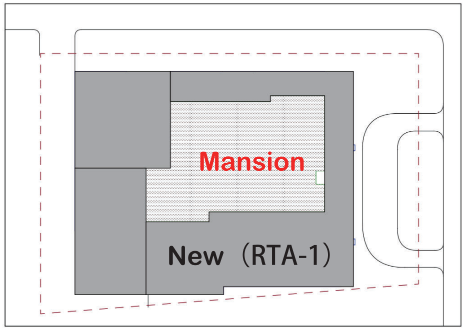
ASSIGNMENT 1: Case Study 1
Zoning, Site Yield, Income and Expense

Yuewen Dai

Senario I

Capacity:
11750 SF
(Property Line Area*0.5 Max Occupation)

Retain Mansion, construct under RTA-1



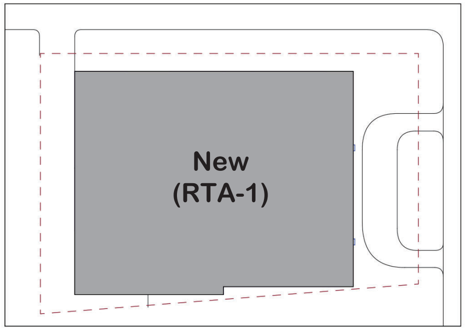
By-right – Conforming with RTA-1 zoning retaining all existing buildings	
Size(SF)	35,250
Effective Gross Income	697,950.00
Potential Gross Income-22/SF/yr	
(Vacancy Loss)-10%	
(Operating Expenses)-55% *	383,872.50
Real Estate Taxes	
Common Area Maintenance	
Utilities	
Cleaning	
Management Fees	
Marketing	
Insurance	
NOI	314,077.50

In the first scenario, the mansion is retained for its historic value, and the existing addition is demolished, new three-story structure is built around the mansion. Retaining older buildings carries the risk of higher vacancy rates and the cost of maintaining older buildings is higher than newer buildings, so in the NOI analysis (shown in the table above) I set a higher vacancy rate within the conventional range, and also a higher operating expenses rate. The Operating Expenses usually fluctuate around 50% of the EGI, considering older construction & fewer units, in this senario, it's set to 55%. The NOI is $314k, which is the lowest among all.

Senario II

Capacity:
11750 SF
(Property Line Area*0.5 Max Occupation)

Demolish all, construct under RTA-1



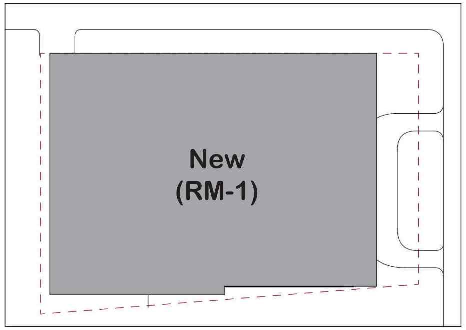
By-right – Conforming with RTA-1 zoning but demolishing all the existing buildings	
Size(SF)	35,250
Effective Gross Income	927,780.00
Potential Gross Income-28/SF/yr	
(Vacancy Loss)-6%	
(Operating Expenses)-45% *	417,501.00
Real Estate Taxes	
Common Area Maintenance	
Utilities	
Cleaning	
Management Fees	
Marketing	
Insurance	
NOI	510,279.00

In the second senario, all the existing constructions are demolished, and a new three-story structure is built within the limit of RTA-1 zoning. Because the building is newly constructed, the owner can charge higher rents and lower maintenance costs compared to retaining the mansion, also the vacancy rate will be lower. The gross area remains the same as in the first scenario, but in this scenario a higher NOI can be obtained because the house is in better condition, which is $510k. But this requires all the original buildings to be demolished and rebuilt, meaning that there's a higher construction cost, which should be analyzed later.

Senario III

Capacity:
18800 SF
(Property Line Area*0.8 Max Occupation)

Demolish all, Rezoned to RM-1



With Zoning Relief – demo buildings and develop max capacity with achievable zoning relief-RM1	
Size(SF)	56,400
Effective Gross Income	1,875,300.00
Potential Gross Income-35/SF/yr	
(Vacancy Loss)-5%	
(Operating Expenses)-40% *	750,120.00
Real Estate Taxes	
Common Area Maintenance	
Utilities	
Cleaning	
Management Fees	
Marketing	
Insurance	
NOI	1,125,180.00

In the third senario, all the existing constructions are demolished, the property is rezoned as RM-1, because we can get higher building occupancy rate and charge higher rents for commercial housing. It has better facilities which can attract more tenants. Our site is on the corner of the block, and according to the zoning regulation, we can use 80% of the site to build. Because of the larger number of residents and newer facilities, operating expenses can ideally be kept to a minimum to obtain the highest NOI, which is $1.1 million, the highest among all three senarios. Also, we have to analyze other costs later.

*Income Info comes from: https://www.mashvisor.com
*Expenses Info comes from: https://www.stacksource.com/blog/multifamily-operating-expenses-a-beginners-rule-of-thumb
*Vacancy Info comes from: https://fred.stlouisfed.org/series/RRVRUSQ156N
*Other References: Real Estate Finance-Basics