Highgrade Place Retail Strip Center

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Highgrade Place Retail Strip Center Case Study Name/Grading Sheet Finance 5770/6770/6780

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Points Possible _____50_____

Points Missed _____

Score Received _____

The Cost Approach				
Replacement Cost				
	Building Improvements	17,000	$ 97.25	$ 1,653,193.33
	Site Improvements	51,000	$ 3.50	$ 178,500.00
Subtotal Cost				$ 1,831,693.33
	Developer Profit	10%		$ 183,169.33
	Less Deferred Maintenance			$ -
Total Cost				$ 2,014,862.67
Less Depreciation				
	Depreciation	10/40	25%	$ (503,715.67)
Total After Depreciation				$ 1,511,147.00
Land Value		68,000	$ 15.00	$ 1,020,000.00
TOTAL VALUE BY COST APPROACH				**$ 2,531,147.00**

Calculations

$$Land\ Size: \frac{17{,}000}{.25} = 68{,}000$$

$$Building\ Improvements: 17{,}000 * 97.25 = 1{,}653{,}193.33$$

$$Site\ Improvements: (68{,}000 - 17{,}000) * 3.5 = 178{,}500$$

$$Subtotal\ Cost: 1{,}653{,}193.33 + 178{,}500 = 1{,}831{,}693.33$$

$$Developer\ Profit:\ 10\% * 1{,}831{,}693.33 = 183{,}169.33$$

$$Total\ Cost:\ 1{,}831{,}693.33 + 183{,}169.33 = 2{,}014{,}862.67$$

$$Depreciation:\ 25\% * 2{,}014{,}862.67 = 503{,}715.67$$

$$Cost\ after\ Deprecation: 2{,}014{,}862.67 - 503{,}715.67 = 1{,}511{,}147.00$$

$$Land\ Value:\ 68{,}000 * 15 = 1{,}020{,}000.00$$

$$Total\ Value\ by\ Cost\ Approach: 1{,}511{,}147 + 1{,}020{,}000 = 2{,}531{,}147.00$$

Cost Approach and Valuation Methodology

Using the known construction costs of three recently constructed strip retail buildings that are similar in size and quality, an approximate current construction cost is determined at $97.25, plus site improvement costs of $3.50. Multiplying

these costs by the square footage of the Highgrade Place project, the replacement construction cost is $1,831,693.33. The developer profit of 10 percent of $183,169.33 was determined by asking area developers what their average return is. The facility is well maintained so no discounts have been taken for deferred maintenance. The building is 10 years old and its original economic life was 40 years when built so, the total cost $2,014,862.67 is reduced by 10/40 or 25 percent equaling $503,715.67, reducing the building value to $1,511,147.00.

Adding land value of $15.00 per square foot for 68,000 total square feet results in $1,020,000.00 and a Total Value by Cost Approach of $2,531,147.00. The current building owner may not want to sell at this price since this price does not reflect current market conditions in the area and is the lesser amount of the valuation methods considered.

COMPARABLE COSTS			
Size (Gross Sq. Ft.)	Total Cost	Cost/Gross Sq. Ft.	Avg
19,000	$1,890,500	99.5	
16,500	$1,595,550	96.7	97.25
15,900	$1,519,086	95.54	

