

THE CHARLESGATE  
A HOTEL FEASIBILITY AND CASE STUDY

Prepared in coordination with a development study of the  
Emerson College properties in Back Bay, Boston

by

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
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The Charlesgate - Hotel Feasibility and Case Study

by  
John Cassidy Clawson

Submitted to the Department of Urban Studies and Planning on August 16, 1985 in partial fulfillment of the requirements for the Degree Master of Science in Real Estate Development at the Massachusetts Institute of Technology

ABSTRACT

The purpose of this study is to detail the process in determining the feasibility and development plan for a hotel development by evaluating an existing building owned by Emerson College in Back Bay, Boston. The thesis is prepared in coordination with a larger study by James McCormack and Bernard Schachter which analyzes the development potential for the 18 properties owned by Emerson College in Back Bay, Boston.

The focus is on a detailed analysis of the hotel development potential of the Charlesgate, a 125,000 square foot building owned by Emerson College at 535 Beacon St., Boston. Chapter I includes a description of the location, layout, condition, and operation of the property. Chapter II provides general guidelines for hotels, their revenues, design, and management, and concludes with a proposed design program for the Charlesgate. Chapter III looks specifically at the Boston hotel market with a detailed inventory of downtown hotels, establishes the target market for the Charlesgate, and projects room rates and occupancies for the proposed hotel. Chapter IV analyzes alternative financing strategies for the hotel including conventional financing, syndication, and a more thorough look at the sale of hotel rooms as condominiums as an alternative source of financing. Chapter V concludes the study with a detailed development plan for the property with an analysis of the proposed programming, design, costs, revenues, expenses, and financing.

The study presents the conclusion that the Charlesgate is not currently feasible as a hotel development given the expected selling price and the uncertainties potentially faced by a developer in purchasing the property. The primary problems limiting the development are price, proposed tax changes, neighborhood opposition, and improper zoning. However, if the properties could be purchased as a feasible residential condominium and the proper tax and economic conditions existed at the time of development, a hotel would provide considerably greater value to the developer.

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## INTRODUCTION

The purpose of this study is to detail the process in determining the feasibility and development plan for a hotel development by evaluating an existing building owned by Emerson College in Back Bay, Boston.

This thesis is prepared in coordination with a larger study by James McCormack and Bernard Schachter which analyzes the development potential for the 18 properties owned by Emerson College in Back Bay, Boston.

### The Emerson College Properties

In early 1985, amidst growing neighborhood opposition to Emerson College's continued growth in the Back Bay, Dr. Allen E. Koenig, the president of the college, announced the school's intent to sell the bulk of Emerson's properties to finance a relocation to a site better suited to their needs. As many as 18 buildings located on Brimmer Street, Beacon Street, Berkeley Street, Charlesgate East and Commonwealth Avenue would be available with an estimated value of between "\$50 million and \$100 million". Emerson is actively pursuing the acquisition of a new site for relocation of the campus within the Boston area. The same pressures on prime Back Bay real estate values that made the prospect of the move attractive to Emerson has aroused interest in the properties from developers, and as reported in the Boston Globe and the TAB, Emerson has been approached by many interested buyers.

The Emerson properties present some unique challenges and opportunities for development. The college has voiced a preference to sell the properties as a package to a single developer. This strategy may simplify and limit the costs of the transaction for Emerson while accomodating their need for flexibility in gradually phasing out of the Back Bay campus. The properties must therefore be evaluated individually and as a whole to best structure an aquisition and development plan.

The McCormack and Schachter thesis will analyze all 18 properties and focus on their potential conversion to residential use. The scope of their study will include:

1. A property inventory describing each building, its location, condition, layout, and recommended improvements.
2. An analysis of the residential market in Boston with a focus on condominium development in the Back Bay.
3. Development plans for conversion of the appropriate properties to a highest and best use as condominium.
4. An analysis of alternative aquisition strategies for the properties.

All but 4 of the 18 buildings are in the 10,000 to 25,000 square foot range and will most likely be best converted to residential use. On preliminary analysis, 100 Beacon St., a 40,000 square foot building, will also best accommodate resi-

dential development, and 355 Commonwealth Avenue should maintain its use as an office and gourmet food store.

The buildings at 534 and 535 Beacon contain 61,600 and 125,000 square feet respectively and represent 42% of the total 446,500 square feet in the 18 Emerson buildings. Both of these properties are potentially better suited and more valuable as alternative uses to condominium residential development.

The primary alternative uses to be considered for 534 and 535 Beacon St. are student housing and hotel. Boston University has already expressed interest in the properties to help satisfy their increasing demand for student housing. Both properties were originally built as hotels and have the size, layout, location and character to be considered for hotel development.

#### Hotel Feasibility and Case Study

This report will focus on 535 Beacon Street, known also as the Charlesgate, and evaluate its potential use, feasibility, and value as a hotel development. The existing operation as a student housing facility will be analyzed in order to assess the potential value relative to hotel and residential uses. The "Hotel Feasibility and Case Study" will be organized in the following manner.

CHAPTER I. PROPERTY DESCRIPTION - A description of the location, layout, condition, and operation of the property. (This information is shared with the "The Emerson College Properties" thesis by McCormack and Schachter.)

CHAPTER II. GUIDELINES FOR HOTEL DEVELOPMENT AND DESIGN - A summary of typical hotels, their operations, design, and management, including specific guidelines for the programming of the Charlesgate.

CHAPTER III. THE BOSTON HOTEL MARKET - A summary market analysis and inventory of the present and future hotel and related development in Boston and a specific projection of market rates and occupancies for the subject property.

CHAPTER IV. FINANCING AND FORMS OF OWNERSHIP - CONDOMINIUM HOTELS - A summary of alternative financing strategies with a more detailed description of the history, characteristics, and structure of the condominium hotel as a method of developing and financing hotel projects.

CHAPTER V. DEVELOPMENT PLAN - A detailed analysis of the programming, planning, design, costs, revenues, expenses, and financing for the proposed hotel development.



## CHAPTER I. PROPERTY DESCRIPTION

The Charlesgate at 535 Beacon Street is located between Beacon and Marlborough Streets where they meet the Fenway. The brick and stone building was built as an apartment hotel in the late 1800's and early 1900's in several phases and additions. Until 5 or 10 years ago it was owned by Boston University and used as a dormitory. BU sold the property to a private owner who ran it as a rooming house and allowed it to substantially deteriorate. When Emerson College bought the Charlesgate they began a gradual renovation and maintenance program, and have used the building for student housing.

### A. Locational Characteristics

The feasibility of the Charlesgate for hotel development is largely determined by its location; the neighborhood, adjacent uses, circulation, accessibility, parking, views, and amenities. Following a discussion of these determinants are site and area plans further illustrating the property's locational characteristics.

#### 1. Neighborhood and Adjacent Uses

The Charlesgate, although technically located in Back Bay, is in a transitional area between the Back Bay, the Fenway, and Kenmore Square. The area contains roughly four square blocks bounded by Storrow Drive and the Charles River to the North, Massachusetts Avenue to the East, the Charlesgate interchange

and the beginning of the Fenway to the West, and the Mass Pike to the South. Property values have increased dramatically in the area with several condominium projects on Marlborough Street and Commonwealth Ave. between Mass. Ave. and Charlesgate. Values, however, have been significantly below those achieved in other parts of Back Bay. Mass Ave. is a major thoroughfare with several poorly maintained commercial buildings and it continues to be a barrier to the spread of luxury condominium developments and exorbitant prices. The Church Court Condominiums on Beacon and Mass. Ave., the new Bildner's gourmet food store in the Ames Mansion, and the recent sale of the Marlborough Building for condominium conversion are, however, improving the character of Mass. Ave. between Commonwealth Ave. and the Charles River and pushing the borders of the Back Bay. Residential development should continue in the area as supply becomes more limited and prices continue to rise in the Back Bay. The separation from Back Bay created by Mass. Ave., the proximity to Kenmore Square, the Fenway, Simmons College, and the several apartment and fraternity houses should, however, maintain the comparatively lower prices in the area.

A number of BU and MIT fraternity houses begin on the river side of Beacon St. between Mass. Ave. and Charlesgate and continue on Bay State Rd. past the Fenway. BU owns a very large building on the river side which it uses for student

housing and they are interested in the Emerson buildings at 534 and 535 Beacon for further expansion of their housing facilities.

Marlborough St. remains primarily residential with a number of apartment, owner occupied multi-family, and condominium buildings. At the end of Marlborough, where it meets the Charlesgate, there are a number of buildings owned by Simmons College. Most of their buildings front on Commonwealth, with their rear open to Marlborough and 535 Beacon as the block tapers near Charlesgate East. Directly east of the Charlesgate on Marlborough is a new single story classroom building on an eight thousand square foot site owned by Simmons. This site will be considered for purchase as part of the proposed hotel parking facilities.

Commonwealth Avenue between Mass. Ave. and Charlesgate has a number of large elegant residential and commercial buildings particularly on the South side. The Sommerset is a 150 unit luxury condominium development with on site parking, security, and doorman services. Adjacent to it is a building being renovated for office and commercial use.

A number of facilities used by potential hotel visitors are located within convenient proximity of the Charlesgate. The Hynes Auditorium currently under renovation at the Prudential Center on Boylston St. is a half a mile or about a ten minute walk. The shopping center and convention hotels at Copley

Place are within another five minutes walk through the Prudential. Newbury St. shops and restaurants, the Esplanade, and the Boston Common are all within a twenty minute walking time of the Charlesgate. A number of colleges and universities are also close to the Beacon St. location. Boston University, Northeastern University, and MIT across the Charles are all easily accessible. Major institutions close to the Charlesgate include the Christian Science Center, Boston Public Library, Institute of Contemporary Art, Symphony Hall, Museum of Fine Arts, and the Longwood Medical Center.

## 2. Circulation

The Charlesgate is exceptionally well located for vehicular circulation. The Charlesgate/Fenway interchange with Storrow Drive is located directly in front of the property. East and westbound entry to Storrow is visible from 535 Beacon with no difficult intersections and reasonably good signage. Access from Storrow from either direction is via the Fenway exit and would require some signage or familiarity to get visitors off of the Charlesgate overpass, onto surface streets, and turned around the Commonwealth Avenue divider leading to Charlesgate East and the front entry of the Charlesgate. There is an alternate route from Storrow Dr. westbound exiting onto Mass. Ave. turning left and then immediately right onto Beacon St. Access onto the Mass Pike westbound is four blocks down on

Mass Ave. across from the end of Newbury St.. There are two alternate approaches to the site from the Mass Pike. The easiest is through the Prudential Center exit following Belvidere or Dalton St. behind the Prudential to Mass. Ave.. The alternative is exiting the Pike at Cambridge and taking Storrow Dr. to the Fenway exit described above. Route 1 coming from Jamaica Plain along the Fenway passes directly in front of the Charlesgate and provides easy access to Boylston St., Northeastern, Boston University, Museum of Fine Arts, and the Arnold Arboretum.

Public transportation is also accessible from the site. The green line can be met at Mass. Ave. and Newbury St. or in Kenmore Square. When the Mass. Ave. bridge is rebuilt, a bus runs down Mass. Ave. providing very easy access across the Charles to MIT, Harvard, and Harvard Square.

Beacon St. is a major westbound artery from Back Bay, Beacon Hill, and downtown leading to Mass. Ave., Kenmore Square, Brighton, Brookline, and western suburbs. A large amount of traffic is diverted at Mass. Ave.. Although a number of people do use the Charlesgate entrance to Storrow Dr., there is rarely a congestion problem at the Beacon St. intersection. Drop off parking for the proposed hotel could be easily accommodated along the South side of Beacon St. in front of the Charlesgate where there is currently parallel parking. A drop off area along Charlesgate East would be

required to accomodate visitors coming from Storrow Dr. or the Fenway. This may necessitate approval of a small curb cut and drop off area encroaching on the existing side walk to avoid creating congestion problems along the rather narrow Charlesgate East.

### 3. Parking

Parking throughout the Back Bay is severely limited and poses a major problem in a proposed hotel conversion. The Charlesgate has no on site parking and the area is generally limited to parallel parking on the street or in alleys behind buildings. There is some limited parking between the ramps for the Charlesgate/Fenway interchange off of Storrow Dr. and along Back Street for the riverside buildings on Beacon St.. The single story classroom building owned by Simmons College just east of 535 Beacon would be an ideal site for a parking structure for the Charlesgate. The site area is 8,000 square feet which would allow for roughly 22 cars per level in a multi-story parking garage. The only other solution to the parking problem would be to lease spaces from adjacent buildings. The riverside Beacon St. buildings have substantial parking and a renovation of 534 Beacon may provide some additional structured parking. Remote parking locations are possible for hotel use if valet parking is offered. There is a parking garage on Newbury near Mass. Ave. and some lots in the Kenmore Square area that may be willing to lease some spaces to the hotel.

#### 4. Views and Amenities

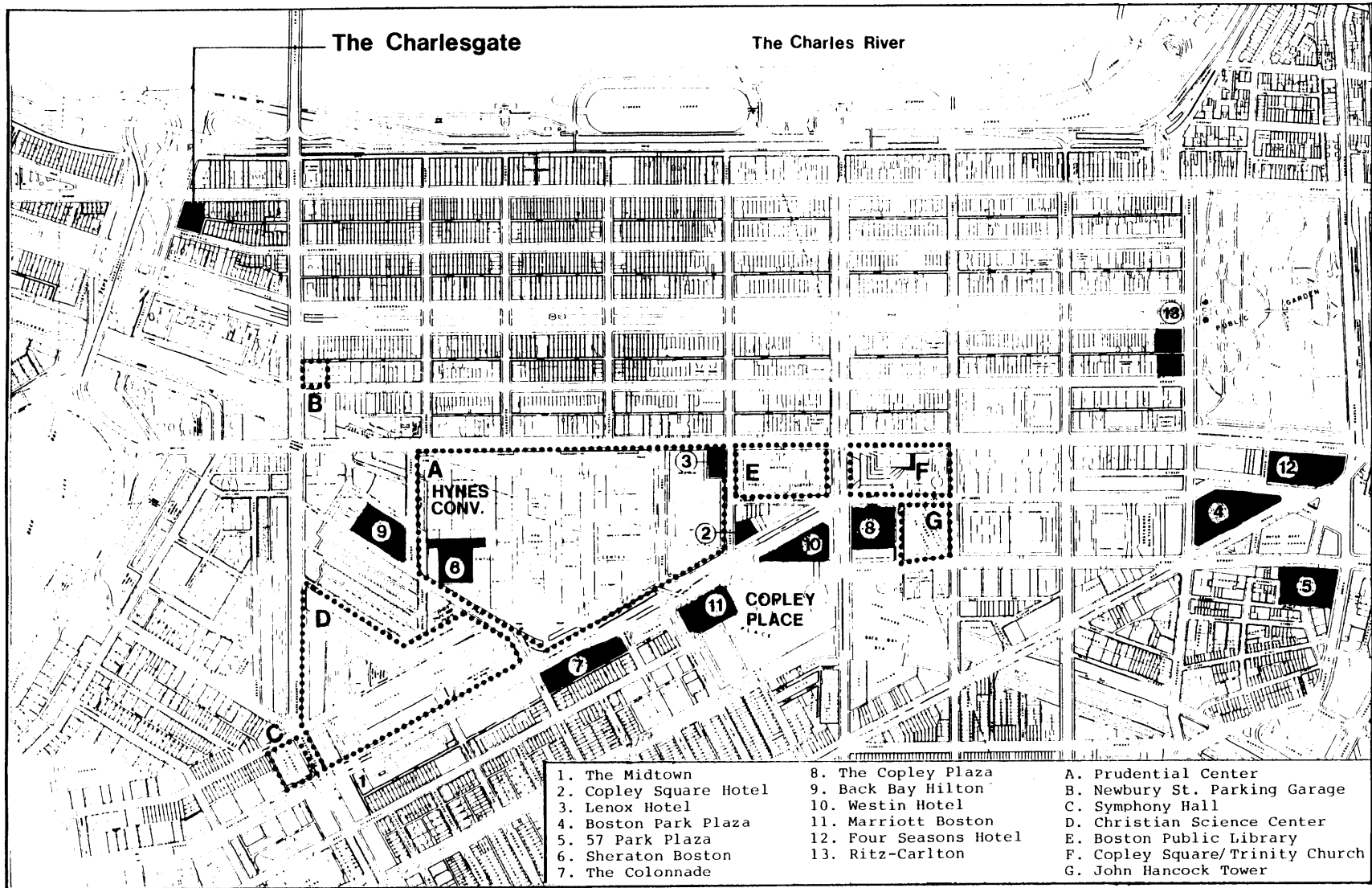
The Charlesgate, besides having the amenities of location and easy access to major arteries and highways, has tremendous views of the Charles River on the North and West sides above the third floor. The Charlesgate also gets these views without the common penalty of traffic noise from Storrow Dr. although some noise is generated by the Charlesgate overpass and interchange. From the fifth floor up as the Charlesgate climbs above its five story neighbors, the views to the South and East over Back Bay and toward the downtown skyline are also dramatic. The views inward along the interior spaces of the U-shaped building are less attractive with views into opposing windows and down to the rooftop of the second floor below. Cleaning the masonry, repairing the walls and windows, installing balconies, and creating a terrace on the second floor roof would greatly improve the feeling from these interior courtyard spaces. The lower levels on the West side look onto the Fenway which is pleasantly landscaped with trees, grass and a small stream. The trees also serve to block much of the view of the Charlesgate overpass. The worst views are from the lower floors facing Beacon, the backs of buildings on Marlborough, and the alley behind Beacon St. to the East.

The Charlesgate is quite visible from a number of highly travelled routes. An excellent view can be seen from Storrow Dr. east bound particularly when taking the Fenway/Kenmore

Square exit. The building is also highly visible from the Charlesgate overpass and can be clearly identified from as far away as Memorial Drive in front of the Cambridge Hyatt.

The Charlesgate is one of the largest buildings in the Back Bay and commands a dominant position, anchoring the end of Beacon, Marlborough, and the Fenway with its unique mass, height, and strong Victorian design.

