensitivitas:
 - a) Pendapatan turun 10% dan biaya-biaya tetap
 - Nilai NPV sebesar Rp. 83.493.275.871,00 dimana lebih besar dibandingkan dengan NPV kondisi existing sebesar Rp. 79.131.701.416,00.
 - Nilai IRR sebesar 6,16% dimana lebih kecil dibandingkan dengan IRR kondisi existing sebesar 6,37%.

- Nilai BCR sebesar 1,453 dimana lebih besar dibandingkan dengan IRR kondisi existing sebesar 1,433.

b) Pendapatan tetap namun biaya-biaya naik 10%

- Nilai NPV sebesar Rp. 61.647.167.140,00 dimana lebih besar dibandingkan dengan NPV kondisi existing sebesar Rp. 57.462.582.417,00.
- Nilai IRR sebesar 7,96% dimana lebih kecil dibandingkan dengan IRR kondisi existing sebesar 8,15%.
- Nilai BCR sebesar 1,299 dimana lebih besar dibandingkan dengan IRR kondisi existing sebesar 1,281.

c) Pendapatan turun 10% dan biaya-biaya naik 10%

- Nilai NPV sebesar Rp. 95.826.997.554,00 dimana lebih besar dibandingkan dengan NPV kondisi existing sebesar Rp. 91.441.583.828,00.
- Nilai IRR sebesar 4,64% dimana lebih kecil dibandingkan dengan IRR kondisi existing sebesar 4,77%.
- Nilai BCR sebesar 1,557 dimana lebih besar dibandingkan dengan IRR kondisi existing sebesar 1,537.

4. Aspek Pasar

Minat dan pertimbangan konsumen dalam memilih unit Springhill Condotel lampung sangat dipengaruhi oleh faktor lokasi, disusul oleh faktor kelengkapan sarana dan faktor kelengkapan prasarana.

5. Hasil *Life Cycle Cost*.

- a. Dengan menggunakan dasar perhitungan Life Cycle Cost pada proyek pembangunan Springhill Condotel Lampung, untuk item pekerjaan dinding dan lantai, maka didapat total biaya sebesar = Rp. 4.920.439.510,22.
- b. Berdasarkan hasil perhitungan Life Cycle Cost (LCC) proyek pembangunan Springhill Condotel Lampung, untuk item pekerjaan dinding dan lantai, maka hasil rinciannya sebagai berikut yaitu:
 - 1) Biaya modal konstruksi (awal) sebesar Rp 1.846.350.000,00 (42,716%).
 - 2) Biaya pemeliharaan dinding sebesar Rp 1.490.976.159,20 (34,494%).
 - 3) Biaya pemeliharaan lantai sebesar Rp 5.000.262,62 (0,116%).
 - 4) Biaya pengganti komponen pintu dan jendela sebesar Rp 946.851.366,40 (21,906%).
 - 5) Biaya pengganti komponen mekanikal sebesar Rp. 23.855.938,00 (0,552%).
 - 6) Biaya pengganti komponen elektrikal sebesar 9.396.000,00 (0,217%).
 - 7) Biaya pembongkaran sebesar Rp. 2.745.310,00 (0,064%).

B. Saran

- Dapat dijadikan bahan pertimbangan yaitu pengembang disarankan agar melakukan penelitian sejenis pada tahap awal perencanaan sehingga komposisi bangunan dapat menghasilkan *profit* yang maksimal.

- Dalam menentukan biaya perencanaan dengan Life Cycle Cost (LCC) maka dapat dilakukan penelitian lebih lanjut untuk keseluruhan item, terutama item-item pekerjaan yang memiliki pengaruh terbesar di dalam kesatuan suatu proyek.

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Lampiran 1

KUISIONER

Profil Responden

Nama : _____

Pekerjaan : _____

Minat Tipe Springhill Condotel Lampung

- | | | |
|---------------------|---------------------------------|---------------------------------|
| Tipe Condotel | : a. Superior (City) | f. Deluxe B (Sea) |
| | b. Superior A (City) | g. Deluxe (Sea) |
| | c. Superior B (City) | h. Suite (Sea) |
| | d. Grand Deluxe (Sea) | i. Executive Suite (Sea) |
| | e. Deluxe A (Sea) | j. Junior Suite (City) |
|
Tipe Apartement |
: a. Ruby (1 Bedroom, City) |
f. Emerald (1 Bedroom, Sea) |
| | b. Ruby (3 Bedroom, City) | g. Emerald (2 Bedroom, City) |
| | c. Ruby (3 Bedroom, Sea) | h. Emerald (2 Bedroom, Sea) |
| | d. Topaz (2 Bedroom, City) | i. Sapphire (1 Bedroom, Sea) |
| | e. Topaz (2 Bedroom, Sea) | j. Penthouse (City & Sea) |

PERTANYAAN

Berikan tanda silang (x) pada jawaban yang anda pilih

A. FAKTOR LOKASI

No.	Pertanyaan	1	2	3	4	5
1	Jalan yang dapat menuju lokasi					
2	Sarana transportasi untuk melewati lokasi					
3	Lingkungan condotel tenang dan bebas dari kebisingan					
4	Lingkungan condotel bebas dari banjir					

B. FAKTOR KELENGKAPAN SARANA

No.	Pertanyaan	1	2	3	4	5
1	Kondisi jalan kawasan di lingkungan condotel baik					
2	Kondisi fasilitas listrik memadai					
3	Kondisi fasilitas air bersih memadai					

4	Kondisi keamanan di lingkungan condotel terjamin					
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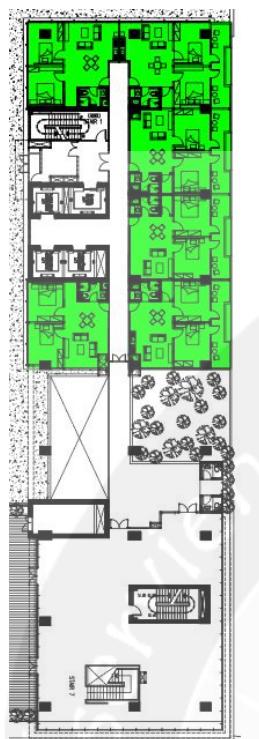
C. FAKTOR KELENGKAPAN PRASARANA

No.	Pertanyaan	1	2	3	4	5
1	Lingkungan condotel dekat dengan fasilitas perbelanjaan					
2	Lingkungan condotel dekat dengan fasilitas rekreasi					
3	Lingkungan condotel dekat dengan fasilitas kesehatan					
4	Lingkungan condotel dekat dengan fasilitas pendidikan					
5	Lingkungan condotel dekat dengan fasilitas pemerintahan					
6	Lingkungan condotel dekat dengan fasilitas perkantoran					
7	Lingkungan condotel dekat dengan fasilitas olah raga					
8	Lingkungan condotel dekat dengan fasilitas kuliner					
9	Lingkungan condotel dekat dengan fasilitas peribadahan					

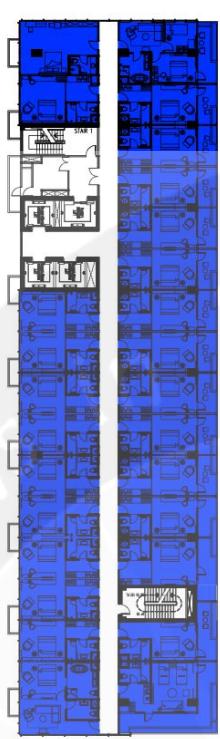
* Keterangan : 5 = Sangat Setuju, 4 = Setuju, 3 = Ragu-Ragu, 2 = Tidak Setuju, 1 = Sangat Tidak Setuju

Lampiran 2

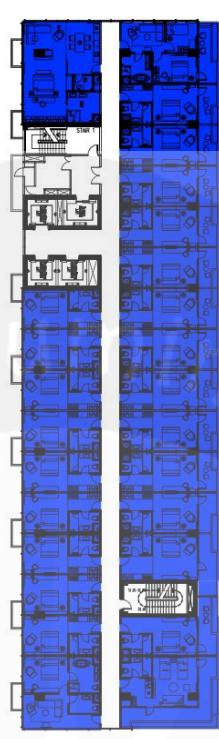
Gambar Site Plan Original :



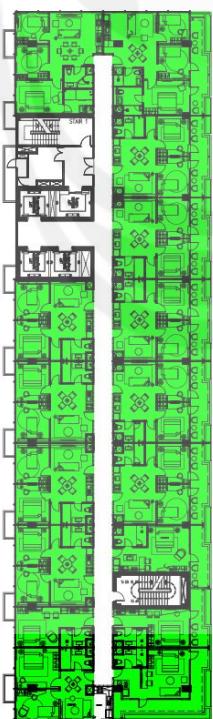
Lantai 4



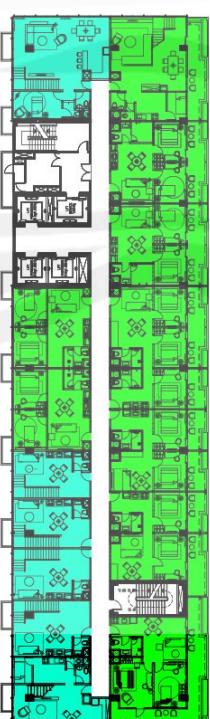
Lantai 5-7



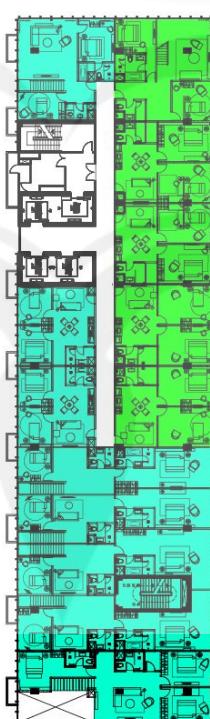
Lantai 8-11



Lantai 12-14



Lantai 15



Lantai 16

Keterangan:



APARTEMEN (70 unit)



CONDOTEL (185 unit)



PENTHOUSE (6 unit)

Lampiran 3

Gambar Denah Tipe Condotel :



Gambar Denah Tipe Superior

Lantai 6-12 (63 unit)



Gambar Denah Tipe Superior A

Lantai 6-8 (3 unit)



Gambar Denah Tipe Superior B

Lantai 6-8 (3 unit)



Gambar Denah Tipe Grand Deluxe

Lantai 6-12 (7 unit)



Gambar Denah Tipe Deluxe A

Lantai 6-12 (7 unit)



Gambar Denah Tipe Deluxe B

Lantai 6-12 (7 unit)



Gambar Denah Tipe Deluxe

Lantai 6-12 (77 unit)



Gambar Denah Tipe Suite

Lantai 6-12 (7 unit)



Gambar Denah Tipe Executive Suite

Lantai 9-12 (4 unit)



Gambar Denah Tipe Junior Suite

Lantai 6-12 (7 unit)

Lampiran 4

Gambar Denah Tipe Apartemen :