Calculations

$$Average\ Cost\ per\ Square\ Foot: \frac{(99.50 + 96.70 + 95.54)}{3} = 97.25$$

STRIP RETAIL CENTER					
SALES COMPARISON SUMMARY					
Sale No.	**1**	**2**	**3**	**4**	**Subject**
Project	**DoubleCorners**	**Forever Plaza**	**Back Street Plaza**	**Weedond StripCenter**	**Highgrade Place**
Address	**NEC Lincoln Ave. & Liberty Street**	**SWC Johnson St. & Jeremiah Way**	**NEC Blue Grass St. & Brass Way**	**150 No. Frigid Way**	**170 No. Determination St.**
Sale Date	2 years ago	Just sold	Just sold	2 years ago	Just Sold
Sale Price	$3,075,453	$3,309,985	$3,581,311	$2,366,018	$2,322,600
Project Rentable Sq.Ft.	17,674	16,540	17,035	16,870	17,000
Price/Rentable Sq.Ft.	$174.01	$200.12	$210.23	$140.25	$136.62
Potential Gross Income	$323,034	$355,595	$394,293	$278,512	$240,750.00
Effective Gross Income	$303,652	$334,259	$370,635	$261,801	$226,304.83
Vacancy%	6.38%	6.38%	6.38%	6.38%	6.38%
Operating Expenses	$88,370	$82,700	$85,175	$84,350	$84,776.81
NOI	$215,282	$251,559	$285,460	$177,451	$174,606.20
OAR (Ro)	7.00%	7.60%	7.35%	7.50%	7.52%
OE/Rentable Sq. Ft.	5	5	5	5	5
GIM	9.52	9.31	9.85	8.50	9.65
Property Rights Conveyed	Leased fee	Leased fee	Leased fee	Leased fee	Leased fee
Financing Terms	Cash	Cash	Cash	Cash	Cash
Location	Average	Average	Average	Average	Average
Physical Characteristics					
Street Orientation	Corner	Corner	Corner	Interior	Interior
Effective Age (Years)	10	10	5	10	10
Building/Land Coverage	24%	26%	25%	26%	25%
Economic Characteristics	Average	Average	Average	Average	Average
Use	Retail	Retail	Retail	Retail	Retail
Non-Realty Components	None	None	None	None	None

SALES ADJUSTMENT GRID				
	Sale #1	Sale #2	Sale #3	Sale #4
Unadjusted Price/Sq.Ft.	$174.01	$200.12	$227.99	$140.25
Property Rights	0%	0%	0%	0%
Sub Total	174.01	200.12	227.99	140.25
Financing Terms	0%	0%	**-7.79%**	0%
Sub Total	174.01	200.12	210.23	140.25
Expenditures Made After Sale	0.00	0.00	0.00	0.00
Sub Total	174.01	200.12	210.23	140.25
Conditions of Sale	0%	0%	0%	0%
Sub Total	174.01	200.12	210.23	140.25
Market Conditions (Date)	**15.00%**	0%	0%	**15.00%**
Sub Total	200.12	200.12	210.23	161.29
OTHER ADJUSTMENTS				
Location	**-19.40%**	**-19.40%**	**-19.40%**	0%
Physical Characteristics	0%	0%	0%	0%
Economic Characteristics	0%	0%	**-4.81%**	0.000
Use	0%	0%	0%	0%
Non-realty Components	0%	0%	0%	0%
Total Other Adjustments	0%	0%	0%	0%
Value Indication for Subject	161.29	161.29	159.33	161.29
AVERAGE	160.80			
Indicated Value	**$2,733,600**			

Calculations

$$Financing\ Terms\ Adjustment: \frac{(3{,}581{,}310.53 - 3{,}883{,}810)}{3{,}883{,}810} = -.0779$$

$$Market\ Conditions\ (Date) Adjustment: \frac{(200.12 - 174.01)}{174.01} = .1500$$

$$Location\ Adjustment: \frac{(161.29 - 200.12)}{200.12} = -.1940$$

$$Economic\ Characteristics\ Adjustment: \frac{(200.12 - 210.23)}{210.23} = -.0481$$

$$Average: \frac{(161.29 + 161.29 + 159.33 + 161.29)}{4} = 160.80$$

$$Indicated\ Value: 160.80 * 17{,}000 = \mathbf{2{,}733{,}600}$$

CASH EQUIVALENCY CALCULATION				
Sale Price	$	3,883,810.00		
PV	$	2,912,857.50	75%	
Down Payment	$	970,952.50	25%	
Rate		4.15%		6.75%
Term		300		
Payment		($15,617.41)		
Balloon		60		
Future Value		($2,543,910.76)		
New Present Value			$	2,610,358.03
Add Down Payment			$	970,952.50
Cash Equivalent Price			**$**	**3,581,310.53**