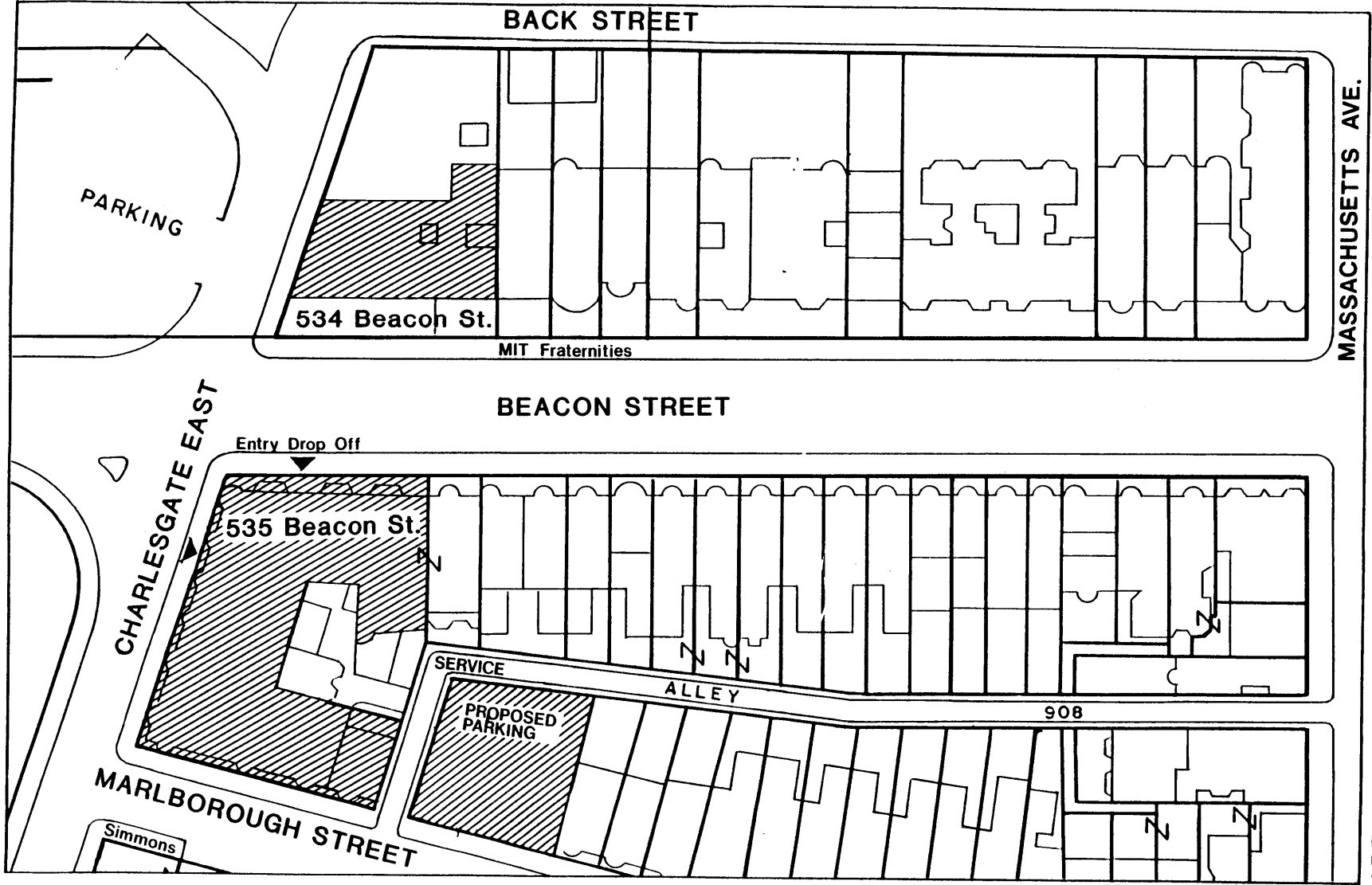




BACK BAY PROPERTY LOCATION PLAN

The Emerson College Properties

18



North

MASSACHUSETTS AVE.

AREA PLAN - 534 & 535 BEACON St.

The Emerson College Properties

## B. Building Configuration

The Charlesgate was originally built as an apartment hotel in at least three phases. In its present form it has approximately 125,525 square feet on nine floors including the basement. The basement and first floor essentially cover the entire site with a gross building area per floor of 18,770 square feet. The second floor is donut shaped, open to the roof of the first floor in the center and contains 16,000 square feet. The remaining floors stack in a U-shape around a central court allowing light into the interior spaces. Following is a summary of the square foot areas per floor and an estimation of potential expansion space if the entire building were to be built to the full eight story height around the U-shaped layout.

FLOOR	ESTIMATED		
	GROSS AREA	NET AREA	EXPANSION
Basement	18,770	14,100	
1	18,770	14,100	
2	15,995	12,000	
3	14,795	11,100	
4	14,795	11,100	
5	14,795	11,100	
6	12,100	9,100	2,690
7	12,100	9,100	2,690
8	3,405	2,500	9,000
TOTAL	125,525	94,200	14,380

The basement has large amounts of interior area and little light through half height windows on its perimeter. The Beacon St. face is the only side with decent exposure and access afforded by a fairly deep window well. The area is

divided into many individual rooms along the perimeter which were used for dormitory rooms. Interior areas are used primarily for storage and mechanical space and the ceiling is cluttered with pipes and electrical lines.

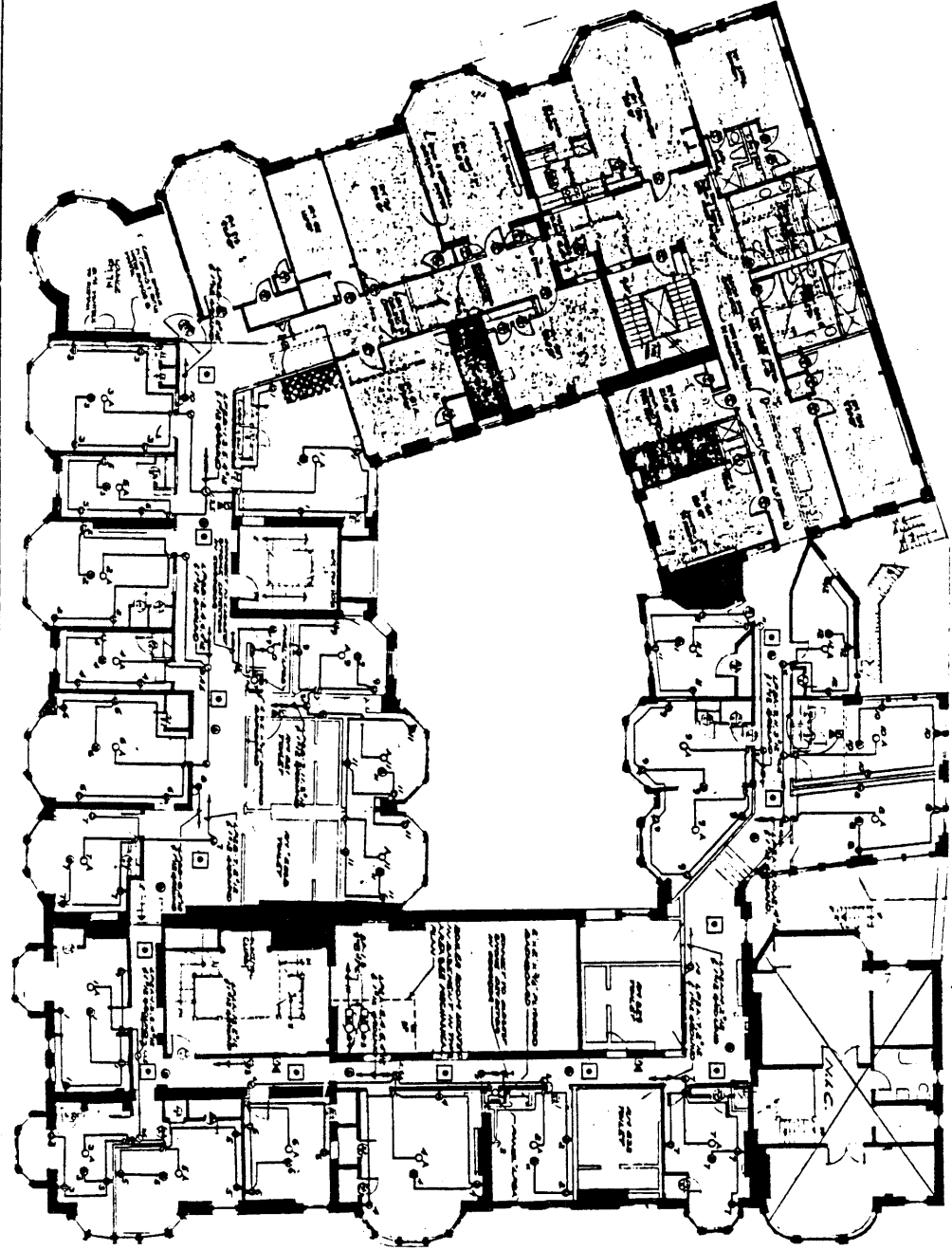
The first floor was the main public floor of the hotel and has large open areas in the center and along the West face looking out onto the Fenway. Along the North side of the building are a series of small rooms and on the South are some larger individual rooms, part of an old attached mansion, with elegant wood detailing and fireplaces. The entries off of Beacon and Charlesgate East and the main internal circulation are decorated with an unusual and colorful ornate tile.

The second through eighth floors are similarly divided into individual rooms largely in their original configuration as apartment hotel units. Room sizes generally range from 200 to 250 square feet. The original apartment layout typically has larger rooms of 250 square feet or more with beautiful large bay windows connected by a doorway to adjacent smaller rooms just under 200 square feet. Most of the individual bathrooms have been eliminated and replaced with new group facilities on each floor. There are three stairways, one in the center and one near each end of the corridors, and one small older elevator in the middle of the center stair. Many of the rooms have some detail, beamed ceilings, and fire-

places but several have been sprayed with a very heavy textured paint which would have to be removed and may result in destroying any detail or trimwork. Corridors are sufficiently wide except for those in the South wing of the building which would have to be enlarged to comfortably accommodate any new use.

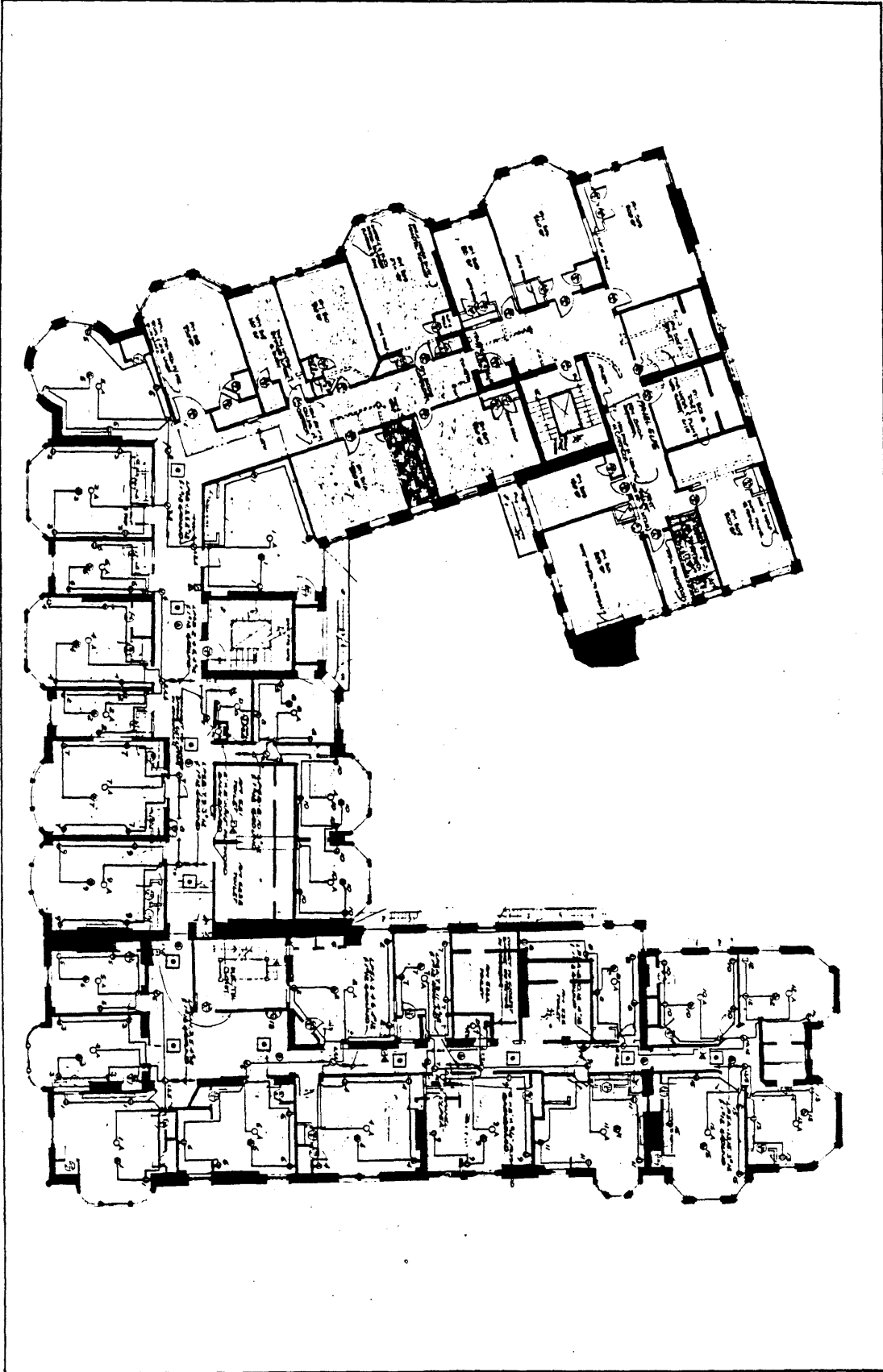
The sixth and seventh floors could pick up an additional 2,700 square feet by building over the east end of the south wing. The eighth floor contains only a small section over the center of the west side and could be expanded to create another full floor without destroying the exterior elevations of the building. There is also the opportunity to create roof decks for the top floor units providing an additional amenity and helping solve the design of that addition in relation to the existing facade.

At the end of this section are floor plans of the second, typical third through fifth, sixth, and eighth floors.



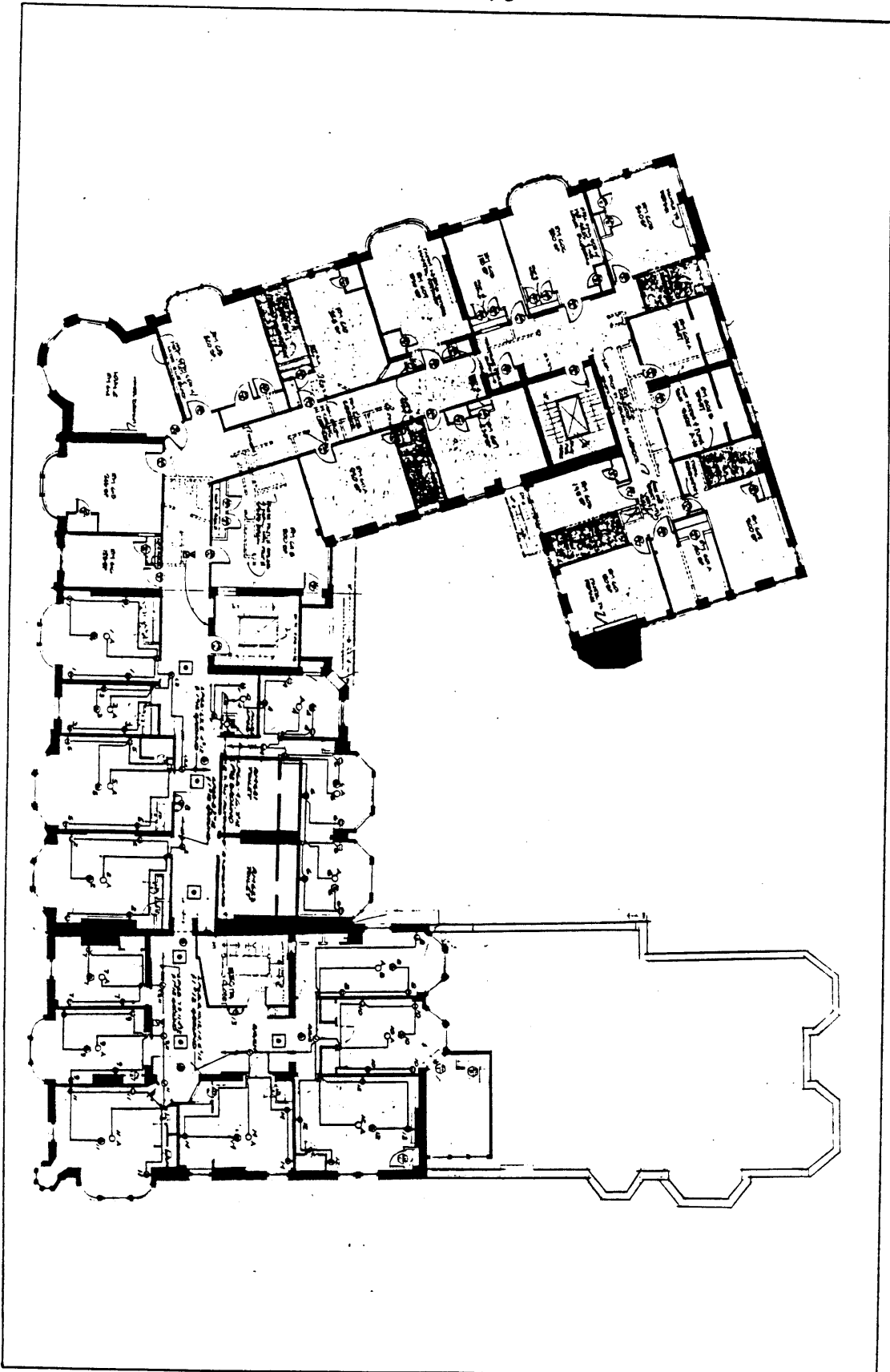
FLOOR PLANS - 535 BEACON ST.- 2nd Floor  
The Emerson College Properties





FLOOR PLANS - 535 BEACON ST.-Typical 3rd-5th Floors  
The Emerson College Properties

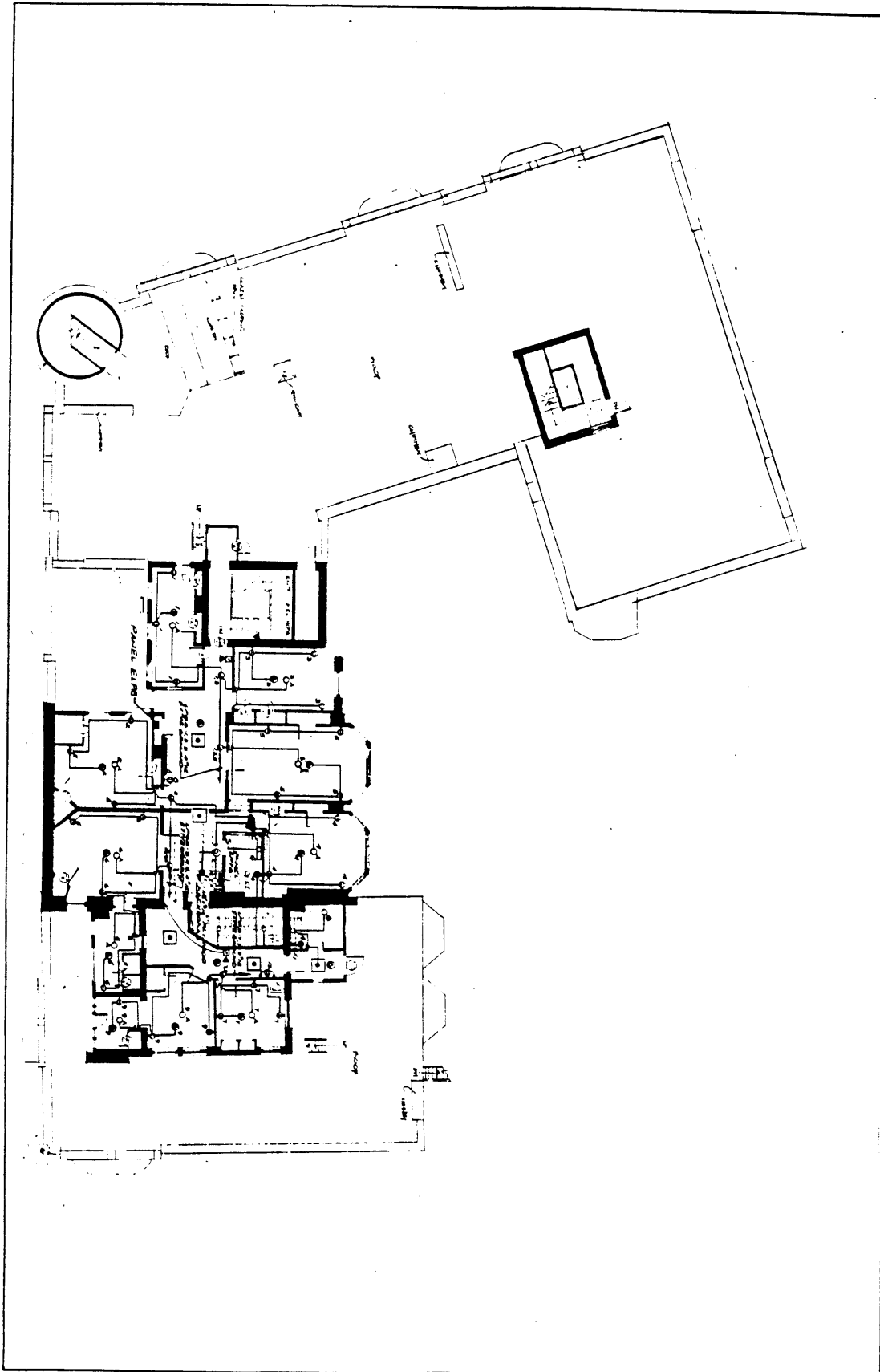




FLOOR PLANS - 535 BEACON ST. - 6th and 7th Floors  
The Emerson College Properties







FLOOR PLANS - 535 BEACON ST.- 8th Floor

The Emerson College Properties



C. General Condition of the Property

The overall condition of the property is very poor. All plumbing, electrical, mechanical, systems, and elevators must be replaced with the possible exception of the main electrical service entry and the fire protection systems. Interior finishes, trim, doors, and hardware must all be replaced or restored. About fifty percent of the windows have been replaced and the balance would need to be. The masonry and stone exterior is in good condition on the Beacon and Charlesgate elevations but needs cleaning throughout and significant repair on the Marlborough and interior courtyard faces.