Gambar Denah Tipe 1 Bedroom Ruby

Lantai 15-17 (3 unit)



Gambar Denah Tipe 1 Bedroom Sapphire

Lantai 15-17 (3 unit)



Gambar Denah Tipe 1 Bedroom Ruby

Lantai 15-17 (6 unit)



Gambar Denah Tipe 2 Bedroom Topaz (City)

Lantai 15-17 (12 unit) + Lantai 18-19 (4 unit) *)



Gambar Denah Tipe 2 Bedroom Topaz (Sea)
Lantai 5, 15-17 (19 unit) + Lantai 18-19 (11 unit) *)



Gambar Denah Tipe 2 Bedroom Emerald
Lantai 5, 15-17 (5 unit)



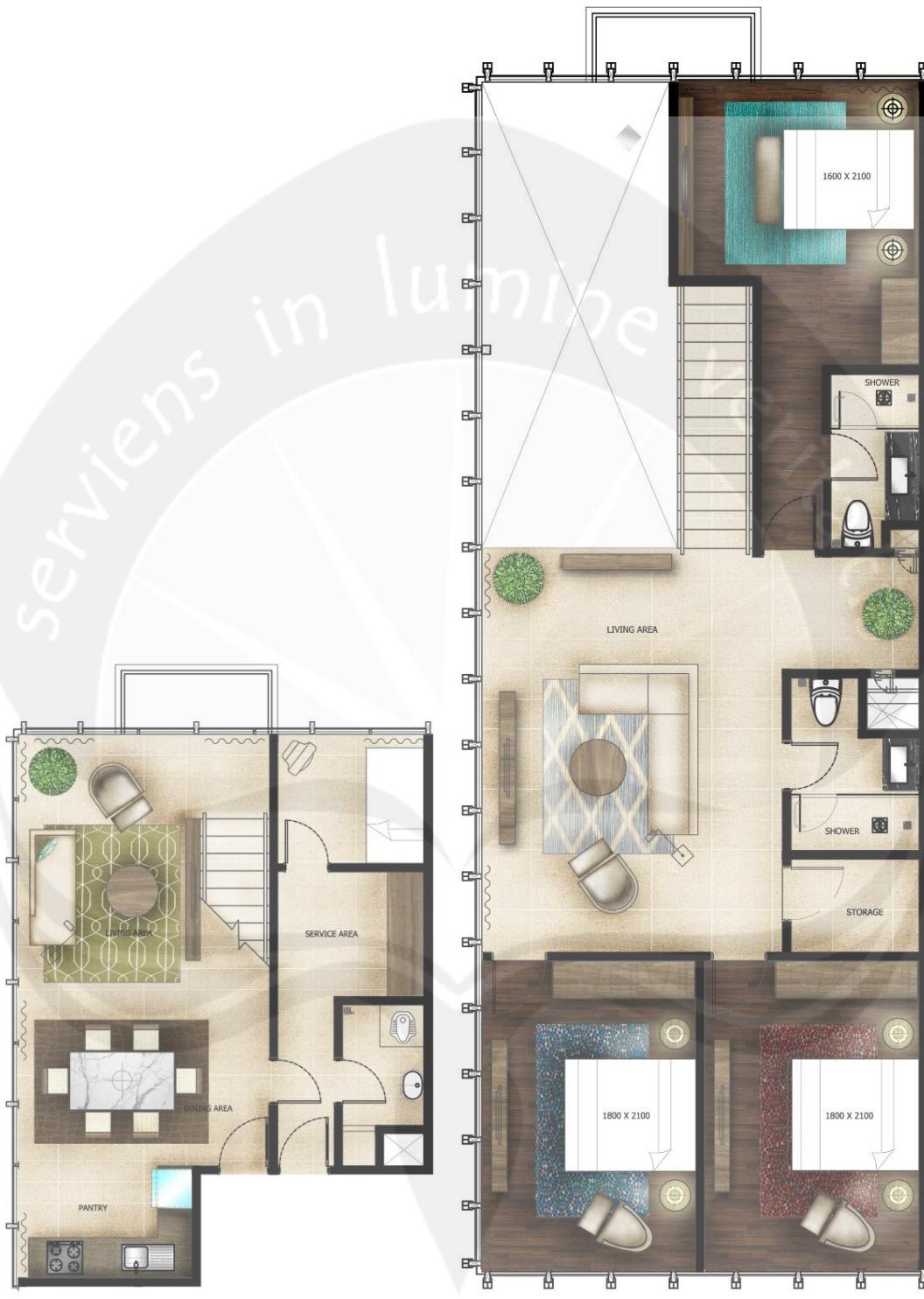
Gambar Denah Tipe 3 Bedroom Ruby (City)
Lantai 15-17 (3 unit)



Gambar Denah Tipe 1 Bedroom Ruby (Sea)
Lantai 15-17 (3 unit) + Lantai 18 (1 unit) *)

Lampiran 5

Gambar Denah Tipe Penthouse :



Lantai 18

Lantai 19

Gambar Denah Tipe Penthouse A (1 unit)



Lantai 18

Lantai 19

Gambar Denah Tipe Penthouse B (1 unit)



Lantai 18

Lantai 19

Gambar Denah Tipe Penthouse C (1 unit)



Gambar: Denah Tipe Penthouse D (1 unit)



Lantai 18



Lantai 19

Gambar Denah Tipe Penthouse E (1 unit)



Lampiran 6

Tabulasi Data Hasil Survey :

Responden	Pertanyaan Faktor Lokasi				Pertanyaan Faktor Kelengkapan				Pertanyaan Faktor Kelengkapan Sarana												
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17				
1	4	5	5	4	4	4	5	5	4	5	4	4	5	5	5	5	4				
2	4	3	4	4	4	4	4	5	5	5	5	4	4	4	5	5	5				
3	4	3	5	5	4	5	4	5	4	5	4	4	3	4	5	5	5				
4	5	4	5	5	5	5	5	5	4	5	5	5	5	4	5	5	5				
5	4	5	5	5	5	5	5	5	5	5	5	4	3	3	5	5	5				
6	4	4	4	5	4	4	4	4	4	3	4	3	4	4	5	5	5				
7	5	4	4	4	5	5	5	5	5	4	5	4	5	5	4	4	4				
8	5	5	4	5	3	4	4	5	4	3	5	4	4	4	3	5	5				
9	4	4	4	4	4	4	4	4	5	3	5	4	3	4	3	5	5				
10	3	3	4	4	4	4	4	5	5	5	4	4	3	3	4	5	5				
11	5	4	5	5	4	5	4	5	5	5	4	4	5	5	4	5	5				
12	5	5	5	5	4	4	5	5	4	5	4	4	5	5	5	5	4				
13	4	3	5	5	4	4	4	5	4	5	4	4	4	4	5	5	5				
14	3	3	4	5	4	4	4	4	3	3	4	2	4	3	3	4	5				
15	4	3	5	5	4	4	4	5	4	5	4	4	5	5	4	5	4				
16	4	3	4	4	3	4	4	4	3	5	5	4	4	3	4	5	5				
17	4	4	5	5	5	5	5	5	5	5	4	4	5	5	5	5	5				
18	4	3	5	4	4	4	4	4	4	5	4	3	4	4	5	4	5				
19	4	3	4	5	5	5	5	5	5	5	4	3	3	3	4	5	5				
20	4	3	4	4	4	5	5	4	4	3	4	4	3	3	4	4	5				
21	4	3	4	4	4	5	5	4	4	3	4	4	3	3	4	4	5				
22	4	3	5	5	5	5	5	5	4	5	4	4	5	5	5	5	4				
Rata-Rata	4,14	3,64	4,50	4,59	4,18	4,45	4,45	4,68	4,27	4,41	4,32	3,82	4,05	4,05	4,32	4,77	4,77				
Nilai	82,73	72,73	90,00	91,82	83,64	89,09	89,09	93,64	85,45	88,18	86,36	76,36	80,91	80,91	86,36	95,45	95,45				

Lampiran 7

Hasil Uji Validitas dan Reliabilitas :

A. Uji Validitas

1. Faktor Lokasi

Correlations

		Lokasi1	Lokasi2	Lokasi3	Lokasi4	LokasiTotal
Lokasi1	Pearson Correlation	1	,548**	,249	,207	,733**
	Sig. (2-tailed)		,008	,264	,355	,000
	N	22	22	22	22	22
Lokasi2	Pearson Correlation	,548**	1	,236	,207	,791**
	Sig. (2-tailed)	,008		,291	,355	,000
	N	22	22	22	22	22
Lokasi3	Pearson Correlation	,249	,236	1	,462*	,641**
	Sig. (2-tailed)	,264	,291		,030	,001
	N	22	22	22	22	22
Lokasi4	Pearson Correlation	,207	,207	,462*	1	,610**
	Sig. (2-tailed)	,355	,355	,030		,003
	N	22	22	22	22	22
LokasiTotal	Pearson Correlation	,733**	,791**	,641**	,610**	1
	Sig. (2-tailed)	,000	,000	,001	,003	
	N	22	22	22	22	22

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

2. Faktor Kelengkapan Prasarana

Correlations

		Prasarana1	Prasarana2	Prasarana3	Prasarana4	PrasaraTotal
Prasarana1	Pearson Correlation	1	,664**	,664**	,386	,889**
	Sig. (2-tailed)		,001	,001	,076	,000
	N	22	22	22	22	22
Prasarana2	Pearson Correlation	,664**	1	,633**	,232	,818**
	Sig. (2-tailed)	,001		,002	,300	,000
	N	22	22	22	22	22
Prasarana3	Pearson Correlation	,664**	,633**	1	,232	,818**
	Sig. (2-tailed)	,001	,002		,300	,000
	N	22	22	22	22	22

Prasarana4	Pearson Correlation		,386		,232		,232		1		,576**
	Sig. (2-tailed)		,076		,300		,300				,005
	N		22		22		22		22		22
PrasaraTota	Pearson Correlation		,889**		,818**		,818**		,576**		1
I	Sig. (2-tailed)		,000		,000		,000		,005		
	N		22		22		22		22		22