Calculations

$$Payment: \frac{\left(2{,}912{,}857.5 * \left(\frac{.0415}{12}\right)\right)}{\left(1-\left(1+\frac{.0415}{12}\right)^{(-12*25)}\right)} = 15{,}617.41$$

Sales Comparison Approach

To derive a project value using the Sales Comparison approach, we adjusted the comparable rental rates to arrive at an average. The first adjustment was applied to sale #3. This project has funded using seller's financing. All the other projects were funded with cash. We used an equivalent cash calculation to determine the necessary adjustment of -7.79%.

Sales 1 & 4 have sales dates that are 24 months old, whereas sales 2 & 3 are current. We generated a percentage adjustment by comparing Sale 1 to Sale 2. We chose these two properties for comparison since the sale date is the only variable differentiating these two properties. This resulted in a positive adjustment of 15% to sales 1 & 4.

An adjustment is necessary based on the various street orientations. The subject property is an interior lot. Sale 4 is also an interior lot. The other three properties are corner lots. To make the adjustment, we compared Sales 2 & 4 as this variable is the differentiating factor between the two. We arrived at an interior lot adjustment of -19.4% for sales 1, 2, & 3.

The final adjustment came from analyzing economic characteristics. The subject property as well as sales 1, 2, & 4 have an effective economic age of 10 years. Sale 3 has an age of 5 years. To bring these into consistent terms, we compared sales 2 & 3 due to the consistency of their variables. This adjustment resulted in a -4.81% reduction to the rate.

All these adjustments result in an average rental rate of $160.80/sqft. This is the basis we used to generate a Sales Comparison Value of $2,733,600.

Direct Income Capitalization Analysis			
GROSS INCOME	Sq.Ft.		
LARGE TENANT	10,000	13.17	131,666.67
SMALL TENANT	3,750	15.58	58,437.50
SMALL TENANT	3,250	15.58	50,645.83
POTENTIAL GROSS INCOME			240,750.00
LESS: VACANCY	-6.38%		-15,366.99
EFFECTIVE GROSS INCOME (before CAM reimbursement income)			225,383.01
CAM REIMBURSEMENT	$ 2.00		34,000.00
EFFECTIVE GROSS INCOME (after CAM reimbursement income)			259,383.01
OPERATING EXPENSES			
COMMON AREA MAINTENANCE (CAM)	-2		-34,000.00
MANAGEMENT	-0.05		-11,269.15
MISC OPERATING EXPENSES			-35,000.00
STRUCTURAL RESERVES	-0.02		-4,507.66
TOTAL OPERATING EXPENSES			-84,776.81
NET OPERATING INCOME			174,606.20
CAPITALIZATION RATE	7.52%		
DIRECT INCOME VALUE INDICATION			**$ 2,322,600**

Calculations

$$Gross\ Income\ Large\ Tenant: 10{,}000 * 13.17 = 131{,}666.67$$

$$Gross\ Income\ Small\ Tenant_1: 3{,}750 * 15.58 = 58{,}437.5$$

$$Gross\ Income\ Small\ Tenant_2: 3{,}250 * 15.58 = 50{,}645.83$$

$$Potential\ Gross\ Income: 131{,}666.67 + 58{,}437.5 + 50{,}645.83 = 240{,}750$$

$$Vacancy: 240{,}750 * .0638 = 15{,}366.99$$

$$Effective\ Gross\ Income: 240{,}750 - 15{,}366.99 = 225{,}383.01$$

$$CAM\ Reimbursement: 2 * 17{,}000 = 34{,}000$$

$$Effective\ Gross\ Income\ with\ CAM\text{: } 225{,}383.01 + 34{,}000 = 259{,}383.01$$

$$Management\ Expense\text{: } 5\% * 225{,}383.01 = 11{,}269.15$$

$$Structural\ Reserve\ for\ Replacement\text{: } 2\% * 225{,}383.01 = 4{,}507.66$$