D. Operations and Estimated Value as Student Housing

The following is a summary of the budgeted and actual expenses on the Charlesgate from June 1984 to June 1985.

DESCRIPTION	BUDGET	ACTUAL
Oil	85,000	74,925
Electric	42,900	41,330
Gas	17,900	13,910
Telephone	2,800	1,690
Water	10,800	17,435
Outside Service	6,000	14,970
Equipment	17,000	7,520
Insurance	10,200	10,200
Repairs & Maint.	19,600	20,940
Electrical	6,000	2,750
Plumbing	10,000	700
Painting	3,500	2,000
Heating	5,000	1,225
Carpentry	8,000	3,435
Locksmith	4,000	1,055
Custodial	23,500	10,905
TOTAL	272,200	232,635
(1)		

The Charlesgate presently has a capacity of 389 students and ran at a 96.4% occupancy with 375 rooms rented at \$2,950 per person for the academic year 1984-1985. Rents are expected to go up by 5% to 10% next year which would take the yearly income as high as \$1,262,000. If the operating budget remains the same for next year, given that it was high for last year, net operating income would be \$990,000. For an institution like Boston University with a substantial endowment, long term time horizons, a demand for student housing, and probably some below market rate financing available, a capitalization rate of 8% may be very reasonable. This would generate a value of nearly \$12.5 million or \$100 per gross square foot. BU may slightly discount the property for its condition and needed repairs but they would certainly have to do less to the property than a private developer converting the building to residential or hotel use. It is possible, however, that they may use a considerably lower capitalization rate, given their position and ability to dictate dramatic yearly rent increases, justifying an even higher purchase price.

#### E. Zoning and Neighborhood Sentiment

The current zoning for 535 Beacon St. is H-3-65 which is an apartment type residential use allowing a FAR of 3 and a maximum height of 65 feet. The eight story Charlesgate obviously does not conform with this current height restric-

tion. Allowed uses under this zoning classification relevant to this study include apartments, single or multi-family residential, and convalescent, nursing, or rest homes with certain conditions. Conditional uses within the zone are lodging or boarding houses, dormitories, educational, and group care facilities. Although apartment hotels are included as allowed uses with multi family residential, hotels, motels, and apartment hotels are expressly forbidden under use 15 in the code for zones H-2-65 and H-3-65. Also forbidden by the code are restaurants, commercial establishments, professional offices, and parking lots. Parking garages are allowed as accessory use number 72 to residential uses 1 through 15 with a limit of 3 cars per dwelling unit. Also included under accessory use number 78 are newstands, dining facilities, and various commercial establishments for the primary use of residents of multi family properties, hotels, or apartment hotels which have in excess of 50 units. Accessory uses in residential areas are restricted to 25% of the total floor area and may not use show windows or advertising to attract the public nor can a business office be open to the public. (2)

It seems almost certain that a variance would be required to permit a hotel development in the area. Even if the project were sold as a condominium hotel or an apartment building with a rental program, it would be construed as a commercial use forbidden under current zoning.

The local neighborhood groups and abutters would probably make the variance and approval process long and difficult. The Back Bay Neighborhood Association is committed to maintaining and enhancing the quality of residential life and adamantly opposes the expansion of commercial uses in the Back Bay area. Their objections to the project would probably be the increased pressure on an already serious parking problem, excessive traffic congestion generated by the hotel, inappropriate mix of residential and commercial uses, and its impact on this particularly sensitive transitional area of the Back Bay neighborhood. The Association feels that this area has suffered from the presence of the institutional uses in the area, the dormitories and fraternity houses. It sees the sale of the Emerson properties, particularly the two large anchor buildings, 535 and 534 Beacon, as the perfect opportunity to improve this part of Back Bay and define it as a coherent residential neighborhood. The uses preferred by the Association are residential condominium or some form of elderly housing. (3)

The threat that exists to the desires of the Neighborhood Association is the competition for the property by Boston University or other institutions. The economics of student housing in these properties combined with the financial position of a major institution like BU may allow them to

pay more for the property than would be economically feasible for a residential or elderly housing project. The city of Boston and the BRA may also support the use as dormitory because of their commitment to maintaining and supporting educational institutions within the city. A hotel may be the only use which creates enough value to compete in price with BU and offer some attractive revenues for the city. Under the threat of hotel as the only viable alternative to continued dormitory use, the neighborhood may not provide such strong opposition and may in fact actively support the hotel if convinced no alternatives exist. The Neighborhood Association's first efforts, however, would be to defeat both proposed uses, and they have the resources, influence, and commitment to wage an effective campaign.

FOOTNOTES TO CHAPTER I

1. Emerson College, Budgeted and actual operating expenses at 535 Beacon St. for June 1984 through June 1985. Projected dormitory room rates based on quoted room rates for 1984-85.

2. Boston Zoning Code and Enabling Act

## CHAPTER II. GUIDELINES FOR HOTEL DEVELOPMENT AND DESIGN

The hotel industry is in a continuous state of evolution as the economy, population, business practices, and travel patterns change. The last 10 to 20 years have been a time of dramatic growth in hotel development. The baby boom has increased the population in the prime travel age group of 25 to 44. Increased wealth and two income households have made travel more affordable while businesses are increasingly dependent on travel, resulting in increased business related travel expenditures. Room size has increased, the new all suite hotels are growing in popularity, and convention hotels are growing in facilities and sophistication to compete in the expanding convention industry.

The following is a description of the types of hotels found in downtown areas and a summary of typical spacial requirements, operations, and management.

### A. Downtown Hotel Types

Downtown hotels can be subdivided into 4 broad categories: convention, super luxury, all suite, and commercial. Following a brief description of these types and how they characterize a hotel's operations and design, is a summary of typical space requirements by hotel type.

#### 1. Convention Hotels

Convention hotels typically require a minimum of 500 rooms to



support the 30,000 to 60,000 square feet of meeting, banquet and ballroom facilities necessary to attract convention business. Large convention hotels can easily reach 1,000 rooms and are usually clustered around a city's major convention center so they can share facilities and provide the necessary lodging for major conventions.

Of the three visitor categories of commercial, group, and tourist, convention hotels serve primarily the commercial and group visitors. Commercial visitors are the most desirable for hotels because they are relatively insensitive to price and seasonal changes, allowing the hotel to achieve maximum room rates and consistent business. The group visitor provides the volume necessary to support the extensive facilities required in a convention hotel and, therefore, frequently demands a discount in the room rate.

## 2. Super Luxury Hotels

In order to maintain the personalized service expected in a luxury hotel, the number of guestrooms are frequently limited to 250 or less. Management and ownership are more individualized with little reference to major chains or national hotel companies. Guestrooms are typically 400 square feet or more as compared to 330 square feet in typical convention and commercial hotels. Meeting and convention facilities are usually very limited, although first class banquet rooms, restaurants, and lounges are expected and often necessary in

generating additional revenue to compensate for increased operating expenses and the lower occupancy associated with their independent operations.

The primary customers of the super luxury hotel are tourists and commercial visitors. The tourist trade seeking the luxury hotel is relatively price insensitive but quite seasonal in nature. Commercial business occurs primarily during the business week and is also price insensitive.

### 3. All Suite Hotels

The all suite hotel is a new concept in hotel design which provides for a separate bedroom and sitting room for every guestroom. The design is popular for both tourist and commercial visitors because it accommodates families with sleep sofas in the additional room and allows for small informal meeting space for business travelers. Average room sizes begin at about 450 square feet and occupy a larger percentage of the overall hotel area with reduced food, beverage, and meeting space when compared with typical commercial hotels.

### 4. Commercial Hotels

This is a general category which overlaps the more specific hotel types described above. Most downtown hotels fit into this category with their operations and design tailored to a specific market. They may contain substantial meeting and banquet facilities (typically about 4 - 5% of gross area) but rarely compete with the major convention hotels in hosting

large group events. Food and beverage facilities represent roughly 4% of gross area and guestrooms, ranging in size from 240 square feet for budget accommodations to 450 square feet for luxury, typically account for 70 to 75% of the gross building area.

SUMMARY OF SPACE REQUIREMENTS BY HOTEL TYPE

	CONVENTION HOTEL		SUPER LUXURY	
Guestrooms				
number	500		250	
area	330		400	
	Area	%	Area	%
Guestrooms	246,428	68.5%	156,600	78.0%
gross factor	0.45		0.45	
Food and Beverage	13,660	3.8%	6,000	3.0%
Meeting and Banquet	28,750	8.0%	8,398	4.2%
Total Public Area	58,638	16.3%	21,122	10.5%
gross factor	0.25		0.25	
Administration	8,438	2.3%	4,050	2.0%
gross factor	0.25		0.2	
Service Areas	46,490	12.9%	18,922	9.4%
gross factor	0.25		0.2	
TOTAL AREA	359,993	100.0%	200,694	100.0%
AREA PER ROOM	720		803	

	ALL SUITE HOTEL		COMMERCIAL	
Guestrooms number	250		200	
area	450		350	
	Area	%	Area	%
Guestrooms gross factor	168,750	82.3%	108,750	76.6%
	0.5		0.45	
Food and Beverage	4,200	2.0%	4,000	2.8%
Meeting and Banquet	7,763	3.8%	6,500	4.6%
Total Public Area gross factor	18,078	8.8%	16,250	11.4%
	0.25		0.25	
Administration gross factor	3,300	1.6%	3,000	2.1%
	0.2		0.2	
Service Areas gross factor	14,867	7.3%	14,000	9.9%
	0.2		0.2	
TOTAL AREA	204,996	100.0%	142,000	100.0%
AREA PER ROOM	820		710	

(1)

A convention hotel and a super luxury hotel are probably not appropriate uses for the property being studied at 535 Beacon St. The Charlesgate is really too far removed from the primary convention facilities around the Hynes Auditorium. It also has a maximum area of 140,000 square feet, allowing for roughly 195 rooms which is well below the size necessary for an efficient convention hotel. The location of the Charlesgate in a transitional neighborhood with some less than desirable adjacent uses combined with its age and existing layout probably limits the property's development as a super luxury hotel. It would be impossible to compete, at

least in the near term, with the elegant Boston hotels like the Ritz Carlton, Copley Plaza, or Four Seasons. The balance of this report will, therefore, focus on commercial and suite hotels as the appropriate hotel use for the Charlesgate property.

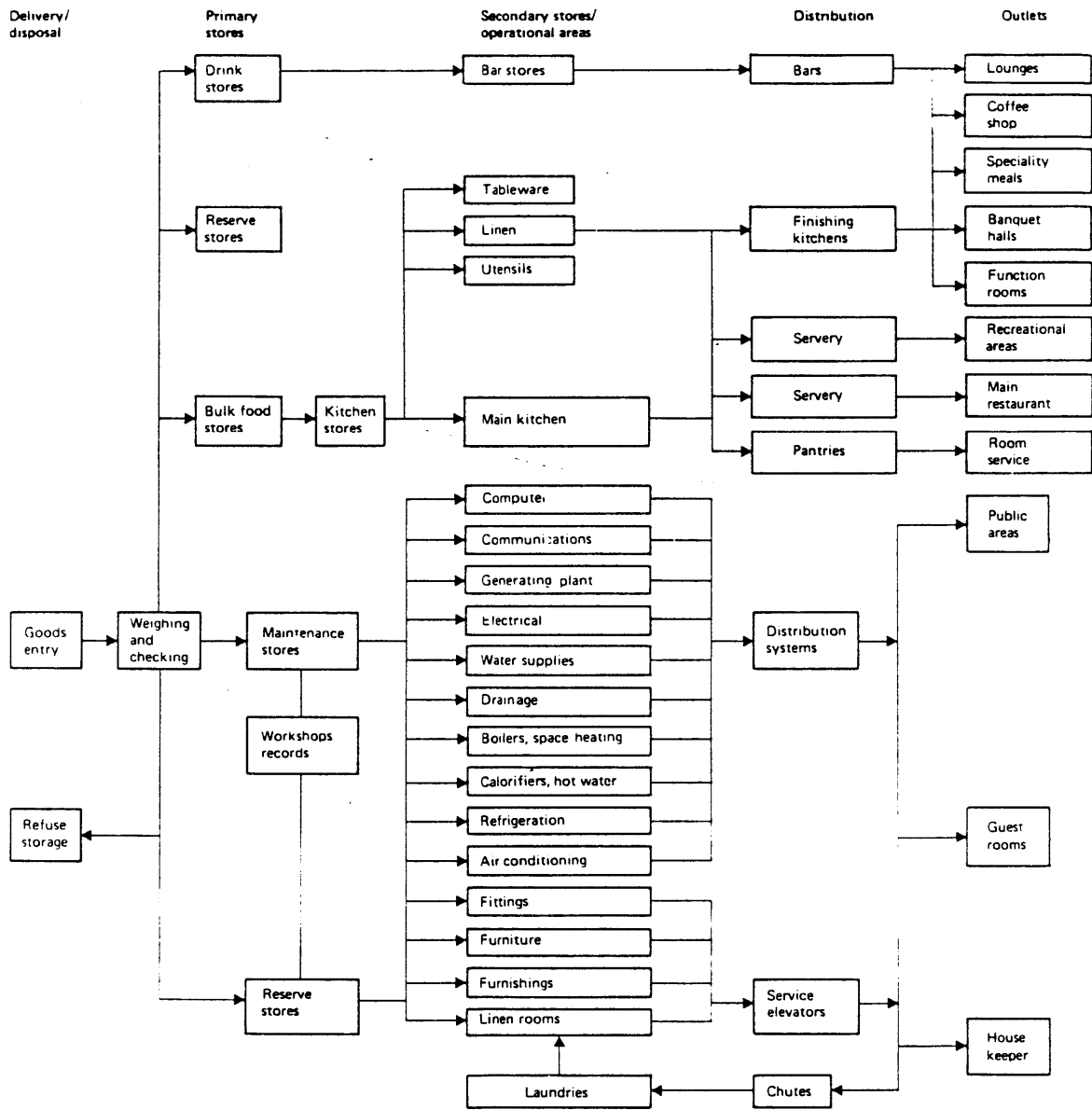
#### B. Physical Facilities and Relationships

The intention of this section is to provide adequate information on the planning, design, and spacial requirements for a hotel to evaluate the initial feasibility, layout, and composition of a proposed project.

##### 1. Relationships of Operational Areas

The following diagram outlines the interaction between the various back of the house functional areas and their relationship to the major public facilities and services and provides a visual inventory of the various physical facilities in a typical hotel.

# RELATIONSHIP DIAGRAM OF HOTEL FUNCTIONAL AREAS



(2)

There are a few key elements in the layout of the hotel and its back of the house facilities. The success of a hotel is dependent on the efficient operation of a functionally complex building. The facility should be designed from the inside out with the kitchen and service areas central to the planning and design process. The service entry location must have a single control point accessible to the various maintenance, food, and beverage storage areas as well as the refuse and laundry pick up (unless laundry is done in house). The main kitchen must be adequately sized with expansion provisions and centrally located to serve all restaurants, banquet facilities, remote serving kitchens, and room service. As a result, the service elevators should be located near the kitchen to accommodate room service deliveries and food transport. Additional service elevators may be provided for serving banquet rooms in larger hotels and passenger elevators may be used for room service but should be avoided if possible. Housekeeping rooms should be located by the service elevators on each floor of guestrooms with laundry and garbage chutes located adjacent to the elevator shafts. These chutes dictate that laundry and trash rooms be located adjacent, above, or below the kitchen near elevator shafts on the lower levels of the hotel. The number of guest rooms per floor should be a multiple of 14 to 16 to achieve efficient staffing of housekeeping personnel (3). Expansion of all

facilities should be anticipated where possible throughout the design and construction process.

## 2. Guestrooms

The guestroom design is the critical ingredient in a hotel's ability to attract a particular market and effectively compete with other comparable facilities. Size, layout, furnishings, and mix of room type vary dramatically for different users and hotel types.

The group business traveler, typically attending a convention, conference, or group meeting, stays for two to four nights and may want double occupancy although single occupancy is more common. Historically 75% of group travelers are men. Discounts are frequently available to group users but they are generally price insensitive and willing to pay for the proper facilities and good work area within the guestroom.

The individual business traveler typically has a shorter stay of one to two days with almost exclusively single occupancy. The historical number of 85% of business travelers being men is quickly decreasing. Price is a minor determinant in deciding location and expenses are usually paid by corporate expense accounts. Work area within the room is particularly important for the business traveler which has helped popularize the all suite configuration.



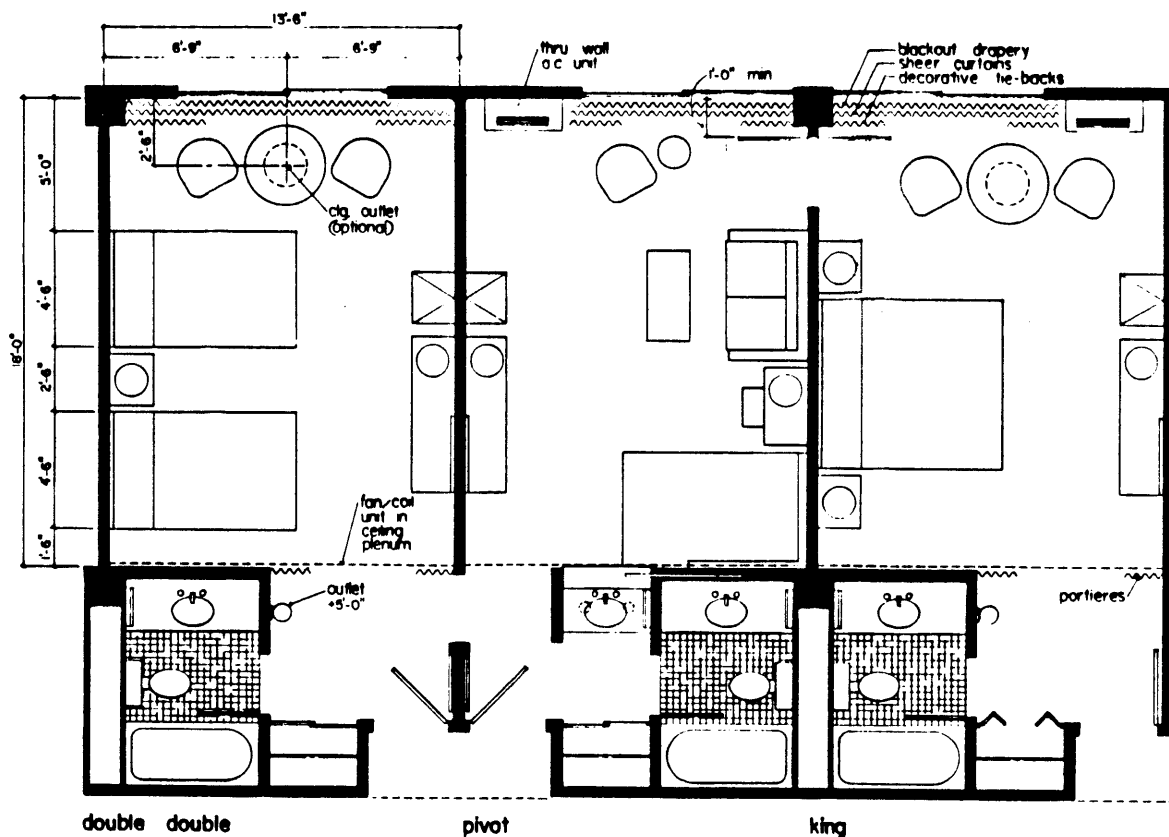
Pleasure travelers are much more price sensitive than either of the two categories discussed above. Length of stay can vary from one to seven days with a much higher percentage of double occupancy. Families in particular will insist on double occupancy if not more for family members or young children. The suite concept is again appropriate for this user because of the additional sleeping and lounge area available in the parlor. Couples without children will typically prefer a king or queen size bed to two doubles. (4)

The hotel industry has generally shifted away from the so called double-double in the suite, luxury, and commercial markets. A guideline for the mix in commercial and luxury hotels is 70% king size, 20% double-double, and 10% of the rooms connecting with a parlor. All suite hotels vary slightly with 90% being kings and only 10% double-double. Suite hotels all have a parlor of course which reduces the need for two double beds.