**. Correlation is significant at the 0.01 level (2-tailed).

3. Faktor Kelengkapan Sarana

Correlations											
		Sarana 1	Sarana 2	Sarana 3	Sarana 4	Sarana 5	Sarana 6	Sarana 7	Sarana 8	Sarana 9	Sarana Total
Sarana 1	Pearson Correlation	1	,212	,173	,268	-,114	,154	,115	,240	,064	,427*
	Sig. (2-tailed)		,345	,442	,228	,614	,493	,611	,282	,777	,048
	N		22	22	22	22	22	22	22	22	22
Sarana 2	Pearson Correlation	,212	1	-,095	,324	,347	,347	,596**	,495*	-,239	,752**
	Sig. (2-tailed)		,345	,674	,141	,113	,113	,003	,019	,284	,000
	N		22	22	22	22	22	22	22	22	22
Sarana 3	Pearson Correlation	,173	-,095	1	,386	-,038	-,038	-,311	,138	,138	,182
	Sig. (2-tailed)		,442	,674		,076	,868	,868	,159	,541	,418
	N		22	22	22	22	22	22	22	22	22
Sarana 4	Pearson Correlation	,268	,324	,386	1	,209	,401	,144	,394	-,171	,635**
	Sig. (2-tailed)		,228	,141	,076		,350	,064	,523	,069	,445
	N		22	22	22	22	22	22	22	22	22
Sarana 5	Pearson Correlation	-,114	,347	-,038	,209	1	,866**	,211	,161	-,628**	,611**
	Sig. (2-tailed)		,614	,113	,868	,350		,000	,345	,473	,002
	N		22	22	22	22	22	22	22	22	22
Sarana 6	Pearson Correlation	,154	,347	-,038	,401	,866**	1	,290	,293	-,628**	,740**
	Sig. (2-tailed)		,493	,113	,868	,064	,000		,190	,186	,002
	N		22	22	22	22	22	22	22	22	22
Sarana 7	Pearson Correlation	,115	,596**	-,311	,144	,211	,290	1	,247	-,218	,554**
	Sig. (2-tailed)		,611	,003	,159	,523	,345	,190		,269	,329
	N		22	22	22	22	22	22	22	22	22
Sarana 8	Pearson Correlation	,240	,495*	,138	,394	,161	,293	,247	1	-,035	,610**
	Sig. (2-tailed)		,282	,019	,541	,069	,473	,186		,269	,876
	N		22	22	22	22	22	22	22	22	22
Sarana 9	Pearson Correlation	,064	-,239	,138	-,171	-,628**	-,628**	-,218	-,035	1	-,330
	Sig. (2-tailed)		,777	,284	,541	,445	,002	,002	,329	,876	,133
	N		22	22	22	22	22	22	22	22	22
Sarana Total	Pearson Correlation	,427*	,752**	,182	,635**	,611**	,740**	,554**	,610**	-,330	1
	Sig. (2-tailed)		,048	,000	,418	,001	,003	,000	,007	,003	,133
	N		22	22	22	22	22	22	22	22	22

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Keterangan :

$r_{hitung} > r_{tabel} (0,423)$ untuk taraf signifikansi 5%

B. Uji Realibilitas

Case Processing Summary

		N	%
Cases	Valid	22	100,0
	Excluded ^a	0	,0
	Total	22	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,806	17

Keterangan :

Nilai Cronbach's Alpha (0,806) > 0,6.

C. Tabel Nilai – Nilai r Product Moment

N	Tarif Signif		N	Tarif Signif		N	Tarif Signif	
	5%	1%		5%	1%		5%	1%
3	0,997	0,999	12	0,576	0,708	21	0,433	0,549
4	0,950	0,990	13	0,553	0,684	22	0,423	0,537
5	0,878	0,959	14	0,532	0,661	23	0,413	0,526
6	0,811	0,917	15	0,514	0,641	24	0,404	0,515
7	0,754	0,874	16	0,497	0,623	25	0,396	0,505
8	0,707	0,834	17	0,482	0,606	26	0,388	0,496
9	0,666	0,798	18	0,468	0,590	27	0,381	0,487
10	0,632	0,765	19	0,456	0,575	28	0,374	0,478
11	0,602	0,735	20	0,444	0,561	29	0,367	0,470

Sumber: Statistika Deskriptif, 2015

Lampiran 8

Perhitungan Pendapatan :

A. Penjualan Unit

1. Penjualan Unit Periode 2014 s/d 2015

Bulan/Tahun	Unit Yang Terjual (Buah)	Condotel	Apartemen
Juni 2014 - September 2014	8	4	4
Oktober 2014 - Januari 2015	2	2	0
Februari 2015 - Mei 2015	0	0	0
Juni 2015 - September 2015	12	10	2
Jumlah	22	16	6

2. Pendapatan Penjualan Unit

No.	Tahun	Penjualan Unit (Rp)	Perkiraan Jualan Unit		
			Condotel	Apartemen	Penthouse
1	2014	10.133.518.726	6	4	
2	2015	32.888.059.442	17	12	
3	2016	34.549.567.355	17	11	
4	2017	43.185.237.923	20	12	1
5	2018	51.820.908.492	23	13	2
6	2019	57.034.244.438	25	15	2
7	2020	50.085.694.367	42	3	1
8	2021	34.277.947.968	35		
9	2022				
10	2023				

3. Iuran Bulanan Selama 1 Tahun Sejak Beroperasi (Tahun 2017)

No	Type	Jumlah	Luas (m2)	IuranBulanan/m2 (Rp)	Total Iuran per bulan (Rp)
1	Condotel	185	9431,23	25.000	235.780.750
2	Apartemen+Penthouse	76	7568,52	25.000	189.213.000
Total Iuran Per Bulan					424.993.750

Total Iuran Per Tahun	5.099.925.000
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4. Iuran Bulanan Sesuai dengan Penjualan Unit Sejak Beroperasi 2017

Tahun	Total Iuran/Tahun (Rp)
2017	2.038.043.218
2018	2.866.148.450
2019	3.779.132.969
2020	4.564.638.973
2021	5.099.925.000
2022	5.609.917.500
2023	5.609.917.500

B. Penyewa Kios

1. Pendapatan Penyewa Kios (Tahun 2017)

No	Lantai	Sewa	Luas (m ²)	Harga sewa/m ²	Harga Sewa/bln
1	Basement 1	Kantin	79,37	300.000	23.811.000
2	Basement 2	Retail 1 s/d 5	515,85	300.000	154.755.000
2	Lantai Dasar	Cafe/Coffee Shop	352,12	300.000	105.636.000
		Retail 1 s/d 9	774,50	300.000	232.350.000
3	Lantai 1	Retail A, B, C & Resto	692,00	300.000	207.600.000
4	Lantai 3	Spa & Sauna	164,05	300.000	49.215.000
		Fitness Hall	166,64	300.000	49.992.000
		Retail 1 s/d 4 & Resto, Outdoor Resto	817,30	300.000	245.190.000
5	Lantai 4	Resto 1 & Outdoor Resto	482,80	300.000	144.840.000
6	Lantai 17	Resto 1 s/d 5 & Teras	974,90	300.000	292.470.000
Pendapatan per bulan					1.505.859.000
Pendapatan per tahun					18.070.308.000

2. Iuran Bulanan Selama 1 Tahun Sejak Beroperasi (Tahun 2017)

No	Lantai	Sewa	Luas (m2)	Iuran bulanan/m2	Total Iuran/bln
1	Basement 1	Kantin	79,37	50.000	3.968.500
2	Basement 2	Retail 1 s/d 5	515,85	50.000	25.792.500
2	Lantai Dasar	Cafe/Coffee Shop	352,12	50.000	17.606.000
		Retail 1 s/d 9	774,50	50.000	38.725.000
3	Lantai 1	Retail A, B, C & Resto	692,00	50.000	34.600.000
4	Lantai 3	Spa & Sauna	164,05	50.000	8.202.500
		Fitness Hall	166,64	50.000	8.332.000
		Retail 1 s/d 4 & Resto, Outdoor Resto	817,30	50.000	40.865.000
5	Lantai 4	Resto 1 & Outdoor Resto	482,80	50.000	24.140.000
6	Lantai 17	Resto 1 s/d 5 & Teras	974,90	50.000	48.745.000
Total Iuran per bulan					250.976.500
Total Iuran per tahun					3.011.718.000

Lampiran 9

Analisis Kelayakan Springhill Condotel :

A. Perhitungan NPV (10 tahun)

B. Perhitungan Bunga tinggi-rendah untuk menentukan IRR

1. Bunga 10%

Tahun ke	DF 10%	NOI	PV
0	1,00	(261.843.890,000)	(261.843.890,000)
1	0,91	9.018.831,666	8.198.937.878,10
2	0,83	29.270.372,903	24.190.390.828,96
3	0,75	30.749.114,946	23.102.265.173,33
4	0,68	46.151.401,415	31.522.028.150,50
5	0,62	54.533.626,127	33.861.091.285,71
6	0,56	59.310.703,942	33.479.346.148,41
7	0,51	53.787.144,203	27.601.309.704,34
8	0,47	39.506.262,575	18.429.963.055,70
9	0,42	11.289.376,030	4.787.797.487,12
10	0,39	10.594.076,901	4.084.475.256,74
NPV			(52.586.285.031)

2. Bunga 5%

Tahun ke	DF 5%	NOI	PV
0	1,00	(261.843.890,000)	(261.843.890,000)
1	0,95	9.018.831,666	8.589.363.491
2	0,91	29.270.372,903	26.549.091.069
3	0,86	30.749.114,946	26.562.241.612
4	0,82	46.151.401,415	37.968.872.159
5	0,78	54.533.626,127	42.728.523.023
6	0,75	59.310.703,942	44.258.560.467
7	0,71	53.787.144,203	38.225.519.186
8	0,68	39.506.262,575	26.739.393.557
9	0,64	11.289.376,030	7.277.232.447
10	0,61	10.594.076,901	6.503.844.218
NPV			3.558.751.230

C. Perhitungan Arus Kas Kumulatif untuk menentukan *discounted PBP*.

Tahun	Arus Kas	Arus Kas Kumulatif
0	261.843.890.000	261.843.890.000
1	9.018.831.666	252.825.058.334
2	29.270.372.903	223.554.685.431
3	30.749.114.946	192.805.570.485
4	46.151.401.415	146.654.169.070
5	54.533.626.127	92.120.542.944
6	59.310.703.942	32.809.839.002
7	53.787.144.203	(20.977.305.202)
8	39.506.262.575	(60.483.567.777)
9	11.289.376.030	(71.772.943.806)
10	10.594.076.901	(82.367.020.707)

Lampiran 10

Analisis Sensitivitas :

A. Pendapatan turun 10% sedangkan biaya-biaya tetap.

Tahun	C	B	B-C	DF 12%	PV	DF 5%	PV	DF 1%	PV
0	261.843.890.000		(261.843.890.000)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)
1	1.114.687.060	9.120.166.853	8.005.479.793	0,89	7.147.749.815	0,95	7.624.266.470	0,99	7.926.217.617
2	3.617.686.539	29.599.253.497	25.981.566.959	0,80	20.712.346.109	0,91	23.566.047.128	0,98	25.469.627.447
3	3.800.452.409	31.094.610.619	27.294.158.210	0,71	19.427.442.695	0,86	23.577.720.082	0,97	26.491.441.055
4	20.303.784.839	59.674.776.427	39.370.991.588	0,64	25.020.976.919	0,82	32.390.612.214	0,96	37.834.749.059
5	21.235.456.815	68.192.174.647	46.956.717.832	0,57	26.644.502.755	0,78	36.791.817.113	0,95	44.677.705.820
6	22.584.699.465	73.705.863.066	51.121.163.601	0,51	25.899.572.431	0,75	38.147.399.373	0,94	48.158.448.591
7	21.945.215.136	68.159.123.406	46.213.908.269	0,45	20.904.825.143	0,71	32.843.361.799	0,93	43.104.546.621
8	20.953.636.393	54.413.909.071	33.460.272.678	0,40	13.514.042.938	0,68	22.647.229.613	0,92	30.900.000.438
9	17.510.770.070	25.920.131.490	8.409.361.420	0,36	3.032.500.032	0,64	5.420.749.351	0,91	7.689.014.042
10	18.206.069.199	25.920.131.490	7.714.062.291	0,32	2.483.721.603	0,61	4.735.765.079	0,91	6.983.439.959
				NPV	(97.056.209.560,28)		(34.098.921.777,11)		17.391.300.650