$$Miscellaneous\ Operating\ Expenses\text{:}$$

$$\frac{(34{,}000 + 11{,}269.15 + 4{,}507.66 + X)}{17{,}000} = 5;\ \ X = 35{,}000$$

$$Total\ Operating\ Expenses\text{: } 34{,}000 + 11{,}269.15 + 4{,}507.66 + 35{,}000 = 84{,}776.81$$

$$Net\ Operating\ Income\text{: } 259{,}383.01 - 84{,}776.81 = 174{,}606.2$$

$$Direct\ Income\ Value\ Indication\text{: } \frac{174{,}606.2}{.0752} = 2{,}322{,}600$$

The Direct Income Capitalization Approach

A value or $2,322,600 was derived utilizing the Income Approach to value. Current rents were estimated through analyzing rent comparables and calculating average rents for large and small tenants to determine Potential Gross Income of $240,750. Vacancy was calculated to be 6.38%, or a loss of $15,366.99 annually, using an average derived from sales comparisons, resulting in Effective Gross Income (EGI) of $225,383.01. Total Operating Expenses were calculated using a common area maintenance rate of $2/PSF, management fee of 5% of EGI, and reserves were estimated to be 2% of EGI, resulting in a Net Operating Income (NOI) of $174,606.20.

Additionally, a Band of Investment method was utilized to derive a capitalization rate from the weighted average of the mortgage and equity demands on net income generated from the property. This method involved estimating typical financing terms and an estimated rate of return on equity capital sufficient to attract investors. The mortgage interest rate available in the market is 6.75%, with a 75% loan-to-value amortized over 25-yers with a five-year balloon payment. Debt coverage ratio was quoted to be 1.25; however, a larger down payment would be required to meet the bank's requirements on this property resulting in a DCR of 1.22 and an adjusted down payment of $882,669.87.

The mortgage constant was calculated to by 8.29% when solving for PMT with PV set = 1, i set = 6.75/12, n set = 300 (25 years * 12 months).

Plugging the Re of 5.70% and the Rm of 8.29% into the Band of Investment calculations resulted in a Ro of 7.6%

Additionally, a capitalization rate of 7.52% was derived by taking the average cap rate for recent sales comparisons which ranged from 7% to 7.97%.

NOI of $174,606.20 was divided by the average cap rate of 7.52% to derive an estimated value of 2,322,600.

Sales Comparison CAP Analysis					
	1	2	3	4	Average
Sale Price	$ 3,075,453.00	$ 3,309,985.00	$ 3,581,310.53	$ 2,366,018.00	$ 3,083,191.63
NOI	$ 215,282.00	$ 251,559.00	$ 285,460.00	$ 177,451.00	$ 232,438.00
CAP	7.00%	7.60%	7.97%	7.50%	**7.5177%**

Calculations

$$Sales\ Comparison\ Capitalization\ Rate: \frac{(.07 + .076 + .0797 + .075)}{4} = .075177$$

Return on Equity Analysis Sale 2					
Sale Price		$ 3,309,985.00			
Debt		$ 2,427,315.13			
NOI		$ 251,559.00			
ADS	($205,821.61)	($201,247.20)	($201,247.20)		
Down Payment	1.22	$ 882,669.87	1.25		
Re CAP		5.70%			**5.70%**

Calculations

$$Debt\ Coverage\ Ratio: \frac{251{,}559}{201{,}247.2} = 1.25$$

$$Annual\ Debt\ Service: \frac{\left(2{,}427{,}315.13 * \left(\frac{.0675}{12}\right)\right)}{\left(1 - \left(1 + \frac{.0675}{12}\right)^{(-12*25)}\right)} = 16{,}770.6 * 12 = 201{,}247.20$$

$$Equity\ Capitalization\ Rate: \frac{(251{,}559 - 201{,}247.2)}{882{,}669.87} = .057$$

Band of Investment Analysis			
Debt	75%	8.29%	6.2182%
Equity	25%	5.70%	1.4250%
		Ro	**7.6432%**