Size and configuration varies by hotel type and price range. For standard configuration commercial hotels the bed and living area ranges from 215 square feet (12' x 18') for midprice hotels to 256 square feet (13'-6" x 19') for first class and up to 300 square feet for luxury hotels. Bathrooms vary from 5' x 7'-6" compartment baths in midprice, 5'-6" x 8'-6" for first class, to 7'-6" x 9' for luxury. Suite hotels are considerably larger overall, ranging in total size

from 475 square feet for midprice to 600 or more square feet for first class and luxury hotels. The parlor is typically 200 to 225 square feet, baths are similar at 45 to 60 square feet, and bedrooms range from 175 to 220. Suites typically have a small kitchenette area of 20 to 55 square feet and dressing/closet area of 35 to 50 square feet. (5)

A few typical guestroom layouts are included below for both conventional and all suite hotels to give a sense of some common arrangements, critical relationships, and dimensions. Many hotel franchisers are extremely specific about required guestroom layout and design. They are particularly insistent on minimum room widths of 13 feet to 13 feet 6 inches to accommodate furnishings without overcrowding.



standard room plans

### 3. Food and Beverage Facilities

The type and amount of food and beverage facilities provided in a hotel is largely dependent on the local market conditions. For hotels in cities like Boston, New York, or San Francisco, where there are numerous good restaurants nearby, in-house specialty restaurants may not be necessary or appropriate. On the other hand, a successful restaurant or bar may generate substantial revenues and provide excellent advertising for the hotel. Any downtown hotel larger than 100 rooms or so must have some food service capacity. Once the major expense of the kitchen is involved, it is usually most efficient to maximize its use and include some food and beverage facilities. Most guests will at least use the hotel's restaurants for breakfast. The amount they are used for lunch, dinner, and outside clientele will depend on the area and the department's effective management and marketing.

The following table provides guidelines for types, capacities, and projected unit areas of food and beverage facilities in different size hotels.

SEATING CAPACITIES OF FOOD AND BEVERAGE FACILITIES

TYPE OF FACILITY	NUMBER OF GUESTROOMS					AREA / PERSON
	200	300	400	500	750	
Coffee Shop	150	225	200	200	250	10-12
Specialty Restaurant			100	125	175	12-14
Theme Restaurant					125	12-14
Deli/Pastry Shop				50	50	5-10
Cocktail Lounge	100	115	125	150	100	7-12
Lobby Bar		35	50	75	75	9-12
Restaurant Holding Bar			25	25	25	7-10
Entertainment Lounge					175	9-14

(6)

4. Parking

Parking is a critical element in the planning, budgeting, and successful marketing of a downtown hotel. Insufficient or inconvenient parking can seriously affect the desirability of the hotel for many visitors and users of hotel facilities while convenient parking can be a strong marketing tool.

Parking is particularly important to support in house banquet facilities and functions. Where on site parking is not feasible, special arrangements may be made with nearby facilities to accommodate hotel parking. The timing of typical business use may provide an efficient sharing of parking with local garages. A valet parking service can also be offered to compensate guests for the inconvenience of remote parking.

Downtown hotels with limited function space frequently get by with .4 to .8 spaces per room. All suite and luxury hotels require more spaces, ranging from .8 to 1.2 spaces per room, because of their marketing to pleasure travelers and higher

paying guests. Downtown hotels, particularly in the Boston area, can charge anywhere from \$5 to \$14 per night for their parking facilities. (7)

#### C. Proposed Design Program for the Charlesgate Hotel

Based on the parameters for hotel design presented here, the following is a detailed program of spacial requirements to be used as a guideline for designing the Charlesgate Hotel. The program assumes a gross building area of 140,000 square feet including the proposed 14,500 square foot expansion. A program for both a commercial hotel and an all suite configuration are provided for comparison and the possible mixing of room types given the existing layout of the Charlesgate. The property should accomodate between 160 and 195 rooms depending on the configuration and ease of efficiently adapting the existing layout to a modern hotel use.

=====

CHARLESGATE HOTEL - 535 BEACON STREET  
 PROPOSED DESIGN PROGRAM FOR SPACIAL REQUIREMENTS

=====

	COMMERCIAL HOTEL	%	ALL SUITE HOTEL	%
<b>GUESTROOMS</b>				
Number of rooms	195		160	
Net Area per Room	375		450	
Net to Gross Multiplier	1.45		1.50	
-----				
TOTAL GROSS ROOM AREA	106,031	76.48%	108,000	76.81%
=====				
<b>PUBLIC AREAS</b>				
Lobby	2,500		2,500	
Food and Beverage				
Coffee Shop/Restaurant	2,200		2,200	
Cocktail Lounge	1,200		1,200	
Lobby Bar	600		600	
-----				
Total Food and Beverage	4,000	2.89%	4,000	2.84%
-----				
Meeting and Banquet				
Ballroom	3,500		3,500	
Ballroom Foyer	900		900	
Meeting/Banquet Rooms	1,200		1,200	
Storage	500		500	
-----				
Total Meeting and Banquet	6,100	4.40%	6,100	4.34%
-----				
Net to Gross Multiplier	1.25		1.25	
-----				
TOTAL GROSS PUBLIC AREA	15,750	11.36%	15,750	11.20%
=====				
<b>ADMINISTRATION</b>				
Front Office	875		875	
Executive Offices	625		625	
Sales and Catering	450		450	
Accounting	500		500	
-----				
Total Administration	2,450		2,450	
Net to Gross Multiplier	1.20		1.20	
-----				
TOTAL GROSS ADMIN. AREA	2,940	2.12%	2,940	2.09%
=====				

=====				
SERVICE AREA				
Food Preparation				
Main Kitchen	1,800		1,800	
Storage	600		600	
Receiving/Storage	2,400		2,400	
Employee Areas				
Personnel	700		700	
Lockers	800		800	
Dining	400		400	
Laundry/Housekeeping				
Laundry	1,250		1,250	
Housekeeping	900		900	
Engineering/Mechanical				
Engineering	750		750	
Mechanical	2,000		2,000	
-----				
Net to Gross Multiplier	1.20		1.20	
-----				
TOTAL GROSS SERVICE AREA	13,920	10.04%	13,920	9.90%
=====				
TOTAL GROSS BUILDING AREA	138,641		140,610	
=====				
AREA PER ROOM	711		879	
=====				

#### D. Revenues and Expenses

The accounting firm of Laventhol and Horwath publishes an annual review of the lodging industry in the United States and a semi annual review of major local markets which provide excellent guidelines for projecting and evaluating the economic performance and financial feasibility of hotels. The following tables from Laventhol,s 1984 report detail national averages for revenues and expenses for different types of hotels. These figures may serve as a starting point for financial projections and as a check for final projections generated from a detailed market study for the specific hotel property.

The first table summarizes the percentage contribution of room, food, beverage, telephone, minor departments, and other income to total sales for selected categories of hotels. Attention should be given to the relationship between revenues from rooms, food, and beverage. It is generally accepted that the room revenues dictate the profitability of the hotel. Because of the relatively high cost of running a food and beverage department, net income typically falls as the food and beverage sales increase as a percent of total sales or room sales.

The second table details the revenues, expenses, and income of these departments as a percent of total and departmental sales by selected categories. The bottom line shows the



range of income before fixed charges as a percentage of total sales.

DEPARTMENTAL REVENUES AS A PERCENT OF TOTAL SALES					
	LOCATION SIZE			REPORTING	
	Center City	Under 100	150-299	Net Income	Net Loss
Rooms	61.9%	69.0%	64.9%	67.3%	59.9%
Food	23.0%	17.4%	20.4%	18.9%	22.9%
Beverage	8.1%	7.4%	9.0%	7.7%	9.7%
Telephone	3.0%	2.2%	3.0%	2.7%	2.6%
Minor Operated Departments	2.4%	1.6%	1.5%	1.6%	2.9%
Rental and Other Income	1.6%	2.4%	1.2%	1.8%	2.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

FOOD & BEVERAGE RATIO TO ROOM SALES				
	Under 50%	50% 74%	75% 99%	100% and over
Rooms	71.6%	57.9%	49.0%	41.1%
Food	16.1%	25.6%	29.9%	37.0%
Beverage	6.5%	11.3%	12.7%	13.0%
Telephone	3.2%	2.7%	2.2%	1.6%
Minor Operated Departments	1.2%	1.1%	4.8%	6.0%
Rental and Other Income	1.4%	1.4%	1.4%	1.3%
TOTAL	100.0%	100.0%	100.0%	100.0%

(8)

U.S. Lodging Industry—1983  
Ratios to Total Sales

Rooms	Total Sales		Total Food & Beverage Sales Ratio to Room Sales			
	\$2,500,000 \$4,999,999	\$5,000,000 \$9,999,999	Under 50%	50-74%	75-99%	100% & Over
Sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Departmental Expenses</b>						
Payroll & Related Expenses	16.8	17.9	17.3	18.1	17.2	18.3
Other	6.6	8.4	6.7	8.3	8.5	9.0
Total	23.5	25.7	24.2	26.5	25.8	27.8
Departmental Income	76.5	74.3	75.8	73.6	74.2	72.2
Ratio to Total Sales	49.2	40.9	52.7	42.8	36.7	30.8
<b>Food &amp; Beverage</b>						
<b>Sales</b>						
Food	69.2	72.5	72.2	70.3	71.3	72.8
Beverage	31.1	27.5	28.6	29.9	28.7	28.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Cost of Sales</b>						
Food	35.1	34.5	33.1	34.6	34.4	35.0
Beverage	22.1	21.6	22.0	21.9	21.3	22.8
Total	30.7	31.0	30.0	30.5	30.3	31.8
Gross Profit	69.3	69.1	70.0	69.6	69.7	68.2
Public Room Sales	3.4	2.6	4.0	2.3	2.4	0.9
Other Income	0.5	0.8	0.7	0.8	0.9	0.5
Gross Profit & Other Income	71.7	71.9	72.0	72.5	72.0	70.0
<b>Departmental Expenses</b>						
Payroll & Related Expenses	40.1	41.3	43.3	39.6	39.2	35.9
Other	11.6	12.1	11.0	12.9	11.8	11.2
Total	53.2	54.8	56.5	53.6	50.5	48.4
Departmental Income	19.2	18.0	16.2	19.5	21.5	21.5
Ratio to Total Sales	5.1	6.0	3.5	6.9	8.8	10.8
Telephone Departmental Income	N	(0.5)	(0.2)	(0.4)	(0.5)	(0.5)
Net Income From Minor Operated Departments	(1.0)	0.1	(1.4)	N	0.1	0.2
Rentals & Other Income	0.6	0.9	0.6	0.9	0.9	1.1
Gross Income	55.7	50.3	57.4	50.0	47.9	44.2
<b>Undistributed Operating Expenses</b>						
<b>Administrative &amp; General</b>						
Payroll & Related Expenses	4.0	5.2	3.9	5.0	5.4	5.2
Other	3.9	4.4	3.7	4.0	4.4	4.2
Total	8.4	10.0	8.1	9.2	9.6	9.7
Marketing	4.3	5.7	3.3	5.5	5.1	6.2
Energy Costs	5.5	5.3	5.7	5.4	5.2	5.3
Property Operation & Maintenance	5.5	5.9	5.7	5.8	6.1	5.0
Total Undistributed Expenses	24.0	26.2	22.5	26.4	27.5	26.9
Income Before Management Fees	31.3	22.9	34.4	24.1	20.8	17.3
Management Fees	3.4	2.9	3.4	3.0	3.0	3.4
Income Before Fixed Charges	29.3%	21.1%	32.7%	20.9%	17.7%	16.8%

U.S. Lodging Industry—1983  
Ratios to Total Sales

Rooms	Size			Occupancy		
	Northeast	150-299 Rooms	\$55.00 and Over	60-69%	70-79%	80% & Over
Sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Departmental Expenses</b>						
Payroll & Related Expenses	17.1	17.3	17.8	18	16.4	16.5
Other	8.0	7.1	8.9	7.6	7.0	7.6
Total	24.8	24.2	26.6	24.9	23.7	25.1
Departmental Income	75.2	75.8	73.4	75.1	76.3	74.9
Ratio to Total Sales	42.8	48.3	42.0	46.4	49.0	51.0
<b>Food &amp; Beverage</b>						
<b>Sales</b>						
Food	69.9	70.1	72.2	71.8	69.0	73.1
Beverage	30.7	30.0	28.0	28.6	31.0	27.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Cost of Sales</b>						
Food	34.4	34.9	32.5	33.9	32.8	31.9
Beverage	21.5	22.1	20.7	21.4	21.3	21.5
Total	29.7	30.7	29.3	30.5	29.3	29.6
Gross Profit	70.3	69.3	70.7	69.5	70.7	70.4
Public Room Sales	3.0	3.5	2.0	2.5	3.4	2.6
Other Income	1.0	0.6	1.0	0.8	0.9	0.7
Gross Profit & Other Income	78.9	71.8	73.0	72.1	72.9	72.8
<b>Departmental Expenses</b>						
Payroll & Related Expenses	39.2	39.9	43.9	40.4	38.9	41.4
Other	12.2	12.1	11.6	12.4	11.5	10.1
Total	55.7	53.2	57.2	53.4	52.1	53.1
Departmental Income	20.1	19.0	16.6	18.3	21.0	21.0
Ratio to Total Sales	5.8	5.1	5.5	5.4	5.5	5.6
Telephone Departmental Income	(0.3)	(0.2)	(0.5)	(0.3)	(0.2)	(0.1)
Net Income From Minor Operated Departments	0	(0.9)	0.2	N	(0.6)	(0.9)
Rentals & Other Income	0.9	0.7	1.3	0.8	0.8	0.8
Gross Income	51.4	55.0	51.0	53.5	56.5	58.2
<b>Undistributed Operating Expenses</b>						
<b>Administrative &amp; General</b>						
Payroll & Related Expenses	4.9	4.3	4.9	4.5	4.1	3.7
Other	3.7	4.1	4.1	4.2	3.6	3.5
Total	8.7	8.0	8.9	9.1	7.8	7.2
Marketing	5.0	4.5	5.4	4.9	4.0	2.7
Energy Costs	5.9	5.6	4.6	5.5	4.9	4.6
Property Operation & Maintenance	5.5	5.7	5.7	6.0	5.2	5.1
Total Undistributed Expenses	25.7	24.8	25.4	25.6	22.0	20.1
Income Before Management Fees	26.3	29.6	26.4	27.7	33.8	37.6
Management Fees	3.2	0.4	3.0	3.2	3.5	4.2
Income Before Fixed Charges	24.0%	27.8%	23.5%	25.5%	31.4%	33.6%

Fixed charges can usually be accurately estimated for any given property. Total fixed charges should range from 18% to 20% of total sales. Of the total fixed charges, rent is typically 8% to 10%, property taxes range from 12.5% to 23%, insurance is 2% to 3%, interest expenses are 37% to 45%, and depreciation and amortization vary from 32% to 42%.

The ratio between income before fixed charges to total sales is a common measure for evaluating overall profitability of a hotel. Laventhol provides average ratios for hotels with net income and net loss for both independent and chain affiliated hotels. Profitable independent hotels average an income before fixed charges of 26.5% of total sales. Those with a net loss average 12.6% and the overall rate for all independent hotels is 21.6%. The percentages for chain affiliated hotels is somewhat higher. Profitable operations average 35.5%, net losers are at 15.3%, and the overall average is 28.3%.

As shown above, income varies between independent and chain affiliated hotels. Independent hotels typically have a lower occupancy because they lack the reservation system available to chain affiliated hotels which can provide as much as 30% of reservations. They are able to compete with chain affiliated hotels in net income because of their ability to achieve higher average room rates and up to 80% higher rate of double occupancy rooms when compared to chain hotels. As

a result of this double occupancy, food and beverage sales for independent hotels reach 76% of room sales as compared to 46% for chain hotels and net food and beverage income is 13% of room sales as compared to 8% for chains. Independents on average have total sales 30% higher than the chain affiliated competition but they also incur greater expenses in administration, marketing, operations, and fixed charges. The bottom line difference in net income before taxes is that chain affiliated hotels generate 16% more income based on national averages (10). The challenge for the independent hotel is to maximize the profitability and efficiency of their food service departments, market to double occupancy, full fare users, and control operational expenses in order to maintain a competitive position with chain affiliated hotels.

#### E. Hotel Management

Hotel management companies vary dramatically in their size, services, expertise, and compensation agreements. One organization which may serve as an example of a rather large company specializing in quality establishments and comprehensive management and development services is Interstate Hotels out of Pittsburgh. Interstate is both an owner and operator of hotels throughout the eastern and central part of the United States. They have developed, and currently own and operate 9 Marriott Hotels and 2 Hiltons. Interstate is also a full service management company available to manage selected hotels on a no investment, no guarantee, fee only basis.

Their typical contract is for a minimum of 25 years with compensation of 4% of gross income and an incentive fee of 25% of operating profit after debt service. They are interested in first class, full service hotels like Marriott with a minimum of 250 rooms and prefer those with more than 300.

Interstate also takes an active role in the design and development of hotels which they have contracted to manage. They offer a full range of consulting services during all phases of development including initial market evaluation, proposed space allocations, functional layout, architectural design, construction management, and final marketing. Interstate takes the attitude that the management company has a tremendous stake in the successful design and operation of the properties it manages. (11)

There are also a number of hotel franchising companies with a variety of services, fees, and reputations. The prime advantages to securing a franchise, particularly for a commercial hotel, is the extensive reservation system available through most chains and the identity that a major franchise name provides for the product. The cost for a quality franchise name like Hilton is typically \$30,000 plus 4% of gross operating income. Most major commercial franchisers look for hotels with over 200 rooms and are very particular about the developer and the management company for the project, requiring a solid track record in the hotel business. Some

companies, like Marriott won't grant any new franchises except through established current franchisees.