B. Pendapatan tetap namun biaya-biaya naik 10%.

Tahun	C	B	B-C	DF 12%	PV	DF 5%	PV	DF 1%	PV
0	261.843.890.000		(261.843.890.000)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)
1	1.226.155.766	10.133.518.726	8.907.362.960	0,89	7.953.002.643	0,95	8.483.202.819	0,99	8.819.171.247
2	3.979.455.192	32.888.059.442	28.908.604.249	0,80	23.045.762.316	0,91	26.220.956.235	0,98	28.338.990.539
3	4.180.497.650	34.549.567.355	30.369.069.705	0,71	21.616.103.960	0,86	26.233.944.243	0,97	29.475.919.857
4	22.169.296.298	66.305.307.141	44.136.010.843	0,64	28.049.232.799	0,82	36.310.805.348	0,96	42.413.838.904
5	23.359.002.497	75.769.082.942	52.410.080.445	0,57	29.738.887.155	0,78	41.064.669.415	0,95	49.866.393.228
6	24.843.169.411	81.895.403.407	57.052.233.996	0,51	28.904.437.275	0,75	42.573.255.420	0,94	53.745.785.196
7	24.139.736.650	75.732.359.340	51.592.622.690	0,45	23.337.882.391	0,71	36.665.913.718	0,93	48.121.370.672
8	23.049.000.033	60.459.898.968	37.410.898.936	0,40	15.109.634.624	0,68	25.321.168.968	0,92	34.548.337.505
9	19.261.847.077	28.800.146.100	9.538.299.023	0,36	3.439.606.249	0,64	6.148.472.596	0,91	8.721.246.652
10	20.026.676.119	28.800.146.100	8.773.469.981	0,32	2.824.822.526	0,61	5.386.149.501	0,91	7.942.507.921
				NPV	(77.824.518.062,81)		(7.435.351.736,76)		50.149.671.722

C. Pendapatan turun 10% dan biaya-biaya meningkat 10%.

Tahun	C	B	B-C	DF 12%	PV	DF 5%	PV	DF 1%	PV
0	261.843.890.000		(261.843.890.000)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)
1	1.226.155.766	9.120.166.853	7.894.011.087	0,89	7.048.224.185	0,95	7.518.105.797	0,99	7.815.852.562
2	3.979.455.192	29.599.253.497	25.619.798.305	0,80	20.423.946.353	0,91	23.237.912.295	0,98	25.114.987.065
3	4.180.497.650	31.094.610.619	26.914.112.969	0,71	19.156.933.999	0,86	23.249.422.714	0,97	26.122.572.888
4	22.169.296.298	59.674.776.427	37.505.480.128	0,64	23.835.410.661	0,82	30.855.851.320	0,96	36.042.029.214
5	23.359.002.497	68.192.174.647	44.833.172.151	0,57	25.439.545.905	0,78	35.127.963.506	0,95	42.657.224.968
6	24.843.169.411	73.705.863.066	48.862.693.655	0,51	24.755.361.270	0,75	36.462.094.326	0,94	46.030.867.739
7	24.139.736.650	68.159.123.406	44.019.386.756	0,45	19.912.135.059	0,71	31.283.756.331	0,93	41.057.676.784
8	23.049.000.033	54.413.909.071	31.364.909.039	0,40	12.667.760.708	0,68	21.229.005.024	0,92	28.964.967.272
9	19.261.847.077	25.920.131.490	6.658.284.413	0,36	2.401.044.108	0,64	4.291.989.499	0,91	6.087.934.600
10	20.026.676.119	25.920.131.490	5.893.455.371	0,32	1.897.534.900	0,61	3.618.070.361	0,91	5.335.268.265
NPV					(104.305.992.851)		(44.969.718.826)		3.385.491.357

Lampiran 11

Hasil LCC Aktual Springhill Condotel Lampung (25 tahun) :

A. Pemasangan Pintu-Jendela

Uraian		Satuan	Volume	Harga Satuan	Jumlah Harga
1 Unit Kusen Jendela Aluminium 2 lubang dgn 2 daun jendela (ukuran 1,6 x 1,5 m)					
a	Profil aluminium 4" natural (+ spare 20 %)	m'	9,24	98.000,00	905.520,00
b	Profil daun jendela alm.(+ spare 20%)	m'	11,04	85.000,00	938.400,00
c	Kaca polos 3 mm	m2	2,40	66.000,00	158.400,00
d	Engsel jendela	ps	4,00	25.000,00	100.000,00
e	Grendel jendela	bh	2,00	19.000,00	38.000,00
f	Kait angin	bh	2,00	10.900,00	21.800,00
g	Acesories (6 % harga bahan)	ls	1,00	120.139,20	120.139,20
h	Upah pembuatan profil (20 % bahan)	ls	1,00	181.104,00	181.104,00
i	Upah pembuatan daun jendela (20 % bahan)	ls	1,00	187.680,00	187.680,00
Jumlah Biaya 1 unit					2.651.043,20
Volume		bh	1		
Biaya pasang		1 x Rp. 2.651.043,20,00			2.651.043,20
1 Unit Kusen Pintu Aluminium ukr 0,9 x 2,7 m					
a	Profil aluminium 4" natural (+ spare 20 %)	m'	7,56	98.000,00	740.880,00
b	Kaca polos 3 mm untuk bovenlight	m2	0,45	66.000,00	29.700,00
c	Daun pintu tekwood	m2	1,68	389.400,00	654.192,00
d	Engsel pintu	ps	3,00	30.000,00	90.000,00
e	Grendel pintu	bh	1,00	29.000,00	29.000,00
f	Kunci tanam	bh	1,00	22.000,00	22.000,00
g	Acesories (6 %)	ls	1,00	46.234,80	46.234,80
h	Upah pembuatan profil (20 % bahan)	ls	1,00	148.176,00	148.176,00
Jumlah Biaya 1 unit					1.760.182,80
Volume		bh	57		
Biaya pasang		57 x Rp. 1.760.182,80,00			100.330.419,60
1 bh Bovenlight Almunium dengan kisi-kisi almunium plat (ukuran 0,5 x 1 m)					
a	Profil Aluminium 4" natural + upah 20%	m'	3,60	66.000,00	237.600,00
b	Plat Aluminium untuk Jalusi	m'	5,00	16.000,00	80.000,00
c	Acesories (6 %)	ls	1,00	14.256,00	14.256,00
d	Upah pembuatan profil (20 % bahan)	ls	1,00	29.635,20	29.635,20
Jumlah Biaya 1 unit					102.600.269,60
Volume		bh	7		

Biaya pasang		7 x Rp. 102.600.269,60		718.201.887,20
1 Unit Pintu Kayu				
a	Profil kayu	m'	9,24	98.000,00
b	Engsel pintu	ps	4,00	30.000,00
c	Grendel pintu	bh	2,00	29.000,00
d	Door holder	bh	2,00	45.000,00
e	Kunci tanam	bh	1,00	75.000,00
f	Acesories (6 % harga bahan)	ls	1,00	120.139,20
g	Upah pembuatan profil (20 % bahan)	ls	1,00	181.104,00
h	Pembantu kayu	org	0,01	65.000,00
i	Tukang kayu	org	0,50	80.000,00
Jumlah Biaya 1 unit				1.590.413,20
Volume		bh	70	
Biaya pasang		70 x Rp. 1.590.413,20		111.328.924,00
1 Unit Pintu kaca frameless				
a	Profil kayu	m'	9,24	98.000,00
b	Engsel pintu	ps	4,00	30.000,00
c	Grendel pintu	bh	2,00	29.000,00
d	Door holder	bh	2,00	45.000,00
e	Kunci tanam	bh	1,00	75.000,00
f	kaca polos	m'	1,10	66.000,00
g	Acesories (6 % harga bahan)	ls	1,00	120.139,20
h	Upah pembuatan profil (20 % bahan)	ls	1,00	181.104,00
i	Pembantu kayu	org	0,01	65.000,00
j	Tukang kayu	org	0,50	80.000,00
Jumlah Biaya 1 unit				1.663.013,20
Volume		bh	7	
Biaya pasang		7 x Rp. 1.663.013,20		11.641.092,40
Total Biaya pasang				944.153.366,40

B. LCC Aktual Springhill Condotel Lampung

No	Deskripsi	Harga (Rp)	%
1	Biaya Awal	1.846.350.000,00	42,716%
2	Pemeliharaan Dinding	1.490.976.159,20	34,494%
3	Pemeliharaan Lantai	5.000.262,62	0,116%
4	Pengganti Komponen Pintu	946.851.366,40	21,906%
5	Pengganti Komponen Mekanikal	23.855.938,00	0,552%
6	Pengganti Komponen Elektrikal	9.396.000,00	0,217%
7	Pembongkaran	2.745.310,00	0,064%
8	Total LCC Aktual	4.322.429.726,22	100%

Lampiran 12

Analisis Cash Flow dengan LCC:

No.	Uraian	8	9	10	11	12	13	14	15	16	17	18	19	20
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
		11	12	13	14	15	16	17	18	19	20	21	22	23
1	Investasi													
2	Penjualan Unit													
3	Disewa Kios	19.877.338.800	19.877.338.800	19.877.338.800	21.865.072.680	21.865.072.680	21.865.072.680	21.865.072.680	21.865.072.680	24.051.579.948	24.051.579.948	24.051.579.948	24.051.579.948	24.051.579.948
4	Service Charge	8.922.807.300	8.922.807.300	8.922.807.300	9.815.088.030	9.815.088.030	9.815.088.030	9.815.088.030	9.815.088.030	10.796.596.833	10.796.596.833	10.796.596.833	10.796.596.833	10.796.596.833
5	Pendapatan	28.800.146.100	28.800.146.100	28.800.146.100	31.680.160.710	31.680.160.710	31.680.160.710	31.680.160.710	31.680.160.710	34.848.176.781	34.848.176.781	34.848.176.781	34.848.176.781	34.848.176.781
6	Biaya Operasional Kantor	16.405.934.507	17.226.231.232	17.226.231.232	18.087.542.794	18.087.542.794	18.991.919.933	18.991.919.933	19.941.515.930	19.941.515.930	20.938.591.727	20.938.591.727	21.985.521.313	21.985.521.313
7	Biaya Pemeliharaan	490.754.402	490.754.402	490.754.402	539.829.842	539.829.842	539.829.842	539.829.842	539.829.842	593.812.826	593.812.826	593.812.826	593.812.826	593.812.826
8	Pengeluaran	16.896.688.908	17.716.985.634	17.716.985.634	18.627.372.635	18.627.372.635	19.531.749.775	19.531.749.775	20.481.345.772	20.535.328.756	21.532.404.552	21.532.404.552	22.579.334.139	22.579.334.139
9	Gross Operating Profit	11.903.457.192	11.083.160.466	11.083.160.466	13.052.788.075	13.052.788.075	12.148.410.935	12.148.410.935	11.198.814.938	14.312.848.025	13.315.772.229	13.315.772.229	12.268.842.642	12.268.842.642
10	Fix Charge	1.309.380.291	1.219.147.651	1.219.147.651	1.435.806.688	1.435.806.688	1.336.325.203	1.336.325.203	1.231.869.643	1.574.413.283	1.464.734.945	1.464.734.945	1.349.572.691	1.349.572.691
11	Biaya Pemeliharaan Dinding	135.543.287		135.543.287		135.543.287		135.543.287		135.543.287		135.543.287		135.543.287
12	Biaya Pemeliharaan Lantai	833.377				833.377				833.377				833.377
13	Biaya Penggantian Komponen Pintu													946.851.366
14	Biaya Penggantian Komponen Mekanikal									23.855.938				
15	Biaya Penggantian Komponen Elektrikal													9.396.000
16	Biaya Life Cycle Cost (LCC)	136.376.664		135.543.287		136.376.664		135.543.287	23.855.938	136.376.664	135.543.287		1.092.624.031	
17	Net Operating Income	10.457.700.236	9.864.012.815	9.728.469.528	11.616.981.386	11.480.604.722	10.812.085.732	10.676.542.445	9.943.089.357	12.602.058.078	11.851.037.283	11.715.493.996	10.919.269.952	9.826.645.921
18	Discount Factor	0,29	0,26	0,23	0,20	0,18	0,16	0,15	0,13	0,12	0,10	0,09	0,08	0,07
19	Present Value (PV)	3.006.338.922	2.531.846.406	2.229.514.125	2.377.064.554	2.097.463.560	1.763.685.393	1.554.977.988	1.292.995.264	1.463.184.346	1.228.558.698	1.084.381.575	902.395.881	725.088.114

No.	Uraian	21	22	23	24	25
		Tahun				
		2037	2038	2039	2040	2041
		24	25	26	27	28
1	Investasi					
2	Penjualan Unit					
3	Disewa Kios	26.456.737.943	26.456.737.943	26.456.737.943	26.456.737.943	26.456.737.943
4	Service Charge	11.876.256.516	11.876.256.516	11.876.256.516	11.876.256.516	11.876.256.516
5	Pendapatan	38.332.994.459	38.332.994.459	38.332.994.459	38.332.994.459	38.332.994.459
6	Biaya Operasional Kantor	23.084.797.379	23.084.797.379	24.239.037.247	24.239.037.247	25.450.989.110
7	Biaya Pemeliharaan	653.194.108	653.194.108	653.194.108	653.194.108	653.194.108
8	Pengeluaran	23.737.991.487	23.737.991.487	24.892.231.356	24.892.231.356	26.104.183.218
9	Gross Operating Profit	14.595.002.972	14.595.002.972	13.440.763.103	13.440.763.103	12.228.811.241
10	Fix Charge	1.605.450.327	1.605.450.327	1.478.483.941	1.478.483.941	1.345.169.236
11	Biaya Pemeliharaan Dinding		135.543.287			
12	Biaya Pemeliharaan Lantai				833.377	
13	Biaya Penggantian Komponen Pintu					
14	Biaya Penggantian Komponen Mekanikal					
15	Biaya Penggantian Komponen Elektrikal					
16	Biaya Life Cycle Cost (LCC)		135.543.287		833.377	
17	Net Operating Income	12.989.552.645	12.854.009.358	11.962.279.162	11.961.445.785	10.883.642.004
18	Discount Factor	0,07	0,06	0,05	0,05	0,04
19	Present Value (PV)	855.779.050	756.115.333	628.268.584	560.915.013	455.690.121

Lampiran 13

Analisis Sensitivitas dengan LCC :

A. Pendapatan turun 10% sedangkan biaya-biaya tetap.

Tahun	C	B	B-C	DF 12%	PV	DF 10%	PV	DF 5%	PV
0	261.843.890.000		(261.843.890.000)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)
1	1.114.687.060	9.120.166.853	8.005.479.793	0,89	7.147.749.815	0,91	7.277.708.903	0,95	7.624.266.470
2	3.617.686.539	29.599.253.497	25.981.566.959	0,80	20.712.346.109	0,83	21.472.369.388	0,91	23.566.047.128
3	3.800.452.409	31.094.610.619	27.294.158.210	0,71	19.427.442.695	0,75	20.506.505.041	0,86	23.577.720.082
4	20.153.905.726	59.674.776.427	39.520.870.701	0,64	25.116.227.805	0,68	26.993.286.457	0,82	32.513.918.132
5	21.371.000.102	68.192.174.647	46.821.174.545	0,57	26.567.591.853	0,62	29.072.265.646	0,78	36.685.615.401
6	22.584.699.465	73.705.863.066	51.121.163.601	0,51	25.899.572.431	0,56	28.856.564.127	0,75	38.147.399.373
7	22.081.591.801	68.159.123.406	46.077.531.605	0,45	20.843.135.266	0,51	23.645.059.411	0,71	32.746.441.450
8	20.953.636.393	54.413.909.071	33.460.272.678	0,40	13.514.042.938	0,47	15.609.464.148	0,68	22.647.229.613
9	17.646.313.357	25.920.131.490	8.273.818.133	0,36	2.983.621.763	0,42	3.508.906.565	0,64	5.333.376.939
10	18.206.069.199	25.920.131.490	7.714.062.291	0,32	2.483.721.603	0,39	2.974.104.950	0,61	4.735.765.079
11	18.342.445.864	25.920.131.490	7.577.685.626	0,29	2.178.403.542	0,35	2.655.932.584	0,58	4.430.515.845
12	18.936.133.285	25.920.131.490	6.983.998.205	0,26	1.792.618.388	0,32	2.225.317.059	0,56	3.888.951.529
13	19.071.676.572	25.920.131.490	6.848.454.918	0,23	1.569.489.109	0,29	1.983.753.446	0,53	3.631.881.862
14	20.063.179.324	28.512.144.639	8.448.965.315	0,20	1.728.825.700	0,26	2.224.876.634	0,51	4.267.301.617
15	20.199.555.988	28.512.144.639	8.312.588.651	0,18	1.518.678.868	0,24	1.989.967.633	0,48	3.998.497.271
16	20.868.074.978	28.512.144.639	7.644.069.661	0,16	1.246.913.346	0,22	1.663.572.274	0,46	3.501.836.387
17	21.003.618.265	28.512.144.639	7.508.526.374	0,15	1.093.574.375	0,20	1.485.521.914	0,44	3.275.945.186

18	21.737.071.353	28.512.144.639	6.775.073.286	0,13	881.027.753	0,18	1.218.556.483	0,42	2.815.182.889
19	22.246.118.703	31.363.359.103	9.117.240.400	0,12	1.058.573.397	0,16	1.490.741.660	0,40	3.608.001.621
20	22.997.139.498	31.363.359.103	8.366.219.605	0,10	867.298.922	0,15	1.243.585.235	0,38	3.153.140.181
21	23.132.682.785	31.363.359.103	8.230.676.318	0,09	761.828.204	0,14	1.112.215.990	0,36	2.954.338.420
22	23.928.906.829	31.363.359.103	7.434.452.274	0,08	614.401.800	0,12	913.292.528	0,34	2.541.466.551
23	25.021.530.860	31.363.359.103	6.341.828.243	0,07	467.950.542	0,11	708.243.695	0,33	2.064.717.302
24	25.343.441.814	34.499.695.013	9.156.253.199	0,07	603.233.219	0,10	929.594.081	0,31	2.839.060.296
25	25.478.985.101	34.499.695.013	9.020.709.912	0,06	530.627.984	0,09	832.575.426	0,30	2.663.840.640
26	26.370.715.297	34.499.695.013	8.128.979.716	0,05	426.940.594	0,08	682.065.725	0,28	2.286.200.230
27	26.371.548.674	34.499.695.013	8.128.146.339	0,05	381.157.879	0,08	619.996.182	0,27	2.177.110.333
28	27.449.352.455	34.499.695.013	7.050.342.558	0,04	295.192.680	0,07	488.894.368	0,26	1.798.497.526
NPV					(79.131.701.416,49)		(57.458.952.448,02)		21.630.375.351,33

B. Pendapatan tetap namun biaya-biaya naik 10%.

Tahun	C	B	B-C	DF 12%	PV	DF 10%	PV	DF 5%	PV
0	261.843.890.000		(261.843.890.000)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)
1	1.226.155.766	10.133.518.726	8.907.362.960	0,89	7.953.002.643	0,91	8.097.602.691	0,95	8.483.202.819
2	3.979.455.192	32.888.059.442	28.908.604.249	0,80	23.045.762.316	0,83	23.891.408.470	0,91	26.220.956.235
3	4.180.497.650	34.549.567.355	30.369.069.705	0,71	21.616.103.960	0,75	22.816.731.559	0,86	26.233.944.243
4	22.169.296.298	66.305.307.141	44.136.010.843	0,64	28.049.232.799	0,68	30.145.489.272	0,82	36.310.805.348
5	23.508.100.112	75.769.082.942	52.260.982.829	0,57	29.654.285.163	0,62	32.449.958.603	0,78	40.947.847.532