Calculations

$$Band\ of\ Investment\ Capitalization\ Rate\text{: } .75 * .0829 + .25 * .057 = .076432$$

Overall CAP Rate Comparison			
Sales Comp CAP Rate	7.5177%	1.00	7.5177%
Band of Investment	7.6432%	-	0.0000%
Overall CAP Rate			**7.5177%**

RENT COMPARABLES SUMMARY											
Rent No.	Project	Tenant	Lease Date	Tenant Size (Rentable Sq.Ft.)	Annual Rent/SF (Rentable Sq.Ft.)	CAM Charge	Rental Basis	Effective Age (Yrs.)	CAMS	Large	
1	Double Corners	Megatronics	Just Leased	10,175	$ 12.50	$ 1.95	NNN	12	Average Rent	$	13.17
2	Back Street Plaza	Nifty Crafts	Just Leased	9,900	$ 13.25	$ 2.00	NNN	9	Average CAM	$	2.00
3	Forever Plaza	Buy more / Get Less	Just Leased	10,100	$ 13.75	$ 2.05	NNN	7		**Small**	
4	Double Corners	Hound House	Just Leased	3,500	$ 15.00	$ 2.10	NNN	12	Average Rent	$	15.58
5	Forever Plaza	Pedal Pusher Flower	Just Leased	3,450	$ 16.00	$ 2.00	NNN	8	Average CAM	$	2.00
6	Back Street Plaza	Face Plant Bikes	Just Leased	3,650	$ 15.75	$ 1.90	NNN	9			

Calculations

$$Average\ Large\ Tenant\ Annual\ Rent\text{: } \frac{(12.5 + 13.25 + 13.75)}{3} = 13.17$$

$$Average\ Large\ Tenant\ CAM\ Charge\text{: } \frac{(1.95 + 2 + 2.05)}{3} = 2$$

$$Average\ Small\ Tenant\ Annual\ Rent\text{: } \frac{(15 + 16 + 15.75)}{3} = 15.58$$

$$Average\ Small\ Tenant\ CAM\ Charge\text{: } \frac{(2.1 + 2 + 1.9)}{3} = 2$$

Reconciliation of Value		
Total Value Indicated by the Cost Approach	$	2,531,147
Total Value Indicated by the Sales Comparison Approach	$	2,733,600
Total Value Indicated by the Income Capitalization Approach	$	2,322,600
Average Reconciled Value	$	2,529,116
CLIENT'S RECOMMENDED PURCHASE PRICE	$	2,322,600

Calculations

$$Average\ Reconciled\ Value: \frac{(2{,}531{,}147 + 2{,}733{,}600 + 2{,}322{,}600)}{3} = 2{,}529{,}116$$

Recommendation

We compared three different approaches to determine value: The Cost Approach described above; the Sales Comparison Approach; and the Income Approach. We found significant variation in indicated value across these approaches.

This disparity in indicated value caused us to look very closely at the subject property, and we had to make some key changes to our assumptions before we could recommend a value to our client.

First, comparable properties in the market have an Operating Expense per Rentable Square Foot of $5. The subject property initially had an OE/Sq. Ft. of $2.93. So, when we adjusted the Operating Expenses of the subject property up to $5/Sq. Ft., the value indicated by the Income Approach dropped from 2.6mm to 2.3mm. Similarly, when priced at 2.6mm, the subject property had a GIM of 11.17 as compared to a market average GIM of 9.52.

Therefore, it appears that the subject property doesn't produce as much gross income per square foot as comparable properties in the market. This means that our client cannot pay a price per square foot that is inline with the market average when other similar properties generate more income and more NOI.

Our recommended purchase price for this property is $2,322,600 or less. This gives us a GIM of 9.65 with an OE/Rentable Sq. Ft. of $5. However, this gives us a price per square foot for the subject property of $136.62 which is significantly less than the market average price per square foot of $181.15 but we feel is appropriate given the limitations in the property's ability to generate sufficient income to hurdle the $5/sq ft in operating expenses which are average for the market.