FOOTNOTES TO CHAPTER II

1. Hotel Planning and Design, Walter A. Rutes and Richard H. Penner, Watson Guptil Publications, New York, 1985, pages 104, 154-157
2. Hotels, Motels, and Condominiums - Design Planning and Maintenance, Fred Lawson, Architectural Press Limited, 1976, page 128
3. Arthur Robbins Associates, Providence Rhode Island, Interview with Lloyd Beale, July 1, 1985
4. Hotel Planning and Design, pages 169-170
5. Hotel Planning and Design, pages 171-173  
also Hilton Franchiser Guidelines
6. Hotel Planning and Design, page 184  
also Time Saver Standards for Building Types
7. Hotel Planning and Design, page 194
8. 1984 US Lodging Industry, Laventhol and Horwath, Philadelphia, PA, pages 46-47
9. 1984 US Lodging Industry, pages 70-80
10. 1984 US Lodging Industry, page 44
11. Interstate Hotel, Interview with Tim Aho, Vice President of Real Estate



### CHAPTER III. THE BOSTON HOTEL MARKET

The last six years have been a time of remarkable growth in hotel development in Boston. The number of rooms has increased by 50% from 6,925 in 1978 to 11,316 today in the downtown Boston and Cambridge area. By far the majority of that growth, 2,250 rooms, has occurred in 1984 and 1985. The 70's were the end of a decline in hotel and commercial development in Boston from its high point in 1930 with 11,568 hotel rooms available. 15% of the 7,000 rooms available in 1979 were considered obsolete and needing replacement. 50% of the rooms were luxury, 30% moderately priced, and less than 10% inexpensive. The market composition was 50% business demand, 30% convention, and 20% tourist, educational, and miscellaneous. The developments being considered in 1979 maintained a similar market mix but increased the share of luxury accommodations in the downtown area to 88% of total rooms. The following table summarizes the 1979 stock of hotel rooms in Boston by class and major use. Luxury had the largest share of the market, particularly in the business and convention categories. Tourism is clearly more price sensitive, providing the major source of business for the inexpensive hotel.

	Luxury Rooms	%	Moderate Rooms	%	Inexpensive Rooms	%
Business	2,169	64%	1,003	30%	221	6%
Tourist	518	37%	599	42%	296	21%
Convention	1,294	61%	720	34%	105	5%
Total	3,981	57%	2,322	34%	622	9%

(1)

A. Growth, Occupancy, and Room Rates in Boston/Cambridge

Besides a dramatic growth in the number of hotel rooms since 1979, the composition of the market has slightly changed. The percentage of luxury hotels has risen but perhaps not to the degree anticipated in 1979. Over 80% of the Boston/Cambridge hotels today have published rack rates in excess of \$100 and roughly 50% are over \$125. The inexpensive hotels with rates in the \$60 to \$100 range still only comprise 8% of the downtown hotel market. The line between moderate and luxury becomes quite blurred with a virtual continuum of prices until you reach the very high end hotels like the Westin, Marriott, Four Seasons, and Ritz Carlton which represent 35% to 40% of the market with room rates over \$150. The average overall room rate in Boston/Cambridge in April of 1985 was \$71.76, an 8.9% increase from \$65.89 in April 1984 and inflation in room rates is expected to continue at a 6%.

The segmentation of the market into business, tourist, and convention has changed slightly since 1979 with business

generating closer to 55% of the demand, 30% from convention, and tourist being reduced to 15%. The shift away from tourist use and increased business corresponds to the increased price of accommodations, with tourism being very price sensitive and business relatively insensitive. The growth in demand within these sectors reflects the shift in market segmentation. Since 1978, business demand grew at an annual rate of 5.1%, tourist demand at 4.4%, and convention demand at 3.6% for an overall yearly growth of 4.5%. The growth rate and its composition is expected to change over the next 5 to 10 years. The BRA is projecting an average annual growth rate in hotel demand over the next 10 years of 6.3% with business growth remaining similar at 5.3%, tourist increasing to 6.5%, and convention increasing dramatically to 7.7% with the new Hynes convention center. The following table summarizes hotel demand by category for 1978, 1984, and projections for 1990 and 1995.

	1978	1984	1990	1995	% annual
Business	3,393	5,128	6,716	8,573	5.3%
Tourist	1,413	2,054	2,622	3,635	6.5%
Convention	2,119	3,077	4,462	6,262	7.7%
Total	6,925	10,257	13,800	18,468	6.3%

(2)

In 1978 the average occupancy for Boston hotels was one of the highest in the country at 77%. That rate decreased to 69.5% in 1984. It is anticipated that the occupancy rate

will decline further in 1985, remain level through 1986 and 1987 at 66% and then begin a recovery to the 70% level by 1990 as the new Hynes convention facility becomes operational (3). The Laventhol Horwath report of April 1985 on the Massachusetts lodging industry tends to confirm the decline in current occupancy figures with April occupancy for Boston/Cambridge at 72.8% down 1% from last year and the year to date trend down 1.6% from last year at a rate of 56.5%.

#### B. Hotels Within the Boston/Cambridge Market Area

There are approximately twenty seven major hotels in the Boston/Cambridge market area with a total of 11,300 rooms which are considered in evaluating the market for the Charlesgate Hotel. The table at the end of this section ranks the hotels by room rate in the four primary market areas, Back Bay, Cambridge, Downtown, and Waterfront, and summarizes their age, number of rooms, conference and meeting facilities, parking facilities, estimated market segmentation, published rates, estimated occupancy, average room rate, and projected average room rate for 1987 assuming a 6% annual inflation rate.

##### 1. Back Bay Hotels

The Back Bay is the primary market area for the proposed Charlesgate and has the largest concentration of hotels in Boston with a total of 13 hotels and 6,712 rooms.

Three of the Back Bay hotels, the Midtown, Copley Square, and Lennox, are relatively inexpensive with room rates under \$75. The hotels are similar in their facilities and target market and represent 8% of the Back Bay room supply. They are small hotels with the Midtown and Copley at 160 rooms and the Lenox at 225 and they all have limited conference, meeting, and dining facilities. The Copley and the Lenox are the two oldest hotels in Back Bay and although they have been continually upgraded, they have not had a total renovation in the recent past. The primary market for these hotels is the price sensitive tourist. The percentage of business travelers is 15%-25%, well below the Boston average of 55%. Group travellers, although higher for the Midtown because of its facilities and relationship to Prudential, are also a significantly smaller percentage of the market for these inexpensive hotels.

The midprice range of \$90 to \$100 includes the Boston Park Plaza, 57 Park Plaza, and the Sheraton Boston at Prudential with a total of 2,620 rooms or 39% of the Back Bay supply. The Sheraton is the largest convention hotel in Boston. The Park Plaza is an older hotel, built in 1927, in a less convenient location to the Hynes but with 880 rooms and extensive meeting and dining facilities. 57 Park Plaza is smaller, at 360 rooms, and newer, built in 1972, but also far from the center of Back Bay in a less attractive neighborhood.

The Colonnade, Copley Plaza, and Back Bay Hilton are priced in the \$110 to \$120 range. They all have 300 to 400 rooms and very good locations close to the convention facilities and central to Back Bay. The Copley has close to 20,000 square feet of conference space while the other two have a more typical percentage for their size at around 9,000 square feet. The Westin and Marriott at Copley Place are large new convention hotels with a total of 1,943 rooms, 127,000 square feet of meeting space, and average room rates of \$145. The Ritz Carlton and the Four Seasons are the premier luxury hotels in the Back Bay with an exceptional location on the Boston Common and average room rates of \$150 to \$160. They are both slightly under 300 rooms with 10,000 square feet of conference and meeting facilities. They also each have a condominium component as part of the development. At the Ritz there is a separate building which is primarily condominium. At the Four Seasons, the 100 residential units are on the upper floors with access to all hotel services.

An additional 200 room hotel is currently planned in conjunction with the Hines Auditorium expansion currently underway at the Prudential Center.

## 2. Cambridge Hotels

The Cambridge market draws a large share of its business from its institutions and a rapidly growing office and

business market. There are six major hotels with a total of 1,883 rooms.

The Howard Johnson's and Sheraton Commander are competitively priced at \$85 to \$95, with 204 and 170 rooms respectively and 5,000 to 6,000 square feet of conference space. The new Embassy Suites hotel, prominently located on Storrow Drive, has 310 rooms, rates of \$115, and is the only all suite hotel in Boston . Competing with Embassy Suites are the Royal Sonesta with 400 rooms at \$115, the new Charles Hotel with 299 rooms at \$125, and the Hyatt Regency with 500 rooms also at \$125. With the exception of the Charles Hotel, these hotels suffer from being isolated from any desirable commercial center.

### 3. Downtown Hotels

The downtown hotels draw primarily business visitors who are relatively price insensitive and benefit from the proximity to downtown office and financial uses. Some tourist market exists for the downtown hotels because of the proximity to the Waterfront. There are three major downtown hotels with a total of 1,367 rooms and an average rate of \$109.

The Parker House is the oldest, built in 1927, with 540 rooms and rates of \$100. The Lafayette Hotel is just completed near downtown crossing and has 500 rooms at \$105. The Hotel Meridien was renovated in 1981 and contains 328 first class rooms with an average rate of \$130.

A new downtown hotel is currently proposed at South Station with up to 500 rooms in conjunction with the transportation center.

#### 4. Waterfront Hotels

The two Waterfront Hotels, the Bostonian and the Marriot, have a total of 553 rooms and an average rate of \$118. This market has a high percentage of the tourist trade combined with a strong business market because of its location and as a result has consistently high room rates and occupancy. The Marriott, with 400 rooms, also has 16,420 square feet of conference and meeting space.

Several new projects are under way or proposed in the Waterfront area. The Rowes Wharf project currently under construction will have a 160 room luxury hotel. The Fan Pier development by Carpenter & Co. and Anthony Athanas is planning a 1,000 room Hyatt. Athanas is also planning a 300 room hotel on his Pier 4.

#### C. Target Market for the Charlesgate Hotel

The Charlesgate can compete primarily in the Back Bay and Cambridge market area. Although the Charlesgate is an older building, it will be totally renovated with all modern systems and facilities. This should allow it to demand higher room rates than the inexpensive Back Bay hotels which have a projected room rate of \$75 in 1987 and clearly suffer



from older accommodations. The new renovation, in fact should provide for better rooms than are available in the midprice hotels, particularly the Park Plaza. If the Charlesgate can be developed with adequate parking, it provides superior views from a quiet and accessible location that is as close to Hynes and the center of Back Bay as either the Park Plaza or 57 Park Plaza. With a new renovation, the Charlesgate should be able to effectively compete with these two hotels in the \$100 to \$110 price range in 1987. The remaining hotels in the Back Bay are clearly superior in location or facilities to the Charlesgate and would probably begin at prices \$15 to \$20 higher per room. This pricing of perhaps \$105 for the Charlesgate also places it just above the Howard Johnson's and Sheraton in Cambridge and a full \$25 below the Sonesta and Embassy Suites. Because of the location of the Charlesgate, with easy access to Storrow Dr. and Mass Ave., it may be able to effectively compete with these hotels particularly if some suite configurations can be offered within the existing layout.

The size of the Charlesgate is too small to significantly affect overall occupancy rates in the Boston area. Occupancy rates therefore should be consistent with projected rates for Boston with a 70% occupancy in 1987 increasing to 80% in 3% intervals by 1990. The hotel should be able to achieve slightly higher occupancies than overall Boston averages

because of the newness of the product, its location, and its competitiveness for the price sensitive tourist traveller which has consistently resulted in higher than average occupancies in the Lennox and Copley Square hotels.

CHARLESGATE HOTEL - 535 BEACON STREET																
SUMMARY OF COMPETITIVE FACILITIES BY LOCATION AND PRICE																
MAP NO. PROPERTY	LOCATION	YEAR OPENED	YEAR UPDATED	NO. OF ROOMS	CONF. AND MEETING SPACE			PARKING	MARKET SEGMENTATION			PUBLISHED RATES		ESTIMATED AVG. OCCUP.	Projected 1987	
					No. Rms.	Size	Total		Comm.	Group	Tourist	Single	Double	Rate		
1 THE MIDTOWN	Back Bay	1961	1983	160	2		5030	free (110 spcs)	25.00%	40.00%	35.00%	49-69	59-79		\$55	\$61.80
2 COPLEY SQUARE HOTEL	Back Bay	1891		153	1	900	900	\$7 @ pru. w/	15.00%	15.00%	70.00%	50-62	60-74	80.00%	\$55.52	\$62.38
3 LENDX HOTEL	Back Bay	1900		225	8		6005	\$7 on site				70-100	85-115		75	\$84.27
4 BOSTON PARK PLAZA	Back Bay	1927		880	13		44150	free (+\$1.50)				85-100	100-115		90	\$101.12
5 57 PARK PLAZA	Back Bay	1972		360	3		11000	free indoor				90-100	100-110		95	\$106.74
6 SHERATON BOSTON	Back Bay	1965		1380	5		81550	\$7 on site				95-115	110-130		100	\$112.36
7 THE COLONNADE	Back Bay	1971		294	6		8300	\$8 on site				105-140	120-155		110	\$123.60
8 THE COPLEY PLAZA	Back Bay	1912		400	8		19200					105-160	120-175		112	\$125.84
9 BACK BAY HILTON	Back Bay	1982		352	9		9200	\$6 on site				115-145	135-175		120	\$134.83
10 WESTIN HOTEL	Back Bay	1983		804	13	2736	35570	\$14 on site				140-165	160-185		145	\$162.92
11 MARRIOTT BOSTON	Back Bay	1984		1139	39		91955	\$12 on site				140	160		145	\$162.92
12 FOUR SEASONS HOTEL	Back Bay	1985		288	10		9800	\$12 for hotel	61.00%	20.00%	19.00%	140-160	160-180		152	\$170.79
13 RITZ-CARLTON	Back Bay	1927		277	8		10180	\$12 remote				155-205	175-225		160	\$179.78
TOTALS				6712								Weighted average room rate		\$115.43	\$129.70	

MAP NO. PROPERTY	LOCATION	YEAR OPENED	YEAR UPDATED	NO. OF ROOMS	CONF. AND MEETING SPACE			PARKING	MARKET SEGMENTATION			PUBLISHED RATES		ESTIMATED AVG. OCCUP.	Projected 1987	
					No. Rms.	Size	Total		Comm.	Group	Tourist	Single	Double	Rate		
14 HOWARD JOHNSON'S	Cambridge			204	5		4950	free on site				73	83		75	\$84.27
15 SHERATON COMMANDER	Cambridge			170	5	1344	6720	free on site				84-101	94-111		85	\$95.51
16 EMBASSY SUITES	Cambridge	1985		310	9		5250					110-140	130-160		115	\$129.21
17 ROYAL SONESTA	Cambridge			400	10		11760	\$6 on site				108-130	123-145		115	\$129.21
18 CHARLES HOTEL	Cambridge	1985		299	11		9930	\$10 valet				120-150	140-170		125	\$140.45
19 HYATT REGENCY	Cambridge			500	16		20600	\$7 on site				120-165	140-185		125	\$140.45
TOTALS				1883								Weighted average room rate		\$112.20	\$126.07	

MAP NO. PROPERTY	LOCATION	YEAR OPENED	YEAR UPDATED	NO. OF ROOMS	CONF. AND MEETING SPACE			PARKING	MARKET SEGMENTATION			PUBLISHED RATES		ESTIMATED AVG. OCCUP.	Projected 1987	
					No. Rms.	Size	Total		Comm.	Group	Tourist	Single	Double	Rate		
20 PARKER HOUSE	Downtown	1927		540	12		11360					95-135	105-155		100	\$112.36
21 LAFAYETTE HOTEL	Downtown	1985		499	11		12065					110-140	130-160		105	\$117.98
22 HOTEL MERIDIEN	Downtown	1981		328	8		7860					120-140	140-160		130	\$146.07
TOTALS				1367								Weighted average room rate		\$109.02	\$122.50	

MAP NO. PROPERTY	LOCATION	YEAR OPENED	YEAR UPDATED	NO. OF ROOMS	CONF. AND MEETING SPACE			PARKING	MARKET SEGMENTATION			PUBLISHED RATES		ESTIMATED AVG. OCCUP.	Projected 1987	
					No. Rms.	Size	Total		Comm.	Group	Tourist	Single	Double	Rate		
23 BOSTONIAN HOTEL	Waterfront	1982		153	1	1240	1240					110-150	125-165		112	\$125.84
24 MARRIOTT LONG WHARF	Waterfront	1982		400	13		16420					110-135	130-155		120	\$134.83
TOTALS				553								Weighted average room rate		\$117.79	\$132.35	

FOOTNOTES TO CHAPTER III

1. Hotel and Convention Center Demand and Supply in Boston - Past Present and Future, City of Boston, Boston Redevelopment Authority, March 1979

Laventhol and Horwath, Interview with Peter Keim July 16, 1985.

2. Boston Hotel Development Projections, 1982-1992, Boston Redevelopment Authority Research Department, May 1983 and updated May 1985 by Alexander Ganz, Research Director

3. Boston Hotel Development Projections, 1982-1992

Convention and Tourist Bureau, Interview with Gary Grimmer June 26, 1985

CHAPTER IV. FINANCING AND FORMS OF OWNERSHIP  
THE CONDOMINIUM HOTEL

Hotels are typically one of the most difficult real estate developments to finance. The value of the property and therefore the security of the loan are determined by the successful operation and management of an ongoing business not the inherent value of the property. The operations and profitability of a hotel are not only affected by location, design, and development costs, but also by marketing, management, and economic conditions. A permanent lender can not look to the security of long term leases with major tenants as would be the case with office buildings or shopping centers. With hotels, leases expire on a nightly basis, allowing depressed economic conditions or new competition to have a direct and immediate impact on the hotel's operating income.

Lenders must be convinced of the strength of the local economy and hotel market. Analyzing the market demand and potential capture is a complex process requiring a detailed market study from one of the major hotel consulting or accounting firms like Laventhol and Horwath, Pannell Kerr Forster, or Hospitality Valuation Services Inc..

Because hotels are more of an operating business than a real estate investment, management is key to the project's success. All lenders will require a long term management con-

tract with a company having a proven and successful track record in the hotel business. An affiliation with a major hotel chain, in either a management or franchise position, also strengthens the projects feasibility from the lender's perspective. The lender is comforted in knowing that a reputable franchiser and management company, who know the hotel business and have their fees and reputations on the line, are willing to go with the project.

#### A. Conventional Financing Sources

Construction financing is still primarily available through commercial banks. A permanent loan commitment, however, is invariably required prior to securing construction financing of a hotel project. Open ended construction loans or those which have an option of converting to a permanent loan are rare in the hotel business and only available to the most experienced developers and operators. Construction financing is typically recourse, requiring the signature and collateral of the developer. Loans are currently available up to the amount of the take out financing at 1 to 2 points over prime with a 1 to 3 point financing fee.

The sources for permanent financing are continually changing and evolving. A mortgage broker may be extremely helpful in locating financing because of their relationships with institutions and current knowledge of the market. The fee charged by a broker for their services is typically around one per-

cent of the loan amount. Unless a financing source is readily available, most developers agree that the money saved in time and the final loan structure justify the broker's fee.

Life insurance companies, commercial banks, pension funds, and real estate investment trusts are all common sources for permanent financing. Life insurance companies are currently less active in hotel financing than they have been in the past. The Union Pension Trust has been quite active recently and commercial banks and REITs are becoming more common sources.

#### B. Syndications and Limited Partnerships

The debt coverage ratios required by permanent lenders combined with the typical 3 to 5 years required for hotels to reach stabilized break even operations, frequently result in a substantial up front equity investment for most hotel developments. Limited partnerships and syndications to raise the necessary equity capital have been common financing strategies for new hotels. There are a number of characteristics of hotel development that make syndications particularly attractive under current tax laws.

Furniture, fixtures, and equipment for a hotel typically run 14% to 16% of total project costs, are depreciable over 5 years, and qualify for a 10% Investment Tax Credit the first year. On a \$30 million hotel, FF&E could generate \$900,000

in depreciation expenses for the first five years and a \$450,000 ITC deducted directly from an investor's tax bill the first year of operations. The FF&E deductions alone can cover a \$2.7 million pay in over five years on a \$30 million development for an investor in the 50% tax bracket.

The interest on financing is also deductible in calculating taxable income. It is not uncommon on hotel financing to have interest only loans in the early years with the paid rate being lower than the contract rate and the difference in interest accruing to future years or increasing the original loan amount. With certain "at risk" restrictions defined by the IRS, the accrued interest is deductible in the current year even though it is not paid until some future date.