6	24.843.169.411	81.895.403.407	57.052.233.996	0,51	28.904.437.275	0,56	32.204.498.742	0,75	42.573.255.420
7	24.289.750.981	75.732.359.340	51.442.608.359	0,45	23.270.023.526	0,51	26.398.192.102	0,71	36.559.301.334
8	23.049.000.033	60.459.898.968	37.410.898.936	0,40	15.109.634.624	0,47	17.452.460.454	0,68	25.321.168.968
9	19.410.944.693	28.800.146.100	9.389.201.407	0,36	3.385.840.154	0,42	3.981.937.955	0,64	6.052.362.943
10	20.026.676.119	28.800.146.100	8.773.469.981	0,32	2.824.822.526	0,39	3.382.552.476	0,61	5.386.149.501
11	20.176.690.450	28.800.146.100	8.623.455.650	0,29	2.479.037.434	0,35	3.022.468.598	0,58	5.041.955.919
12	20.829.746.613	28.800.146.100	7.970.399.487	0,26	2.045.803.029	0,32	2.539.614.906	0,56	4.438.216.672
13	20.978.844.229	28.800.146.100	7.821.301.871	0,23	1.792.440.522	0,29	2.265.552.555	0,53	4.147.803.372
14	22.069.497.256	31.680.160.710	9.610.663.454	0,20	1.966.532.155	0,26	2.530.788.062	0,51	4.854.038.118
15	22.219.511.587	31.680.160.710	9.460.649.123	0,18	1.728.425.224	0,24	2.264.804.182	0,48	4.550.733.987
16	22.954.882.476	31.680.160.710	8.725.278.234	0,16	1.423.281.886	0,22	1.898.874.762	0,46	3.997.150.492
17	23.103.980.092	31.680.160.710	8.576.180.618	0,15	1.249.072.174	0,20	1.696.751.615	0,44	3.741.759.196
18	23.910.778.488	31.680.160.710	7.769.382.222	0,13	1.010.327.280	0,18	1.397.391.685	0,42	3.228.338.789
19	24.470.730.573	34.848.176.781	10.377.446.208	0,12	1.204.891.832	0,16	1.696.795.379	0,40	4.106.707.852
20	25.296.853.447	34.848.176.781	9.551.323.334	0,10	990.154.792	0,15	1.419.743.353	0,38	3.599.793.312
21	25.445.951.063	34.848.176.781	9.402.225.718	0,09	870.266.361	0,14	1.270.528.129	0,36	3.374.857.132
22	26.321.797.512	34.848.176.781	8.526.379.269	0,08	704.641.388	0,12	1.047.431.362	0,34	2.914.741.654
23	27.523.683.946	34.848.176.781	7.324.492.835	0,07	540.459.353	0,11	817.985.867	0,33	2.384.644.697
24	27.877.785.995	38.332.994.459	10.455.208.464	0,07	688.811.124	0,10	1.061.471.291	0,31	3.241.824.640
25	28.026.883.611	38.332.994.459	10.306.110.848	0,06	606.239.518	0,09	951.212.788	0,30	3.043.423.099
26	29.007.786.827	38.332.994.459	9.325.207.632	0,05	489.767.453	0,08	782.435.770	0,28	2.622.628.248
27	29.008.703.542	38.332.994.459	9.324.290.917	0,05	437.249.381	0,08	711.235.320	0,27	2.497.495.648

28	30.194.287.700	38.332.994.459	8.138.706.759	0,04	340.761.692	0,07	564.365.187	0,26	2.076.132.309
			NPV	(57.613.189.063,25)			(33.268.160.489,69)		55.778.744.052,08

C. Pendapatan turun 10% sedangkan biaya-biaya naik 10%.

Tahun	C	B	B-C	DF 12%	PV	DF 5%	PV	DF 1%	PV
0	261.843.890.000		(261.843.890.000)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)	1,00	(261.843.890.000,00)
1	1.226.155.766	9.120.166.853	7.894.011.087	0,89	7.048.224.185	0,95	7.518.105.797	0,99	7.815.852.562
2	3.979.455.192	29.599.253.497	25.619.798.305	0,80	20.423.946.353	0,91	23.237.912.295	0,98	25.114.987.065
3	4.180.497.650	31.094.610.619	26.914.112.969	0,71	19.156.933.999	0,86	23.249.422.714	0,97	26.122.572.888
4	22.169.296.298	59.674.776.427	37.505.480.128	0,64	23.835.410.661	0,82	30.855.851.320	0,96	36.042.029.214
5	23.508.100.112	68.192.174.647	44.684.074.535	0,57	25.354.943.914	0,78	35.011.141.623	0,95	42.515.363.702
6	24.843.169.411	73.705.863.066	48.862.693.655	0,51	24.755.361.270	0,75	36.462.094.326	0,94	46.030.867.739
7	24.289.750.981	68.159.123.406	43.869.372.425	0,45	19.844.276.194	0,71	31.177.143.947	0,93	40.917.755.709
8	23.049.000.033	54.413.909.071	31.364.909.039	0,40	12.667.760.708	0,68	21.229.005.024	0,92	28.964.967.272
9	19.410.944.693	25.920.131.490	6.509.186.797	0,36	2.347.278.013	0,64	4.195.879.847	0,91	5.951.608.712
10	20.026.676.119	25.920.131.490	5.893.455.371	0,32	1.897.534.900	0,61	3.618.070.361	0,91	5.335.268.265
11	20.176.690.450	25.920.131.490	5.743.441.040	0,29	1.651.102.054	0,58	3.358.071.024	0,90	5.147.982.424
12	20.829.746.613	25.920.131.490	5.090.384.877	0,26	1.306.575.011	0,56	2.834.516.772	0,89	4.517.458.115
13	20.978.844.229	25.920.131.490	4.941.287.261	0,23	1.132.415.506	0,53	2.620.470.134	0,88	4.341.724.308
14	22.069.497.256	28.512.144.639	6.442.647.383	0,20	1.318.293.300	0,51	3.253.974.726	0,87	5.604.864.649
15	22.219.511.587	28.512.144.639	6.292.633.052	0,18	1.149.640.532	0,48	3.026.864.090	0,86	5.420.156.175

16	22.954.882.476	28.512.144.639	5.557.262.163	0,16	906.509.839	0,46	2.545.845.828	0,85	4.739.351.333
17	23.103.980.092	28.512.144.639	5.408.164.547	0,15	787.668.561	0,44	2.359.564.278	0,84	4.566.532.392
18	23.910.778.488	28.512.144.639	4.601.366.151	0,13	598.359.768	0,42	1.911.962.676	0,84	3.846.821.771
19	24.470.730.573	31.363.359.103	6.892.628.530	0,12	800.280.883	0,40	2.727.647.162	0,83	5.705.303.754
20	25.296.853.447	31.363.359.103	6.066.505.656	0,10	628.895.017	0,38	2.286.402.179	0,82	4.971.771.164
21	25.445.951.063	31.363.359.103	5.917.408.040	0,09	547.712.990	0,36	2.124.008.434	0,81	4.801.563.404
22	26.321.797.512	31.363.359.103	5.041.561.591	0,08	416.647.306	0,34	1.723.457.180	0,80	4.050.371.457
23	27.523.683.946	31.363.359.103	3.839.675.157	0,07	283.321.781	0,33	1.250.088.055	0,80	3.054.238.075
24	27.877.785.995	34.499.695.013	6.621.909.018	0,07	436.265.294	0,31	2.053.241.491	0,79	5.215.191.241
25	28.026.883.611	34.499.695.013	6.472.811.402	0,06	380.752.169	0,30	1.911.439.148	0,78	5.047.294.069
26	29.007.786.827	34.499.695.013	5.491.908.186	0,05	288.439.463	0,28	1.544.548.295	0,77	4.240.016.530
27	29.008.703.542	34.499.695.013	5.490.991.471	0,05	257.492.247	0,27	1.470.752.835	0,76	4.197.335.428
28	30.194.287.700	34.499.695.013	4.305.407.313	0,04	180.264.251	0,26	1.098.282.011	0,76	3.258.485.391
NPV					(57.462.582.417,08)		(33.083.606.865,75)		56.107.349.476,95

Lampiran 14

Perkiraan untuk Menentukan Metode Simpleks:

A. Condotel

Uraian	Type Deluxe	Perkiraan M2	Total Seluruh
Keuntungan	265.641.405	5.512.376	51.988.486.991
Konstruksi	199.083.000	4.131.210	38.962.389.751
Unit	77	51	185
Luas (m2)	48,19		9.431,23

B. Apartemen

Uraian	Type 3 Ruby, sea	Perkiraan M2	Total Seluruh
Keuntungan	808.349.890	6.350.958	40.227.029.280
Konstruksi	388.966.000	3.055.987	19.356.650.956
Unit	3	90	70
Luas (m2)	127,28		6.334,01

C. Penthouse (2 lantai)

Uraian	5% apartemen	Perkiraan M2	Total Seluruh
Keuntungan		6.668.506	8.232.336.768
Konstruksi		3.208.786	3.961.278.579
Unit		206	6
Luas (m2)			1.234,51

D. Metode Simpleks

	Asumsi				
	Keuntungan	Luas/unit	Jumlah Minat	Konstruksi	Lantai
Condotel	281.018.849	51	16	210.607.512	7
Apartemen	574.671.847	90	6	276.523.585	6
Penthouse	1.372.056.128	206		660.213.096	2
	17.850			200.762.000.000	13

Lampiran 15

Hasil Akhir Metode Simpleks

A. Hasil Akhir Optimasi pada Program QSB+ :

Final tableau <Total iteration = 3 >										
Basis	C(j)	x1	x2	x3	s1	s2	s3	s4	B(i)	A(i,j)
s1	0	-670	-518	0	1.000	0	0	0	-206	16511
s2	0	1.000	-2.70	0	0	1.000	0	0	0	0
s3	0	-210	-170	0	0	0	1.000	-66.0	19647	0
x3	137.2	3.500	3.000	1.000	0	0	0	1.000	6.500	0
C(j)-Z(j) * Big M		-452	-354	0	0	0	0	-137	891.8	

<Max.> Optimal OBJ value = 891.8

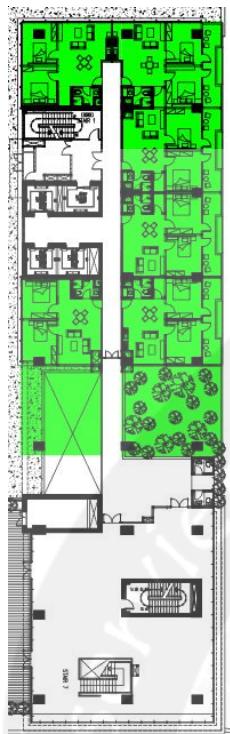
Press any key to continue. Or press 'G' to go without stop.