Investors in hotel syndications typically require a higher return on their investment than they would expect from more secure alternatives. A minimum after tax internal rate of return of around 18% is currently necessary to attract investors. The effects of sale after ten or fifteen years are usually evaluated with sale prices established under four scenarios: 1) sale at \$1 over debt, 2) sale at purchase price, 3) sale at a 9% cap rate and, 4) sale at an 11% cap rate. The 18% IRR should be achievable under the sale at purchase price scenario.

Proposed changes to the tax laws under the Reagan Administra-

tion would have a dramatic impact on the feasibility of tax oriented syndications. A reduction in the marginal tax rate from 50% to 35% would result in a 30% reduction in the value of tax deductions. The investment tax credit for both equipment and older properties is threatened and the date that such a change would be effective is uncertain. The expected ruling is that the property must be placed in service before the beginning of the following year in which the new law is passed. If the ITC is eliminated in 1985, buildings must be placed in service before January 1, 1986 to qualify. Depreciation and amortization schedules for building and development costs may also be increased beyond their current period of 18 years. The threat of the proposed tax laws initially stimulated the sale of syndications to investors anxious to secure some good tax shelters before they disappear. More recently, however, the effect has been to severely restrict the marketability of tax syndications due to the uncertainty of the timing and details of the new proposal. If the tax law is revised according to plan, the effect will probably be to reduce property values and force syndication financings to be based more on the economics of the project and less on their tax advantages.

### C. The Condominium Hotel

In the last few years, the selling of individual hotel rooms as condominium units with a share of the common areas has become a popular form for financing certain hotel develop-



ments. The history of the condominium hotel began with resort developments popularized in the '60s where units were sold largely for the use of the buyer as a vacation home with the added advantage of offering a rental program to generate income and manage the property when not occupied by the owner. Florida's Innisbruck resort, developed in 1974, rekindled the interest in resort condominiums with the sale of units marketed primarily as a condominium project with a rental program. The Camelback Inn in Scottsdale Arizona, developed and marketed by Flautt and Mann in 1974-75, was the first true hotel sold as condominium.

Since the sale of the Camelback Inn, over 14,000 condominium hotel units have been sold. The largest marketer of condominium hotel units is Merrill Lynch, having recently sold \$50 million in units at the Hilton Inn in Florida in just 2 months. Dowmar Securities Inc., founded by hotel consultant, Bill Dowling in 1982, has also taken a major position in the hotel condominium market. In January of 1983, Dowmar sold 125 rooms for \$7 million in 4 months to finance the remodeling of the hotel at Stratton Mountain, Vermont. Since Stratton, they have sold 38 units for \$2.2 million at the Snowy Owl Inn at Waterville New Hampshire and 174 units for \$12 million at the Sandestin Beach Resort in Destin, Florida. Dowmar is presently marketing 294 units for a total price of \$56.9 million at the Marco Beach Hilton on San Marco Island, Florida.

The majority of the condominium hotels sold to date have been resort oriented facilities that take advantage of the resort amenities to help attract buyers as potential part time users. The current trend, however, is to expand the realm of the condo hotel to include full service downtown or suburban hotels marketed to more sophisticated investors. Merrill Lynch is currently marketing a 434 unit hotel near Disney-world which will be the first major non resort oriented condo hotel. It is being sold in 5 unit blocks and marketed purely as a financial investment comparable to any limited partnership offering. (1)

#### 1. Investment Characteristics

The condominium concept offers some unique advantages to both the developer and the investor for financing or investing in hotel properties. The hotel units are readily financed with conventional 30 year condominium loans for up to 90% of the purchase price. With unit prices ranging from \$50,000 to \$200,000, the \$5,000 to \$20,000 investment required is manageable for a large number of people without many of the net worth requirements limiting investors from limited partnership offerings. Unit owners share in all of the cash flow and tax deductions from the hotel and can better tailor the investment and taking of tax advantages to meet their individual financial situation. Because the condominium units are held in fee simple, with each owner having a deeded interest in the hotel, the units can be sold at the discretion of the

buyer rather than being subject to the decision of the general partner. As the hotel reaches a profitable position, the units are marketable as income generating investments through typical real estate brokerage networks. The unit owners also have the added benefit of staying at the hotel for up to a two week period each year at a reduced rate (and reduced cash flow from the hotel).

The benefits of the condominium hotel to the developer stem from the benefits to the investor. The price of entry is relatively low, opening up a broad potential market. The flexibility available to the investor in buying, selling, and managing the investment make it very marketable relative to other real estate investments or limited partnerships. The sale of condominium units allows the developer to avoid many of the financing hurdles typically involved in hotel development and take his profit out at the front end of the project.

There are some potential risks and disadvantages to the condominium hotel concept. In a limited partnership, liability and financial exposure is typically limited to the amount of the capital contribution (tax liability may be greater). Condominium unit owners are liable for any damages in excess of insurance coverage carried and the financing of the balance of the purchase price is frequently recourse, exposing the investor to any debt service or expenses not covered by operating income. Most of these risks are being

addressed through large insurance policies, substantial operating reserve accounts, and most recently, a staged pay in of the capital contribution which allows the financing to become nonrecourse after five years.

Some management problems are associated with the condominium form of ownership. Accounting and management expenses are typically higher than in a conventional hotel due to the complexity of allocating and reporting income and expenses for each unit. Additional hotel expenditures, improvements, or expansions usually have to be approved by the condominium association and unit owners who may not support management's recommendations.

## 2. Pricing the Offering

In establishing the total sale price for the property, the primary additions to the total development costs are developer profit, sales commissions, and organizational expenses associated with forming the condominium. Developer profit on gross sales is typically stated in the 12% to 15% range. Additional profit may be made or lost through savings in projected financing costs and operating reserves. Substantial management and development fees are also incorporated into the development budget. Sales commissions are high, typically running 9% to 10% of gross sales because of high marketing costs and the special expertise of the companies familiar with selling condominium hotels. Organizational

expenses will typically run about 5% of gross sale price. (2)

A first class condominium hotel with 250 rooms and development costs of \$30 million could be priced at roughly \$42 million or \$168,000 per unit. This would include a developer's profit of \$6 million, sales commissions of \$4 million and organizational expenses of \$2 million.

The other approach to pricing the condominium units is to base the price on the return demanded in the marketplace for comparable investments. The same 18% to 20% after tax internal rate of return guideline used for syndications may be used for condominium ownership.

### 3. Financing

The purchase of condominium hotel units are financed similar to residential condominiums through commercial banks and savings and loan institutions. Developers typically arrange for end loan financing through a single source for unit purchasers. 75% to 80% of buyers will use the financing offered by the developer with the balance securing their own financing or paying cash. Condominium hotel mortgages, however, are not as easily sold on the secondary market, nor are they as commonplace as residential condominium mortgages. The developer must find a source which understands this type of development and is willing to hold the mortgages.

Until recently all financing of condominium hotel units had

recourse to the investor in the event of default which limited the marketability of the investment in comparison with many limited partnership offerings. The Marco Beach Hilton project, being sold by Dowmar, restructured the financing of unit purchases midway through marketing in order to attract more investors. The original mortgage is written as a recourse interest only loan. A phased pay in was structured where \$65,000 or 35% of the \$180,000 purchase price was paid in over five years which went to cover debt service (operating deficits) and reduce the original loan amount. At the end of five years, when the loan amount is reduced to 75% of the original purchase price, the mortgage becomes nonrecourse, amortizing over 25 years. The amount of the semi annual installments vary to best match the after tax benefits from the development. This restructuring to nonrecourse financing has made condominium hotels more attractive and comparable with other real estate investments and limited partnerships.

Construction financing for condominium hotels is available based on the preselling of the hotel units. The necessity to presell a large percentage of the units places particular emphasis on the marketing program. Thorough presentation and documentation of the design and financial feasibility of the project is essential. Experienced marketers, with a knowledge of the product and the resources to quickly sell

the large number of unique investments are equally important. If preselling can be accomplished, the condominium hotel offers a way to get construction money while avoiding the difficulties in securing long term hotel financing.

FOOTNOTES FOR CHAPTER IV

1. Dowmar Securities, New York, Interview with Tuck Wilson June 21, 1985
2. Prospectus for the Marco Beach Hilton, Dowmar Securities

## CHAPTER V. DEVELOPMENT PLAN FOR THE CHARLESGATE HOTEL

The development plan for the Charlesgate has evolved from an analysis of the property, general guidelines for hotel development, the Boston hotel market, and the potential forms of financing hotel development. The following will outline design guidelines and a proposed configuration for the property, the construction and development costs, a detailed revenue and expense projection, a comparative after tax analysis of alternative financing strategies, and a summary evaluation of the project.

### A. Design Guidelines and Proposed Hotel Configuration

The Charlesgate should receive a complete renovation to the standards of a first class hotel and take maximum advantage of the existing layout, architectural design, and details.

#### 1. Site Design

Drop off areas should be constructed with covered entries for both the Charlesgate East and Beacon St. entrances. Sidewalks should be repaired and landscaping added where possible. The main service entry should be located in the alley behind the building. Turning radiuses and capacity may limit the use of the alley for the major deliveries and trash removal associated with a hotel. If additional service area is required, it should be located on Marlborough St.

A parking garage can be constructed on the 8,000 square foot



site owned by Simmons College just east of the Charlesgate on Marlborough St.. The site should be able to accomodate a five story structure with 22 cars per level without exceeding the height of neighboring buildings. Additional spaces may be available if a basement level can be constructed or if cars are double parked by attendants. The garage would be easily accessible by car off of Marlborough St. from Charlesgate East or Mass Ave. and could provide direct pedestrian access to the hotel from an upper level bridge over the alley. The inclusion of the parking garage or some alternative parking solution is essential to the success of the hotel in this location.

## 2. Interior Common and Public Areas

The proposed design program for the hotel outlined in Chapter II. Section C, calls for the following public, administration, and service areas.

PUBLIC AREAS		SERVICE AREAS	
Lobby	2,500	Food Preparation	2,400
Food and Beverage	4,000	Receiving and Storage	2,400
Meeting and Banquet	6,100	Employee Areas	1,900
-----		Laundry/Housekeeping	2,150
Total w/circulation	15,750	Engineering/Mech.	2,750
-----		-----	
ADMINISTRATION		Total w/circulation	13,920
Front Office	875	=====	
Executive Offices	625	TOTAL	32,610
Sales and Catering	450		
Accounting	500		
-----			
Total w/circulation	2,940		

The basement and first floor of the Charlesgate contain 18,770 square feet each for a total of 37,540 square feet which should comfortably accommodate the public, administration, and service areas of the hotel. All service areas should be located in the basement clustered around a central elevator core. The service entry would be on the west side of the building through the alley and would probably require a service elevator to get supplies to the basement level. If additional space is available after laying out the service areas, some meeting and banquet facilities may be included in the basement on the Beacon St. side where there is some natural light through the deep window well and exterior access and egress can be accommodated.

The balance of the public areas and administration should fit comfortably on the first floor. In the center of the building are a series of large open spaces which run east to west from the Charlesgate East side to the alley. These would be appropriate areas for a restaurant along Charlesgate East with a view to the Fenway and a large ballroom on the alley side of the building. This should also be a good central location for service from the kitchen below. There are some beautiful rooms of various sizes with nice architectural detail on the south and east sides of the building that could accommodate additional meeting or dining spaces. Administration may best be located along the Beacon St. side

in the small office size rooms that run along the perimeter and around on the east side of the building. Existing entrances can be accommodated from both Beacon and Charlesgate leading to a central lobby, possibly preserving the ornate tile as a feature throughout this area.

### 3. Guestrooms

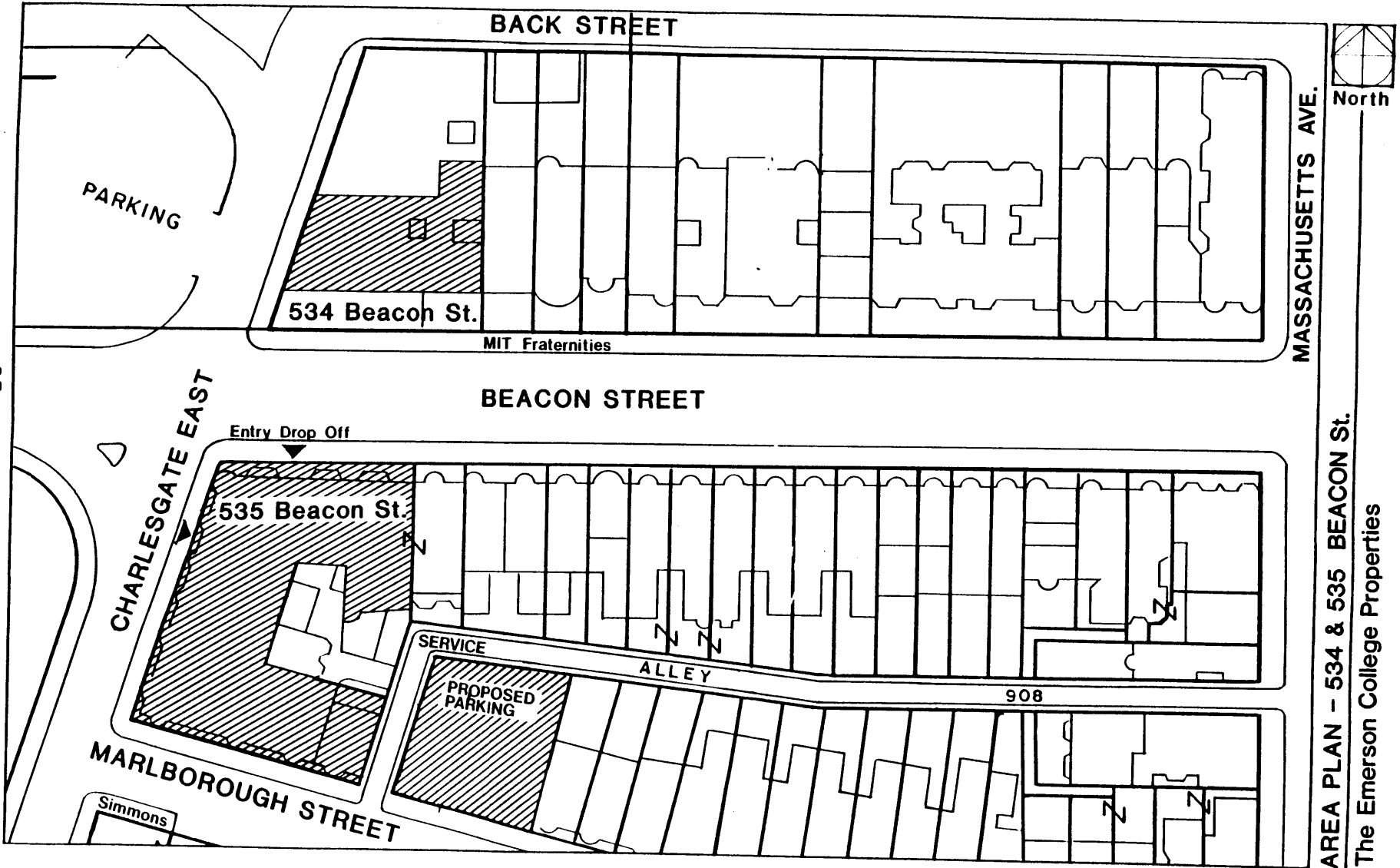
The second through eighth floors would be guestroom floors with a total of 190 rooms. The second floor has 29 rooms and access to a central courtyard on top of the first floor below. Floors three through eight could have 27 rooms each if the maximum expansion was constructed on floors six, seven, and eight. The guestroom floors should be served by a minimum of two passenger elevators and one service elevator providing direct access to the main lobby and the service areas on the basement level. Immediately adjacent to the service areas should be housekeeping rooms, storage, laundry, and trash chutes.

The new room layout can be accommodated without totally changing the existing layout. The result, however, is a variety of room sizes and configurations. One layout studied would include 18 standard guestrooms ranging in size from 330 to 390 square feet with 2 at 330, 9 at 350, and 7 over 375 square feet. The balance of 9 rooms would then be suites of 420 to 500 square feet. Although this arrangement does not fit within the standardized design guidelines of a new

commercial or all suite hotel, it provides some variety that may be an attractive marketing tool when appealing to the varied needs of tourist and business travellers. Each of the suites, which comprise over 30% of the hotel, could have a parlor area with a bay window view and a separate sleeping area. Many of the standard rooms also have the advantage of a bay window and on the interior courtyard side additional bays and balconies could be added to increase room areas and improve what is currently a rather dreary interior elevation.

The following pages include a site plan locating the building and parking garage and diagramatic plans illustrating a potential guestroom floor layout including toilet, elevator, and service locations. Drawings for the existing conditions on the first floor and basement were not available for preparing proposed layouts of public, administrative, and service areas.

85



MASSACHUSETTS AVE.

BACK STREET

534 Beacon St.

MIT Fraternities

BEACON STREET

Entry Drop Off

535 Beacon St.

CHARLESGATE EAST

SERVICE

ALLEY

PROPOSED PARKING

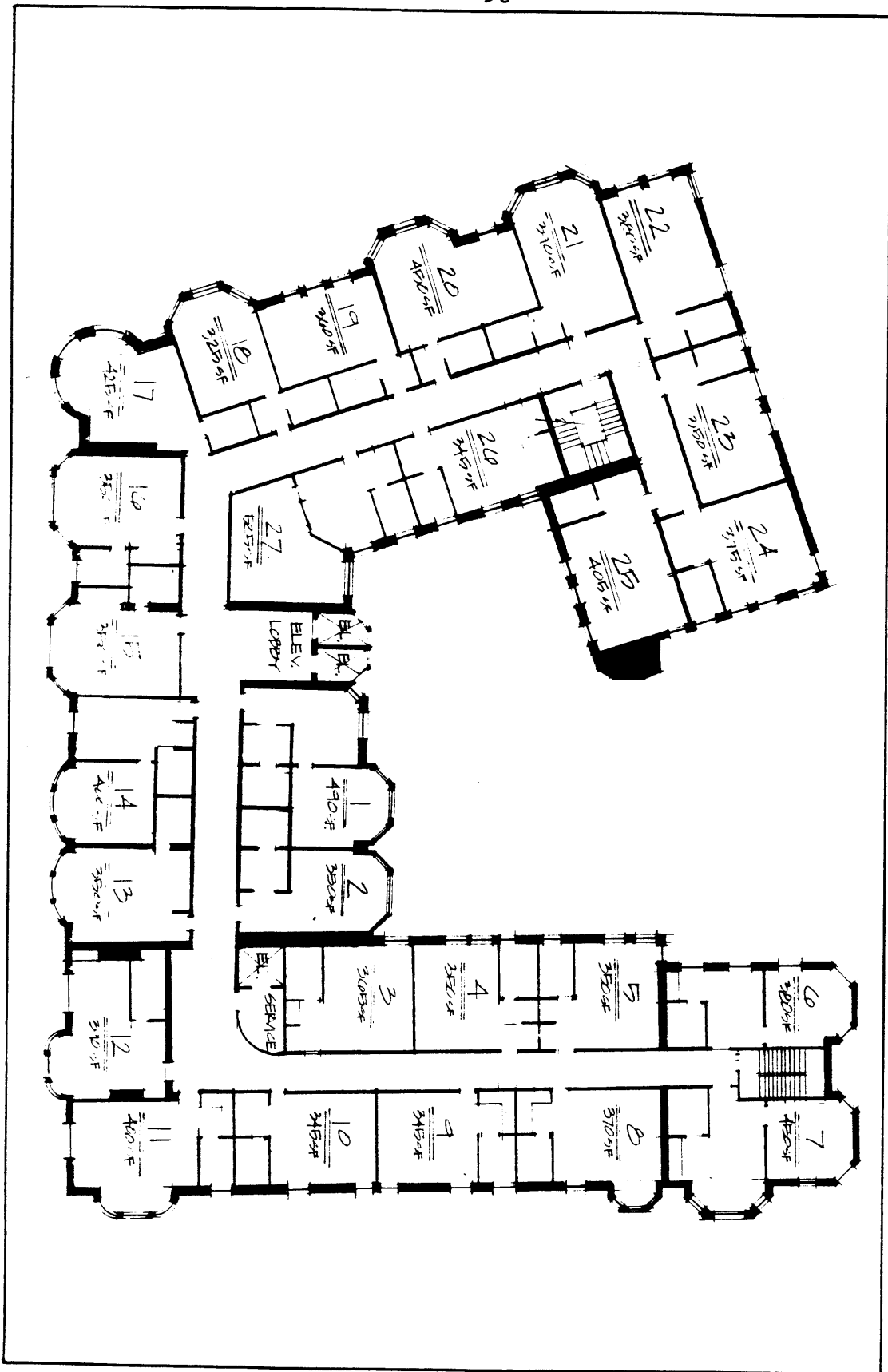
908

MARLBOROUGH STREET

Simmons

AREA PLAN - 534 & 535 BEACON St.