B. Biaya Investasi Berdasarkan Hasil Optimasi :

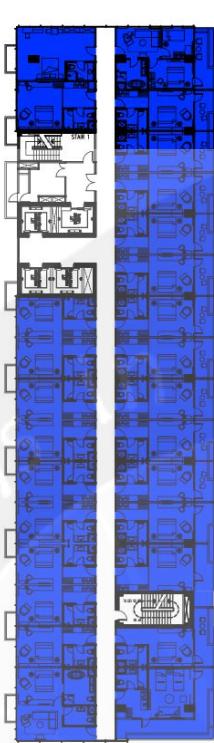
No	Uraian Pekerjaan	Perhitungan	Jumlah
1	Pengadaan Lahan	1.400.000 x 5995 m ²	8.393.000.000
2	Biaya Perizinan	2,5% x 200.762.000.000	5.148.540.017
3	Biaya Perencanaan	10% x 200.762.000.000	20.594.160.068
4	Biaya Konstruksi		205.941.600.675
5	Biaya Furniture (hanya tipe condotel)	2.500.000 x 9431,36 m ²	23.578.400.000
6	Pengembangan Fasilitas	50% x 20.076.200.000	4.118.832.014
Total			267.774.532.773

Lampiran 16

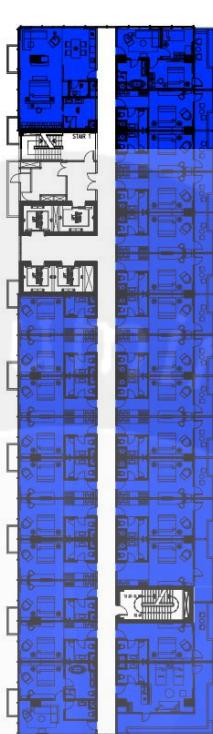
Gambar Site Plan Hasil Optimasi :



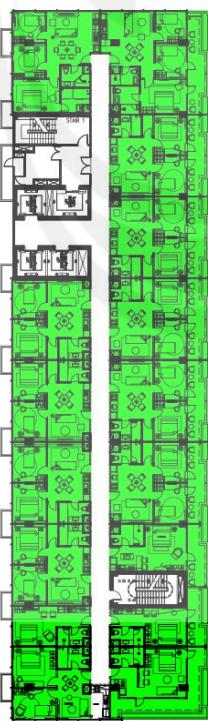
Lantai 4



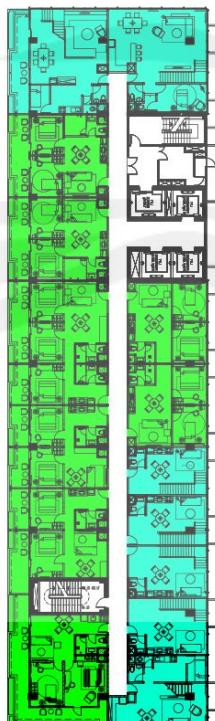
Lantai 5-7



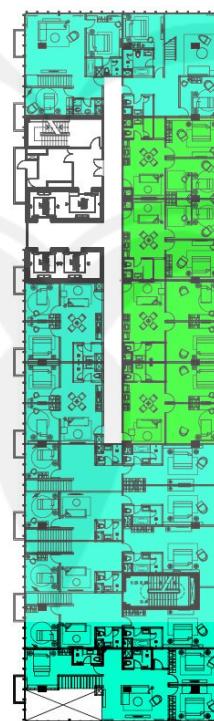
Lantai 8-11



Lantai 12-14



Lantai 15



Lantai 16

Keterangan:

- █ APARTEMEN (71 unit)
- █ CONDOTEL (185 unit)
- █ PENTHOUSE (7 unit)

Lampiran 16

Analisis Cash Flow dengan Hasil Optimasi

No.	Uraian	8	9	10	11	12	13	14	15	16	17	18	19	20
		Tahun												
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
		11	12	13	14	15	16	17	18	19	20	21	22	23
1	Investasi													
2	Penjualan Unit													
3	Disewa Kios	19.877.338.800	19.877.338.800	19.877.338.800	21.865.072.680	21.865.072.680	21.865.072.680	21.865.072.680	21.865.072.680	24.051.579.948	24.051.579.948	24.051.579.948	24.051.579.948	24.051.579.948
4	Service Charge	9.020.565.683	9.020.565.683	9.020.565.683	9.922.622.251	9.922.622.251	9.922.622.251	9.922.622.251	9.922.622.251	10.914.884.476	10.914.884.476	10.914.884.476	10.914.884.476	10.914.884.476
5	Pendapatan	28.897.904.483	28.897.904.483	28.897.904.483	31.787.694.931	31.787.694.931	31.787.694.931	31.787.694.931	31.787.694.931	34.966.464.424	34.966.464.424	34.966.464.424	34.966.464.424	34.966.464.424
6	Biaya Operasional Kantor	16.405.934.507	17.226.231.232	17.226.231.232	18.087.542.794	18.087.542.794	18.991.919.933	18.991.919.933	19.941.515.930	20.938.591.727	20.938.591.727	21.985.521.313	21.985.521.313	
7	Biaya Pemeliharaan	496.131.113	496.131.113	496.131.113	545.744.224	545.744.224	545.744.224	545.744.224	545.744.224	600.318.646	600.318.646	600.318.646	600.318.646	600.318.646
8	Pengeluaran	16.902.065.619	17.722.362.345	17.722.362.345	18.633.287.018	18.633.287.018	19.537.664.157	19.537.664.157	20.487.260.154	20.541.834.576	21.538.910.373	21.538.910.373	22.585.839.959	22.585.839.959
9	Gross Operating Profit	11.995.838.864	11.175.542.138	11.175.542.138	13.154.407.914	13.154.407.914	12.250.030.774	12.250.030.774	11.300.434.777	14.424.629.848	13.427.554.051	13.427.554.051	12.380.624.465	12.380.624.465
10	Fix Charge	1.319.542.275	1.229.309.635	1.229.309.635	1.446.984.870	1.446.984.870	1.347.503.385	1.347.503.385	1.243.047.825	1.586.709.283	1.477.030.946	1.477.030.946	1.361.868.691	1.361.868.691
11	Biaya Pemeliharaan Dinding	135.543.287		135.543.287		135.543.287		135.543.287		135.543.287		135.543.287		135.543.287
12	Biaya Pemeliharaan Lantai		833.377			833.377				833.377				833.377
13	Biaya Penggantian Komponen Pintu													946.851.366
14	Biaya Penggantian Komponen Mekanikal									23.855.938				
15	Biaya Penggantian Komponen Elektrikal													9.396.000
16	Biaya Life Cycle Cost (LCC)	136.376.664		135.543.287		136.376.664		135.543.287	23.855.938	136.376.664		135.543.287		1.092.624.031
17	Net Operating Income	10.539.919.924	9.946.232.503	9.810.689.216	11.707.423.043	11.571.046.379	10.902.527.389	10.766.984.102	10.033.531.014	12.701.543.900	11.950.523.106	11.814.979.819	11.018.755.774	9.926.131.743
18	Discount Factor		0,29	0,26	0,23	0,20	0,18	0,16	0,15	0,13	0,12	0,10	0,09	0,07
19	Present Value (PV)	3.029.975.117	2.552.950.152	2.248.356.756	2.395.570.709	2.113.986.912	1.778.438.386	1.568.150.303	1.304.756.260	1.474.735.324	1.238.872.071	1.093.589.944	910.617.639	732.428.970

No.	Uraian	21	22	23	24	25
		Tahun				
		2037	2038	2039	2040	2041
		24	25	26	27	28
1	Investasi					
2	Penjualan Unit					
3	Disewa Kios	26.456.737.943	26.456.737.943	26.456.737.943	26.456.737.943	26.456.737.943
4	Service Charge	12.006.372.924	12.006.372.924	12.006.372.924	12.006.372.924	12.006.372.924
5	Pendapatan	38.463.110.867	38.463.110.867	38.463.110.867	38.463.110.867	38.463.110.867
6	Biaya Operasional Kantor	23.084.797.379	23.084.797.379	24.239.037.247	24.239.037.247	25.450.989.110
7	Biaya Pemeliharaan	660.350.511	660.350.511	660.350.511	660.350.511	660.350.511
8	Pengeluaran	23.745.147.889	23.745.147.889	24.899.387.758	24.899.387.758	26.111.339.621
9	Gross Operating Profit	14.717.962.977	14.717.962.977	13.563.723.108	13.563.723.108	12.351.771.246
10	Fix Charge	1.618.975.928	1.618.975.928	1.492.009.542	1.492.009.542	1.358.694.837
11	Biaya Pemeliharaan Dinding		135.543.287			
12	Biaya Pemeliharaan Lantai				833.377	
13	Biaya Penggantian Komponen Pintu					
14	Biaya Penggantian Komponen Mekanikal					
15	Biaya Penggantian Komponen Elektrikal					
16	Biaya Life Cycle Cost (LCC)		135.543.287		833.377	
17	Net Operating Income	13.098.987.050	12.963.443.763	12.071.713.566	12.070.880.189	10.993.076.409
18	Discount Factor	0,07	0,06	0,05	0,05	0,04
19	Present Value (PV)	862.988.818	762.552.626	634.016.168	566.046.784	460.272.059

Lampiran 17

Analisis Sensitivitas dengan Hasil Optimasi:

A. Pendapatan turun 10% sedangkan biaya-biaya tetap.

Tahun	C	B	B-C	DF 12%	PV	DF 10%	PV	DF 5%	PV
0	267.774.532.773		(267.774.532.773)	1,00	(267.774.532.773,06)	1,00	(267.774.532.773,06)	1,00	(267.774.532.773,06)
1	1.114.687.060	9.120.166.853	8.005.479.793	0,89	7.147.749.815	0,91	7.277.708.903	0,95	7.624.266.470
2	3.617.686.539	29.599.253.497	25.981.566.959	0,80	20.712.346.109	0,83	21.472.369.388	0,91	23.566.047.128
3	3.800.452.409	31.094.610.619	27.294.158.210	0,71	19.427.442.695	0,75	20.506.505.041	0,86	23.577.720.082
4	20.153.905.726	59.674.776.427	39.520.870.701	0,64	25.116.227.805	0,68	26.993.286.457	0,82	32.513.918.132
5	21.371.000.102	68.192.174.647	46.821.174.545	0,57	26.567.591.853	0,62	29.072.265.646	0,78	36.685.615.401
6	22.584.699.465	73.705.863.066	51.121.163.601	0,51	25.899.572.431	0,56	28.856.564.127	0,75	38.147.399.373
7	22.081.591.801	68.159.123.406	46.077.531.605	0,45	20.843.135.266	0,51	23.645.059.411	0,71	32.746.441.450
8	21.417.469.629	58.173.315.337	36.755.845.707	0,40	14.845.069.611	0,47	17.146.873.288	0,68	24.877.803.159
9	17.661.852.052	26.008.114.035	8.346.261.982	0,36	3.009.745.742	0,42	3.539.629.829	0,64	5.380.074.891
10	18.221.607.894	26.008.114.035	7.786.506.140	0,32	2.507.046.584	0,39	3.002.035.190	0,61	4.780.239.318
11	18.357.984.559	26.008.114.035	7.650.129.476	0,29	2.199.229.418	0,35	2.681.323.712	0,58	4.472.872.263
12	18.951.671.980	26.008.114.035	7.056.442.055	0,26	1.811.212.920	0,32	2.248.399.902	0,56	3.929.290.975
13	19.087.215.267	26.008.114.035	6.920.898.767	0,23	1.586.091.370	0,29	2.004.737.849	0,53	3.670.300.382
14	20.080.271.888	28.608.925.438	8.528.653.550	0,20	1.745.131.491	0,26	2.245.861.037	0,51	4.307.549.590
15	20.216.648.552	28.608.925.438	8.392.276.886	0,18	1.533.237.611	0,24	2.009.044.363	0,48	4.036.828.674
16	20.885.167.542	28.608.925.438	7.723.757.896	0,16	1.259.912.224	0,22	1.680.914.756	0,46	3.538.342.485
17	21.020.710.830	28.608.925.438	7.588.214.608	0,15	1.105.180.515	0,20	1.501.287.807	0,44	3.310.712.899