The Emerson College Properties



FLOOR PLANS - 535 BEACON ST. - Typical Guestroom Floor  
 The Emerson College Properties



## B. Construction and Development Costs

The table at the end of this section details the projected construction and development costs for the Charlesgate.

Following is a brief description of the method used to arrive at the purchase price for the Charlesgate and the adjacent site for the parking garage.

### 1. Purchase Price for the Charlesgate

The pro forma is based on a purchase price for the Charlesgate of \$85 per square foot or \$10,667,500. This number was arrived at by three methods. First, it was estimated in Chapter I. Section D. that Boston University or some other institution would value the property around \$12.5 million as a student housing facility. It was also estimated, however, that a minimum of \$1.5 to \$2 million would have to be spent upgrading the building in order to demand the rents, support the occupancy, and justify the \$12.5 million value. Second, the \$85 per square foot number is comparable with other sales of comparable properties in the area. The Marlborough building, in a superior location on Mass Ave and Marlborough St., recently sold for \$80 per square foot. Third, \$10.7 million is about the highest feasible number with the assumed room and occupancy rates, given the uncertainty of the proposed tax plan and hotel market.

### 2. Pricing the Parking Garage Site

The price of the proposed parking site owned by Simmons

College was based on its value as a potential site for condominium development. Given a typical lot coverage in the area of 60% and a five story building, the potential gross building area for the site would be 24,000 square feet. A vacant shell in the area would sell for \$85 to \$100 per square foot with \$50 in renovation costs for a total developed cost of \$135 to \$150 without soft costs. New construction would run \$85 to \$100 per square foot for comparable space. Land value should then be between \$35 and \$50 per buildable square foot resulting in a purchase price of \$840,000 to \$1,200,000. Deducted from this price is the cost of demolishing the existing one story building at \$100,000 giving a final purchase price between \$750,000 and \$1,100,000.

### 3. The Development Budget

The balance of the estimate is self explanatory and is based on budgets from similar developments and assumptions previously discussed in this study and summarized in the Summary of Assumptions on the first page of the pro forma, preceeding the Development Budget. The budget provides subtotals for each category of expense and its percentage contribution to total development costs. Both FF&E and Administrative Costs are estimated as a percentage of total construction and purchase costs.



CHARLESGATE HOTEL - 535 BEACON STREET  
DEVELOPMENT BUDGET

PROJ. DATE: 01-Jan-80  
OPEN. DATE: 01-Jul-87

DESCRIPTION	AMOUNT	% subtotal	% total cost
<b>PURCHASE PRICE</b>	10,687,500		36.97%
Land as a percent of purchase =	15.00%	1,600,125	5.55%
Building	9,087,375		31.42%
Land Purchase for Parking	750,000		
<b>CONSTRUCTION</b>			
Renovation Costs	5,647,500		
Expansion Costs	942,500		
Parking Structure	825,000		
<b>Construction Contract</b>	7,415,000	91.98%	
Elevators	270,000	3.35%	
Contingency Items at	2.00%	148,300	1.84%
Temporary Heat	15,000	0.19%	
Per Diea Extension	68,000	0.84%	
Exterior Building Signs	35,000	0.43%	
Owner Interior Finishes	60,000	0.74%	
Building Permit/Taxes/Fees	40,000	0.50%	
Utility Relocation	10,000	0.12%	
<b>TOTAL</b>	98,061,300	100.00%	27.94%
<b>ARCHITECT AND ENGINEERING</b>			
Architects Fee at	6.00%	483,678	75.14%
Soil Tests & Eng.	50,000	7.77%	
Surveys	10,000	1.55%	
Interior Design	100,000	15.54%	
<b>TOTAL</b>	643,678	100.00%	2.23%
<b>FURNITURE/FIXTURES/EQUIPMENT</b>			
Guest Room Furn./Fix./Carpet	805,048	23.50%	
Pub. Area FF&C/Plants/Art/Lighting	911,246	26.60%	
Drapes and Installation	58,237	1.70%	
Furniture Installation	68,515	2.00%	
Carpet Installation	65,089	1.90%	
Kitchen Design	27,406	0.80%	
Kitchen Fire Control	6,851	0.20%	
Kitchen Equip. and Installation	537,840	15.70%	
Sound System and Communication	47,960	1.40%	
Auto. Bar	30,832	0.90%	
Laundry Equipment	106,198	3.10%	
Cash Registers	116,475	3.40%	
Office F&E, Lockers (85,000)	126,752	3.70%	
Linens, Blks, Bedspds, Uniforms	188,415	5.50%	
SSU Equip. & Supplies	322,019	9.40%	
<b>TOTAL-As a percent of bldg &amp; const.</b>	20.00%	43,425,735	100.00%
			11.87%

DESCRIPTION	AMOUNT	% subtotal	% total cost
<b>ADMINISTRATIVE &amp; PRE-OPENING</b>			
Rooms	57,295	4.46%	
Food & Beverage	226,998	17.67%	
Administration & General	187,687	14.61%	
Sales	223,529	17.40%	
Other Depts.	45,348	3.53%	
Advertising	286,862	22.33%	
Brand Opening	124,740	9.71%	
Task Force	62,306	4.85%	
Travel	37,383	2.91%	
Contingency	19,398	1.51%	
<b>TOTAL-As a percent of bldg &amp; const.</b>	7.50%	1,284,651	100.00%
			4.45%
<b>FRANCHISE/LEGAL/ACCTG./MISC.</b>			
Franchise Fee	30,000	3.74%	
Appraisals & Feasibility	25,000	3.11%	
Title Insurance	40,000	4.98%	
Project Insurance	18,000	2.24%	
Legal & Accounting	590,000	73.47%	
Development Overhead	100,000	12.45%	
<b>TOTAL-As a percent of bldg &amp; const.</b>	4.69%	8803,000	100.00%
			2.78%
<b>FINANCING COSTS</b>			
Interest on Construction Financing	1,545,600	69.70%	
total const. loan of 22,400,000			
financed in const. for 12 months			
with an avg. balance of 60.00%			
at an interest rate of 11.50%			
Construction loan commitment fee at	1.00%	224,000	10.10%
Permanent loan commitment fee at	1.00%	224,000	10.10%
Mortgage broker fee at	1.00%	224,000	10.10%
<b>TOTAL</b>	2,217,600	100.00%	7.68%
<b>RESERVES</b>			
Working Capital	600,000		
Contingency as a percent of const.	5.00%	403,065	
<b>TOTAL</b>	1,003,065		3.48%
<b>TOTAL PROJECT COSTS</b>	28,856,529		100.00%

### C. Revenue and Expense Projection

The operating pro forma for the Charlesgate Hotel is based on a 190 room hotel with projected room rates in 1987 of \$105, parking at \$7, occupancy beginning at 70% and increasing to 80% in four years, and overall revenues and expenses following guideline figures presented in the Laventhol and Horwath reviews of the US and Boston lodging industry. A fifteen year pro forma for the property follows this section with percentage breakdowns of revenues and expenses for easy comparison with the Laventhol guidelines.

#### 1. Revenues

Room revenue is a basic calculation of the number of rooms times 365 days times the occupancy times the room rate. Room sales represent 62.2% of total sales which falls within guidelines for similar hotels.

Food and beverage revenue is categorized by food, beverage, and banquet components and calculated based on an average food revenue per occupied room of \$24. Beverage and banquet revenue are calculated as a percentage of food revenue at 58.4% and 50% respectively resulting in total food and beverage revenue of 29.6% of total sales and 47.6% of total room sales. Telephone, gift shop, parking, and other revenue make up the balance of 8.2% of total sales.

Department profits account for the individual department expenses. The percentage numbers are derived from Laventhol

guidelines and are applied to departmental revenues in calculating profit by department. The room department, with a profitability of up to 80%, is clearly the most profitable part of a hotel. Food departments are very poor with a profitability of only 10%, while beverage and banquet are better with 40% and 33% respectively. It is clear from this analysis of departmental profits why hotels with a large percentage of sales attributed to food and beverage are typically less profitable. In almost any case, however, food and beverage represents a substantial share of total sales and must be carefully managed to optimize its profitability. The mix of food, beverage, and banquet facilities becomes a critical element in determining this profitability. The overall profit from all departments is 58.5% of total sales, a relatively high number due to the additional parking income and projected high occupancy and room rates when compared to the national averages documented by Laventhol. Deductions from departmental profits include general and administrative at 9.2% of total sales, a management fee of 4%, a royalty or franchise fee of 5% of room sales which becomes 3.1% of total sales, and miscellaneous expenses equalling 12.9% of total sales. The total deductions are equal to approximately 29% of total sales.

House profit is the net income before fixed charges and ranges from 29.3% in 1987 to 33.2% in the stabilized year

1991. This compares favorably with profitable chain hotels as described by Laventhol with an average ratio of house profit to total sales of 35.5% and 26.5% for independent hotels.

Fixed charges of insurance, real estate taxes, and FF&E reserves, representing an additional 2.4% of total sales, are then deducted from house profit to establish net operating income ranging from 26.9% to 27.2% of total sales.

CHARLESGATE HOTEL - 535 BEACON STREET  
 OPERATING PRO FORMA

Opening Date Jul-87  
 (assumes 1st of month)

ASSUMPTIONS

1. Food revenue per occupied room	\$24.00	4. Telephone revenue per occupied room	\$3.50	9. Parking revenue per occupied room	\$7.00	7. Royalty is Franchise Fee	
2. Beverage Revenue as percent of food revenue	58.4%	5. Gift Shop Revenue per occupied room	\$2.90	10. Parking revenue based on same occupancy as hotel		Percent of rooms rev.	5.00%
3. Banquet Revenue as percent of food revenue	50.0%	6. Other Revenue as percent of room revenue	3.25%	8. Inflation factor is 6% a year for Room Rate; Food, Telephone, & Gift Shop Rev; & Taxes	106.00%	Percent of F&B rev.	0.00%

	1987	%	1988	%	1989	%	1990	%	1991	%	1992	%	1993	%	1994	%	1995	%
ROOMS	190		190		190		190		190		190		190		190		190	
PARKING SPACES	110		110		110		110		110		110		110		110		110	
OCCUPANCY	70%		73%		76%		80%		80%		80%		80%		80%		80%	
AVERAGE ROOM RATE	\$105.00		\$111.30		\$117.98		\$125.06		\$132.56		\$140.51		\$148.94		\$157.88		\$167.35	
AVERAGE PARKING RATE	\$7.00		\$7.42		\$7.87		\$8.34		\$8.84		\$9.37		\$9.93		\$10.53		\$11.16	

ROOMS REVENUE	\$2,548,613	62.2%	\$5,634,618	62.2%	\$6,218,148	62.2%	\$6,938,145	62.2%	\$7,354,433	62.2%	\$7,795,699	62.2%	\$8,263,441	62.2%	\$8,759,248	62.2%	\$9,284,803	62.2%
Food Revenue	582,540	14.2%	1,287,913	14.2%	1,421,291	14.2%	1,585,862	14.2%	1,681,033	14.2%	1,781,874	14.2%	1,888,787	14.2%	2,002,114	14.2%	2,122,241	14.2%
Beverage Revenue	339,912	8.3%	751,497	8.3%	829,323	8.3%	925,350	8.3%	980,871	8.3%	1,039,724	8.3%	1,102,107	8.3%	1,168,233	8.3%	1,238,327	8.3%
Banquet Revenue	291,270	7.1%	643,956	7.1%	710,646	7.1%	792,931	7.1%	840,507	7.1%	890,937	7.1%	944,393	7.1%	1,001,057	7.1%	1,061,120	7.1%
TOTAL F&B REVENUE	1,213,722	29.6%	2,683,366	29.6%	2,961,260	29.6%	3,304,143	29.6%	3,502,391	29.6%	3,712,535	29.6%	3,935,287	29.6%	4,171,404	29.6%	4,421,688	29.6%
TELEPHONE REVENUE	84,954	2.1%	187,821	2.1%	207,272	2.1%	231,271	2.1%	245,148	2.1%	259,857	2.1%	275,448	2.1%	291,975	2.1%	309,493	2.1%
GIFT SHOP REVENUE	70,390	1.7%	155,623	1.7%	171,739	1.7%	191,625	1.7%	203,122	1.7%	215,310	1.7%	228,228	1.7%	241,922	1.7%	256,437	1.7%
OTHER REVENUE	82,830	2.0%	183,125	2.0%	202,090	2.0%	225,490	2.0%	239,019	2.0%	253,360	2.0%	268,562	2.0%	284,676	2.0%	301,756	2.0%
PARKING REVENUE	98,368	2.4%	217,476	2.4%	239,999	2.4%	267,788	2.4%	283,855	2.4%	300,887	2.4%	318,940	2.4%	338,076	2.4%	358,361	2.4%
GROSS OPERATING REVENUE	4,098,876	100.0%	9,062,029	100.0%	10,000,508	100.0%	11,158,461	100.0%	11,827,969	100.0%	12,537,647	100.0%	13,289,906	100.0%	14,087,301	100.0%	14,932,539	100.0%

DEPARTMENT PROFITS

ROOMS PROFITS	1,987,918	78.0%	4,479,521	79.5%	4,974,519	80.0%	5,619,897	81.0%	5,957,091	81.0%	6,314,516	81.0%	6,693,387	81.0%	7,094,991	81.0%	7,520,690	81.0%
Food Department	58,254	10.0%	148,110	11.5%	184,768	13.0%	214,091	13.5%	226,937	13.5%	240,553	13.5%	254,986	13.5%	270,285	13.5%	286,502	13.5%
Beverage Department	135,965	40.0%	311,871	41.5%	364,902	44.0%	416,408	45.0%	441,392	45.0%	467,876	45.0%	495,948	45.0%	525,705	45.0%	557,247	45.0%
Banquet Department	96,119	33.0%	225,385	35.0%	262,939	37.0%	293,384	37.0%	310,987	37.0%	329,647	37.0%	349,426	37.0%	370,391	37.0%	392,615	37.0%
TOTAL F&B DEPARTMENT PROFIT	290,338	23.9%	685,366	25.5%	812,609	27.4%	923,883	28.0%	979,316	28.0%	1,038,075	28.0%	1,100,360	28.0%	1,166,381	28.0%	1,236,364	28.0%
TELEPHONE DEPARTMENT	(2,549)	-3.0%	(20,660)	-11.0%	(20,727)	-10.0%	(23,127)	-10.0%	(24,515)	-10.0%	(25,986)	-10.0%	(27,545)	-10.0%	(29,197)	-10.0%	(30,949)	-10.0%
GIFT SHOP DEPARTMENT	10,559	15.0%	26,456	17.0%	34,348	20.0%	38,325	20.0%	40,624	20.0%	43,062	20.0%	45,646	20.0%	48,384	20.0%	51,287	20.0%
OTHER DEPARTMENTS	24,849	30.0%	64,094	35.0%	90,470	45.0%	101,470	45.0%	107,559	45.0%	114,012	45.0%	120,853	45.0%	128,104	45.0%	135,790	45.0%
PARKING PROFITS	88,531	90.0%	195,729	90.0%	215,999	90.0%	241,009	90.0%	255,470	90.0%	270,798	90.0%	287,046	90.0%	304,269	90.0%	322,525	90.0%
TOTAL DEPARTMENT PROFITS	2,399,645	58.5%	5,430,506	59.9%	6,107,688	61.1%	6,901,458	61.8%	7,315,545	61.8%	7,754,478	61.8%	8,219,747	61.8%	8,712,932	61.8%	9,235,707	61.8%

DEDUCTIONS

ADMINISTRATIVE & GENERAL	377,097	9.2%	806,521	8.9%	860,044	8.6%	959,628	8.6%	1,017,205	8.6%	1,078,238	8.6%	1,142,932	8.6%	1,211,500	8.6%	1,284,198	8.6%
MANAGEMENT FEE	163,955	4.0%	362,481	4.0%	400,020	4.0%	446,338	4.0%	473,119	4.0%	501,504	4.0%	531,596	4.0%	563,492	4.0%	597,302	4.0%
ROYALTIES	127,431	3.1%	281,731	3.1%	310,907	3.1%	346,907	3.1%	367,722	3.1%	389,785	3.1%	413,172	3.1%	437,962	3.1%	464,240	3.1%
ADVERTISING & SALES	213,142	5.2%	453,101	5.0%	480,024	4.8%	535,606	4.8%	567,743	4.8%	601,807	4.8%	637,915	4.8%	676,190	4.8%	716,762	4.8%
REPAIRS & MAINTENANCE	122,966	3.0%	289,985	3.2%	340,017	3.4%	379,388	3.4%	402,151	3.4%	426,280	3.4%	451,857	3.4%	478,968	3.4%	507,706	3.4%
HEAT LIGHT & POWER	192,647	4.7%	425,915	4.7%	470,024	4.7%	524,448	4.7%	555,915	4.7%	589,269	4.7%	624,626	4.7%	662,103	4.7%	701,829	4.7%
TOTAL DEDUCTIONS	1,197,237	29.2%	2,619,734	28.9%	2,861,037	28.6%	3,192,315	28.6%	3,383,854	28.6%	3,586,885	28.6%	3,802,098	28.6%	4,030,224	28.6%	4,272,037	28.6%
HOUSE PROFIT	1,202,408	29.3%	2,810,771	31.0%	3,246,651	32.5%	3,709,143	33.2%	3,931,692	33.2%	4,167,593	33.2%	4,417,649	33.2%	4,682,708	33.2%	4,963,670	33.2%
INSURANCE	30,000	0.7%	63,600	0.7%	67,416	0.7%	71,461	0.6%	75,749	0.6%	80,294	0.6%	85,111	0.6%	90,218	0.6%	95,631	0.6%
REAL ESTATE TAXES	50,000	1.2%	100,000	1.1%	250,000	2.5%	265,000	2.4%	280,000	2.4%	297,754	2.4%	315,619	2.4%	334,556	2.4%	354,630	2.4%
FF&E RESERVE	20,494	0.5%	158,586	1.8%	300,015	3.0%	334,754	3.0%	354,839	3.0%	376,129	3.0%	398,697	3.0%	422,619	3.0%	447,976	3.0%
NET OPERATING INCOME	\$1,101,914	26.9%	\$2,488,586	27.5%	\$2,629,220	26.3%	\$3,037,928	27.2%	\$3,220,204	27.2%	\$3,413,416	27.2%	\$3,618,221	27.2%	\$3,835,314	27.2%	\$4,065,433	27.2%

CHARLESGATE HOTEL - 535 BEACON STREET  
OPERATING PRO FORMA

ASSUMPTIONS

1. Food revenue per occupied room
2. Beverage Revenue as percent of food revenue
3. Banquet Revenue as percent of food revenue