18	21.754.163.917	28.608.925.438	6.854.761.521	0,13	891.390.378	0,18	1.232.889.112	0,42	2.848.294.996
19	22.264.920.524	31.469.817.982	9.204.897.458	0,12	1.068.750.975	0,16	1.505.074.289	0,40	3.642.690.495
20	23.015.941.318	31.469.817.982	8.453.876.663	0,10	876.386.046	0,15	1.256.614.898	0,38	3.186.177.204
21	23.151.484.606	31.469.817.982	8.318.333.376	0,09	769.941.707	0,14	1.124.061.138	0,36	2.985.802.252
22	23.947.708.650	31.469.817.982	7.522.109.332	0,08	621.645.999	0,12	924.060.844	0,34	2.571.432.105
23	25.040.332.681	31.469.817.982	6.429.485.301	0,07	474.418.577	0,11	718.033.074	0,33	2.093.255.925
24	25.364.123.817	34.616.799.780	9.252.675.963	0,07	609.585.754	0,10	939.383.460	0,31	2.868.957.900
25	25.499.667.104	34.616.799.780	9.117.132.676	0,06	536.299.890	0,09	841.474.861	0,30	2.692.314.549
26	26.391.397.300	34.616.799.780	8.225.402.480	0,05	432.004.796	0,08	690.156.120	0,28	2.313.318.239
27	26.392.230.677	34.616.799.780	8.224.569.103	0,05	385.679.488	0,08	627.351.087	0,27	2.202.937.009
28	27.470.034.458	34.616.799.780	7.146.765.322	0,04	299.229.831	0,07	495.580.645	0,26	1.823.094.360
NPV					(83.493.275.871,30)		(61.535.986.539,13)		18.619.164.934,28

B. Pendapatan tetap namun biaya-biaya meningkat 10%.

Tahun	C	B	B-C	DF 12%	PV	DF 10%	PV	DF 5%	PV
0	267.774.532.773		(267.774.532.773)	1,00	(267.774.532.773,06)	1,00	(267.774.532.773,06)	1,00	(267.774.532.773,06)
1	1.226.155.766	10.133.518.726	8.907.362.960	0,89	7.953.002.643	0,91	8.097.602.691	0,95	8.483.202.819
2	3.979.455.192	32.888.059.442	28.908.604.249	0,80	23.045.762.316	0,83	23.891.408.470	0,91	26.220.956.235
3	4.180.497.650	34.549.567.355	30.369.069.705	0,71	21.616.103.960	0,75	22.816.731.559	0,86	26.233.944.243
4	22.169.296.298	66.305.307.141	44.136.010.843	0,64	28.049.232.799	0,68	30.145.489.272	0,82	36.310.805.348
5	23.508.100.112	75.769.082.942	52.260.982.829	0,57	29.654.285.163	0,62	32.449.958.603	0,78	40.947.847.532

6	24.843.169.411	81.895.403.407	57.052.233.996	0,51	28.904.437.275	0,56	32.204.498.742	0,75	42.573.255.420
7	24.289.750.981	75.732.359.340	51.442.608.359	0,45	23.270.023.526	0,51	26.398.192.102	0,71	36.559.301.334
8	23.559.216.592	64.637.017.041	41.077.800.448	0,40	16.590.634.643	0,47	19.163.097.072	0,68	27.803.072.249
9	19.428.037.258	28.897.904.483	9.469.867.225	0,36	3.414.929.057	0,42	4.016.148.137	0,64	6.104.360.849
10	20.043.768.684	28.897.904.483	8.854.135.799	0,32	2.850.794.760	0,39	3.413.652.641	0,61	5.435.671.316
11	20.193.783.014	28.897.904.483	8.704.121.468	0,29	2.502.226.929	0,35	3.050.741.475	0,58	5.089.119.552
12	20.846.839.178	28.897.904.483	8.051.065.305	0,26	2.066.507.935	0,32	2.565.317.522	0,56	4.483.134.418
13	20.995.936.794	28.897.904.483	7.901.967.689	0,23	1.810.927.046	0,29	2.288.918.569	0,53	4.190.582.178
14	22.088.299.077	31.787.694.931	9.699.395.854	0,20	1.984.688.562	0,26	2.554.154.076	0,51	4.898.854.009
15	22.238.313.408	31.787.694.931	9.549.381.524	0,18	1.744.636.302	0,24	2.286.046.013	0,48	4.593.415.789
16	22.973.684.297	31.787.694.931	8.814.010.635	0,16	1.437.756.062	0,22	1.918.185.517	0,46	4.037.799.827
17	23.122.781.913	31.787.694.931	8.664.913.019	0,15	1.261.995.546	0,20	1.714.306.847	0,44	3.780.472.848
18	23.929.580.309	31.787.694.931	7.858.114.622	0,13	1.021.866.005	0,18	1.413.350.987	0,42	3.265.208.934
19	24.491.412.576	34.966.464.424	10.475.051.848	0,12	1.216.224.508	0,16	1.712.754.681	0,40	4.145.333.718
20	25.317.535.450	34.966.464.424	9.648.928.974	0,10	1.000.273.253	0,15	1.434.251.809	0,38	3.636.579.851
21	25.466.633.066	34.966.464.424	9.499.831.358	0,09	879.300.702	0,14	1.283.717.635	0,36	3.409.891.931
22	26.342.479.515	34.966.464.424	8.623.984.909	0,08	712.707.763	0,12	1.059.421.822	0,34	2.948.108.129
23	27.544.365.949	34.966.464.424	7.422.098.475	0,07	547.661.474	0,11	828.886.285	0,33	2.416.422.292
24	27.900.536.199	38.463.110.867	10.562.574.668	0,07	695.884.636	0,10	1.072.371.710	0,31	3.275.115.455
25	28.049.633.814	38.463.110.867	10.413.477.052	0,06	612.555.153	0,09	961.122.259	0,30	3.075.128.637
26	29.030.537.030	38.463.110.867	9.432.573.836	0,05	495.406.413	0,08	791.444.380	0,28	2.652.823.998
27	29.031.453.745	38.463.110.867	9.431.657.122	0,05	442.284.166	0,08	719.424.966	0,27	2.526.253.505

28	30.217.037.904	38.463.110.867	8.246.072.963	0,04	345.257.036	0,07	571.810.319	0,26	2.103.520.744
				NPV	(61.647.167.139,64)		(36.951.526.612,20)		53.425.650.387,77

C. Pendapatan turun 10% sedangkan biaya-biaya naik 10%.

Tahun	C	B	B-C	DF 12%	PV	DF 5%	PV	DF 1%	PV
0	267.774.532.773		(267.774.532.773)	1,00	(267.774.532.773,06)	1,00	(267.774.532.773,06)	1,00	(267.774.532.773,06)
1	1.226.155.766	9.120.166.853	7.894.011.087	0,89	7.048.224.185	0,95	7.518.105.797	0,99	7.815.852.562
2	3.979.455.192	29.599.253.497	25.619.798.305	0,80	20.423.946.353	0,91	23.237.912.295	0,98	25.114.987.065
3	4.180.497.650	31.094.610.619	26.914.112.969	0,71	19.156.933.999	0,86	23.249.422.714	0,97	26.122.572.888
4	22.169.296.298	59.674.776.427	37.505.480.128	0,64	23.835.410.661	0,82	30.855.851.320	0,96	36.042.029.214
5	23.508.100.112	68.192.174.647	44.684.074.535	0,57	25.354.943.914	0,78	35.011.141.623	0,95	42.515.363.702
6	24.843.169.411	73.705.863.066	48.862.693.655	0,51	24.755.361.270	0,75	36.462.094.326	0,94	46.030.867.739
7	24.289.750.981	68.159.123.406	43.869.372.425	0,45	19.844.276.194	0,71	31.177.143.947	0,93	40.917.755.709
8	23.559.216.592	58.173.315.337	34.614.098.744	0,40	13.980.053.934	0,68	23.428.184.511	0,92	31.965.539.452
9	19.428.037.258	26.008.114.035	6.580.076.777	0,36	2.372.841.651	0,64	4.241.576.160	0,91	6.016.426.244
10	20.043.768.684	26.008.114.035	5.964.345.351	0,32	1.920.359.577	0,61	3.661.590.660	0,91	5.399.444.039
11	20.193.783.014	26.008.114.035	5.814.331.020	0,29	1.671.481.230	0,58	3.399.518.927	0,90	5.211.522.795
12	20.846.839.178	26.008.114.035	5.161.274.857	0,26	1.324.770.704	0,56	2.873.990.966	0,89	4.580.369.373
13	20.995.936.794	26.008.114.035	5.012.177.241	0,23	1.148.661.660	0,53	2.658.064.604	0,88	4.404.012.682
14	22.088.299.077	28.608.925.438	6.520.626.361	0,20	1.334.249.344	0,51	3.293.359.408	0,87	5.672.703.473
15	22.238.313.408	28.608.925.438	6.370.612.030	0,18	1.163.887.000	0,48	3.064.373.312	0,86	5.487.323.327

16	22.973.684.297	28.608.925.438	5.635.241.141	0,16	919.229.900	0,46	2.581.568.896	0,85	4.805.853.463
17	23.122.781.913	28.608.925.438	5.486.143.526	0,15	799.025.758	0,44	2.393.586.248	0,84	4.632.376.085
18	23.929.580.309	28.608.925.438	4.679.345.129	0,13	608.500.123	0,42	1.944.364.552	0,84	3.912.013.547
19	24.491.412.576	31.469.817.982	6.978.405.406	0,12	810.240.159	0,40	2.761.591.985	0,83	5.776.304.698
20	25.317.535.450	31.469.817.982	6.152.282.532	0,10	637.787.228	0,38	2.318.730.582	0,82	5.042.069.129
21	25.466.633.066	31.469.817.982	6.003.184.916	0,09	555.652.465	0,36	2.154.797.389	0,81	4.871.165.349
22	26.342.479.515	31.469.817.982	5.127.338.467	0,08	423.736.123	0,34	1.752.779.994	0,80	4.119.284.274
23	27.544.365.949	31.469.817.982	3.925.452.033	0,07	289.651.081	0,33	1.278.014.544	0,80	3.122.468.586
24	27.900.536.199	34.616.799.780	6.716.263.581	0,07	442.481.571	0,31	2.082.497.814	0,79	5.289.501.700
25	28.049.633.814	34.616.799.780	6.567.165.966	0,06	386.302.417	0,30	1.939.302.312	0,78	5.120.868.780
26	29.030.537.030	34.616.799.780	5.586.262.750	0,05	293.395.041	0,28	1.571.084.641	0,77	4.312.862.779
27	29.031.453.745	34.616.799.780	5.585.346.035	0,05	261.916.870	0,27	1.496.025.546	0,76	4.269.460.427
28	30.217.037.904	34.616.799.780	4.399.761.877	0,04	184.214.808	0,26	1.122.351.260	0,76	3.329.896.281
NPV				(95.826.997.554,46)		(8.245.506.439,87)			84.126.362.587,17