	1996	%	1997	%	1998	%	1999	%	2000	%	2001	%
ROOMS	190		190		190		190		190		190	
PARKING SPACES	110		110		110		110		110		110	
OCCUPANCY	80%		80%		80%		80%		80%		80%	
AVERAGE ROOM RATE	\$177.40		\$188.04		\$199.32		\$211.28		\$223.96		\$237.39	
AVERAGE PARKING RATE	\$11.83		\$12.54		\$13.29		\$14.09		\$14.93		\$15.83	
<b>ROOMS REVENUE</b>	<b>\$9,841,891</b>	<b>62.2%</b>	<b>\$10,432,404</b>	<b>62.2%</b>	<b>\$11,058,348</b>	<b>62.2%</b>	<b>\$11,721,849</b>	<b>62.2%</b>	<b>\$12,425,160</b>	<b>62.2%</b>	<b>\$13,170,670</b>	<b>62.2%</b>
Food Revenue	2,249,575	14.2%	2,384,550	14.2%	2,527,422	14.2%	2,679,280	14.2%	2,840,037	14.2%	3,010,439	14.2%
Beverage Revenue	1,312,627	8.3%	1,391,385	8.3%	1,474,868	8.3%	1,563,360	8.3%	1,657,161	8.3%	1,756,591	8.3%
Banquet Revenue	1,124,788	7.1%	1,192,275	7.1%	1,263,811	7.1%	1,339,640	7.1%	1,420,018	7.1%	1,505,219	7.1%
<b>TOTAL F&amp;B REVENUE</b>	<b>4,686,990</b>	<b>29.6%</b>	<b>4,968,209</b>	<b>29.6%</b>	<b>5,266,101</b>	<b>29.6%</b>	<b>5,582,280</b>	<b>29.6%</b>	<b>5,917,216</b>	<b>29.6%</b>	<b>6,272,249</b>	<b>29.6%</b>
TELEPHONE REVENUE	328,063	2.1%	347,747	2.1%	368,612	2.1%	390,728	2.1%	414,172	2.1%	439,022	2.1%
GIFT SHOP REVENUE	271,824	1.7%	288,133	1.7%	305,421	1.7%	323,746	1.7%	343,171	1.7%	363,761	1.7%
OTHER REVENUE	319,861	2.0%	339,053	2.0%	359,396	2.0%	380,960	2.0%	403,818	2.0%	428,047	2.0%
PARKING REVENUE	379,862	2.4%	402,654	2.4%	426,813	2.4%	452,422	2.4%	479,568	2.4%	508,342	2.4%
<b>GROSS OPERATING REVENUE</b>	<b>15,828,491</b>	<b>100.0%</b>	<b>16,778,200</b>	<b>100.0%</b>	<b>17,784,892</b>	<b>100.0%</b>	<b>18,851,986</b>	<b>100.0%</b>	<b>19,983,105</b>	<b>100.0%</b>	<b>21,182,091</b>	<b>100.0%</b>
<b>DEPARTMENT PROFITS</b>												
<b>ROOMS PROFITS</b>	<b>7,971,931</b>	<b>81.0%</b>	<b>8,450,247</b>	<b>81.0%</b>	<b>8,957,262</b>	<b>81.0%</b>	<b>9,494,698</b>	<b>81.0%</b>	<b>10,064,380</b>	<b>81.0%</b>	<b>10,668,243</b>	<b>81.0%</b>
Food Department	303,693	13.5%	321,914	13.5%	341,229	13.5%	361,703	13.5%	383,405	13.5%	406,409	13.5%
Beverage Department	590,682	45.0%	626,123	45.0%	663,690	45.0%	703,512	45.0%	745,723	45.0%	790,466	45.0%
Banquet Department	416,171	37.0%	441,142	37.0%	467,610	37.0%	495,667	37.0%	525,407	37.0%	556,931	37.0%
<b>TOTAL F&amp;B DEPARTMENT PROFIT</b>	<b>1,310,546</b>	<b>28.0%</b>	<b>1,389,179</b>	<b>28.0%</b>	<b>1,472,530</b>	<b>28.0%</b>	<b>1,560,881</b>	<b>28.0%</b>	<b>1,654,534</b>	<b>28.0%</b>	<b>1,753,806</b>	<b>28.0%</b>
TELEPHONE DEPARTMENT	(32,806)	-10.0%	(34,775)	-10.0%	(36,861)	-10.0%	(39,073)	-10.0%	(41,417)	-10.0%	(43,902)	-10.0%
GIFT SHOP DEPARTMENT	54,365	20.0%	57,627	20.0%	61,084	20.0%	64,749	20.0%	68,634	20.0%	72,752	20.0%
OTHER DEPARTMENTS	143,938	45.0%	152,574	45.0%	161,728	45.0%	171,432	45.0%	181,718	45.0%	192,621	45.0%
PARKING PROFITS	341,876	90.0%	362,389	90.0%	384,132	90.0%	407,180	90.0%	431,611	90.0%	457,507	90.0%
<b>TOTAL DEPARTMENT PROFITS</b>	<b>9,789,850</b>	<b>61.8%</b>	<b>10,377,241</b>	<b>61.8%</b>	<b>10,999,875</b>	<b>61.8%</b>	<b>11,659,868</b>	<b>61.8%</b>	<b>12,359,460</b>	<b>61.8%</b>	<b>13,101,028</b>	<b>61.8%</b>
<b>DEDUCTIONS</b>												
ADMINISTRATIVE & GENERAL	1,361,250	8.6%	1,442,925	8.6%	1,529,501	8.6%	1,621,271	8.6%	1,718,547	8.6%	1,821,660	8.6%
MANAGEMENT FEE	833,140	4.0%	871,128	4.0%	911,396	4.0%	954,079	4.0%	999,324	4.0%	1,047,284	4.0%
ROYALTIES	492,095	3.1%	521,620	3.1%	552,917	3.1%	586,092	3.1%	621,258	3.1%	658,533	3.1%
ADVERTISING & SALES	759,768	4.8%	805,354	4.8%	853,675	4.8%	904,895	4.8%	959,189	4.8%	1,016,740	4.8%
REPAIRS & MAINTENANCE	538,169	3.4%	570,459	3.4%	604,686	3.4%	640,968	3.4%	679,426	3.4%	720,191	3.4%
HEAT LIGHT & POWER	743,939	4.7%	788,575	4.7%	835,890	4.7%	886,043	4.7%	939,206	4.7%	995,558	4.7%
<b>TOTAL DEDUCTIONS</b>	<b>4,528,360</b>	<b>28.6%</b>	<b>4,800,061</b>	<b>28.6%</b>	<b>5,088,065</b>	<b>28.6%</b>	<b>5,393,349</b>	<b>28.6%</b>	<b>5,716,950</b>	<b>28.6%</b>	<b>6,059,967</b>	<b>28.6%</b>
<b>HOUSE PROFIT</b>	<b>5,261,490</b>	<b>33.2%</b>	<b>5,577,180</b>	<b>33.2%</b>	<b>5,911,810</b>	<b>33.2%</b>	<b>6,266,519</b>	<b>33.2%</b>	<b>6,642,510</b>	<b>33.2%</b>	<b>7,041,061</b>	<b>33.2%</b>
INSURANCE	101,369	0.6%	107,451	0.6%	113,898	0.6%	120,732	0.6%	127,976	0.6%	135,654	0.6%
REAL ESTATE TAXES	375,908	2.4%	398,462	2.4%	422,370	2.4%	447,712	2.4%	474,575	2.4%	503,049	2.4%
FFBE RESERVE	474,855	3.0%	503,346	3.0%	533,547	3.0%	565,560	3.0%	599,493	3.0%	635,463	3.0%
<b>NET OPERATING INCOME</b>	<b>\$4,309,359</b>	<b>27.2%</b>	<b>\$4,567,921</b>	<b>27.2%</b>	<b>\$4,841,996</b>	<b>27.2%</b>	<b>\$5,132,516</b>	<b>27.2%</b>	<b>\$5,440,467</b>	<b>27.2%</b>	<b>\$5,766,895</b>	<b>27.2%</b>

#### D. Analysis of Alternative Financing Strategies

This section summarizes the pro forma and sensitivity analysis used in evaluating the feasibility of the project on a before and after tax basis using three primary financing strategies. A brief discussion of the assumptions and spreadsheet (located at the end of this chapter) will be followed by an evaluation of conventional, syndication, and condominium forms of financing.

##### 1. Assumptions and Design of the Spreadsheet Analysis

The first page of the spreadsheet provides a summary of all assumptions controlling the base case analysis and a few key investment return measures for the hotel. The sensitivity analysis tables at the end of the spreadsheet vary these assumptions to test their impact on the project's feasibility.

The Hotel Summary states that the Charlesgate will have 190 rooms opening in July of 1987 at an average room rate of \$105. This part of the summary also includes calculations of some return measures which help to quickly evaluate the feasibility of the overall project under the given assumptions. The base case generates a cash on cash return of 11.5% in the stabilized fifth year of operations. This is about the minimum return that would be financable at today's rates by conventional sources. Under the financing assumptions discussed later, the project would require 20% equity

or \$5,776,708 on a total project cost of roughly \$29 million. With a sale of the property after fifteen years, the project generates an after tax internal rate of return of 34% and a net present value of nearly \$5 million.

The base case investment analysis assumes an ordinary income tax bracket of 50%, a capital gains rate of 20%, and an after tax discount rate of 18%. The building was depreciated over 18 years and equipment over 5 years, both on a straight line basis. Costs of renovating the building were assumed to qualify for a 25% historic investment tax credit and equipment qualifies for a 10% ITC. The final sale of the property in year 15 was based on a capitalization rate of 9% with 2% selling costs unless sold as a condominium in which costs would be 5%.

The financing of the project under both a build and hold and a syndication scenario assumed a 1.2 debt coverage ratio on fifth year stabilized net operating income which generates a maximum permanent loan amount of \$23 million. The construction loan amount was assumed to be equal to the permanent and available at 11.5% interest for a 1 point commitment fee. The construction period is estimated at one year and the average outstanding balance on the loan is high at 60% because of the large cost of the building purchase being carried in full throughout construction. The permanent loan is based on a 300 basis point margin over the short term



treasury bill rate presently near 8% but assumed to be closer to 9% at the time of funding. The mortgage is interest only for the first 5 years until stabilized operations are achieved with interest accruing to the principal amount of the loan. After year 5, the loan is amortized on a 30 year schedule. No second mortgage is included in the base case analysis. A mortgage broker fee of 1% is also included on top of the 1 point commitment fee for both the construction and permanent loans.

The syndication analysis assumes that the entire equity required is provided by the syndication leaving the developer with no cash in the project. The minimum equity contribution includes a 10% syndication cost on top of the equity required as shown in the hotel summary. The number of units, purchase price, and distribution of benefits are controlled from the Summary of Assumptions page. After tax cash flows as calculated by the spreadsheet are displayed and capital contributions are proportionately distributed over a 7 year pay in period to maximize the ratio of write off to contribution. The current spreadsheet analysis, however, focuses primarily on the condominium form of financing and does not evaluate a phased pay in for syndication. Some return measures are displayed to assist in selecting the appropriate distribution of benefits and evaluate the overall returns to both investor and developer. Under the base case assumptions, the investor receives an IRR of 22% if given 75%

of the project benefits. The developer's net present value is \$2,724,198.

The Condominium Hotel Conversion Analysis determines a minimum total sale price for the 190 units by adding a 15% developer's profit, a 10% selling and marketing cost, and a 5% organizational expense to the total project costs. The unit purchase price is then broken down into components for purposes of calculating depreciation with land at 15%, furniture fixtures and equipment at 15%, and building at 70%. Under the single payment scenario, 90% of the purchase price is financed at 12% for 30 years. With the phased pay in alternative, 35% of the purchase price is payed in over 6 years in amounts proportional to after tax cash flows. The phased pay in covers the operating deficit and reduces the original loan amount to between 75% and 80% of the purchase price. In year five or six the mortgage would convert to a nonrecourse loan. The owner receives a 33% IRR with a phased pay in and 31% without.

The Sensitivity Analysis and Summary of Return Measures following the Summary of Assumptions varies the assumptions to test their impact on the project. Purchase price is varied from \$75 to \$125 per square foot, construction costs from \$30 to \$65 per square foot, the income tax bracket is analyzed at 50% and 35%, the depreciation period is changed from 18 years to both 15 and 30 years, the investment tax

credit on construction is calculated at 25%, 20%, 10%, and 0%, the capitalization rate is varied from 7% to 11%, sale is analyzed at 1\$ over liability and at original price, and the general partner's share of ownership in the syndication is varied from 10% to 50%. This sensitivity analysis is applied to four different room rate and development scenarios. The first is the base case with room rates at \$105, the second is a best case with rates at \$115, the third is with rates at \$95, and finally a scenario is considered without the expansion on the sixth, seventh, and eighth floors.

## 2. Conventional Financing and Ownership by the Developer

The Charlesgate is a marginally attractive build and hold project for a developer under the base case analysis. There are three basic problems with the deal. First, the original purchase price of the building is too high for the projected income stream and development costs. The projected development cost per room is \$151,876. The typical rule of thumb is \$1 of room rate for every thousand dollars of cost. Room rates for the Charlesgate start at only \$105 and reach \$132 by the stabilized fifth year of operations. The second problem is a direct result of the first. Given conventional financing sources and required debt coverage, substantial cash equity is required. 22% of the total development costs or \$6.5 million is required in equity at the \$85 purchase price. Any increase in price or construction costs is added directly to the equity required.

The third problem is the uncertainty of the proposed changes to the tax structure. Before tax, the Internal Rate of Return is 15.41%. The cash on cash return is 11.16% but the cash on equity investment is zero for the first three years and only 6.6% in year five. The investment tax credit has a dramatic impact on these returns by essentially reducing the \$6.5 million equity by \$3.2 million the first year. The after tax IRR increases to nearly 30% and generates a net present value of \$4.1 million. The elimination of the ITC alone reduces the IRR from 30% to 22% and the reduction of the maximum tax bracket to 35% could reduce the return from 30% to 26.5%. The proposed lengthening of the depreciation period to 28 or 30 years would have a similar 3 point reduction in IRR. The total effect of the combined proposed tax change could reduce the after tax IRR to as low as 18%, a marginal return for a developer investing \$6.5 million in a very risky project. The developer must also be able to take advantage of these huge tax deductions in the year they are available in order to achieve the projected returns.

If room rates reach \$115, the cash on cash return becomes a much more financable 12.23%, reducing the equity to 15% or \$4.4 million. The ITC reduces this to \$1.2 million. Proposed tax change could still drop the projected after tax IRR from 48% to around 23%.

If room rates go the other way to \$95, the project loses any

attraction as a build and hold deal. Equity increases to \$8.6 million and the IRR, even with the questionable tax savings, is only 21%.

An even riskier scenario is threatened by the inability to expand the development. The expansion allows the developer to average down the price of the building because the cost of the expansion is only \$65 per square foot as opposed to \$85 for original purchase and \$45 for construction.

### 3. Syndication

Syndicating the equity requirements for the Charlesgate distributes many of the risks associated with the project. If the developer syndicates the entire equity, reducing his cash investment to zero, a minimum of 75% of the project benefits must be given up to the investors to provide them with a 20% after tax IRR. If the property is evaluated based on sale at original purchase price, however, the return is only 17%. The developer's net present value in the base case syndication analysis is reduced from \$4.1 million in the build hold scenario to \$2.6 million as a general partner with no cash investment.

The timing of the tax benefits from the project are ideally suited to a phased pay in of the capital contribution to the limited partnership. The ITC alone allows for a \$47,562 contribution the first year at essentially no cost to an investor with substantial tax liabilities. With the 5 year

depreciation of furniture, fixtures, and equipment, the tax deductions in those years can be easily matched with capital contributions to minimize the after tax cost and produce an average ratio of after tax benefits to cash invested of 1.85 over a five year period. This phased pay in would substantially increase the returns on the project thereby decreasing the percent ownership by limited partners and increasing the developer's NPV.

The proposed tax changes are still a significant risk in this project. Investors will not be willing to take those risks without some adjustment in their ownership to maintain the projected returns in the event such tax revisions occur.

In the best case scenario, where room rates reach \$115, the developer can keep 45% of the project, generating an NPV of \$4.9 million, and still provide a 22.5% return to the investors. Because of the higher return and stronger economics of the project, the investor returns remain almost acceptable even after proposed tax changes.

If room rates drop to \$95 or the expansion is prohibited, the syndication is almost not marketable even if the developer gives up over 95% ownership.

#### 4. Condominium Hotel

The condominium form of ownership and financing of the hotel produces the highest returns to both the investor and the developer. The investor receives a 29% return if the unit is purchased with a single 10% down payment and a 32.7% return with a phased pay in over six years. The cumulative net investment after tax benefits to a purchaser using the phased pay in is only \$5,673 of the total \$75,895 capital contribution or 2.6% of the \$216,842 purchase price. The developer receives an up front profit of 15% on the total \$41.2 million sale price equalling \$6.2 million. This profit is taxable at ordinary income tax rates but it is cash available today and represents a significant improvement to the \$2.6 million NPV generated in the syndication from tax savings, future residuals, and a minimal cash flow.

The problem with the condominium concept for financing the Charlesgate is that it is entirely tax driven. The before tax IRR is zero or negative for both forms of financing under the base case assumptions. The purchase price has become so inflated that the debt service consumes all of the net operating income and generates an operating deficit through year ten with a phased pay in and year twelve with a single down payment. The economics are generated from the ITC and an extremely high basis in the unit allowing substantial depreciation expense for both building and FF&E. As a result, the proposed tax plan has a disastrous impact on

investor returns. The drop in the tax bracket alone reduces the return from 32.7% to 15.3%. The elimination of the ITC or the extension of the depreciation period have equally dramatic impacts.

Because the economics of the condominium structure are tax driven, changes in the operational and cost variables in the project have a relatively minor impact. Increasing the purchase price from \$85 to \$105 reduces the IRR from 32.7% to only 27.3%. Increased construction costs actually perversely increase the investor return in the case of the phased pay in due to increased ITC and depreciation. Even in the worst case where no building expansion is feasible, the IRR remains at 28.3%, provided of course that tax laws remain constant.

Returns are similarly insensitive to increases in room rates. When the rate increases to \$115, the IRR remains at 32.7%. The investment does, however, become more economic in nature. There are no negative cash flows after the pay in period and enough cash flow is generated after seven or eight years to make the investment marketable on its income and residual value.

#### E. Summary Evaluation of the Charlesgate Hotel

The purpose of this study has been to outline the process in evaluating and planning a hotel development by analyzing the specific feasibility of a hotel at the Charlesgate. The hotel is one alternative in a larger highest and best use



analysis for this property conducted in conjunction with an effort to structure a purchase and development strategy for the eighteen Emerson College properties in Back Bay. The development of the Charlesgate must be an integral part of this overall development strategy.

The highest and best use for the property may be a hotel under the right set of circumstances but the property should not be purchased at this time given the level of uncertainty without some acceptable alternative strategies. The projection of \$105 room rates and 70% to 80% occupancies for this property two years in the future requires more substantial study but it is clear that this may be stretching the market and that the project is too tight to allow for any significant drop in rates. The threat of the proposed tax changes could potentially destroy the project's feasibility because of its dependence on current tax benefits to make an overpriced property marginally feasible. The final uncertainty is the ability to do the hotel development at all under current zoning and neighborhood sentiment.

On the other hand, however, if the tax laws remain favorable with regard to the ITC, depreciation, and marginal tax rates and if the Boston hotel market remains strong, the hotel may easily outperform the alternative uses of residential condominium or student housing. Student housing may be able to generate the highest purchase price even under favorable

economic conditions but it will receive extremely strong resistance from the neighborhood. Condominiums selling at an aggressive \$242 per square foot in 1987 (\$200 today inflated at 10% per year) would generate \$25.6 million in gross sales based on a net saleable area (including the maximum building expansion) of 105,800 square feet. With a 15% developer profit of \$3.8 million there is only \$155.45 per square foot left to purchase the property and complete the development. Development cost could easily be \$70 per square foot leaving \$85 for the purchase price. Achieving the 105,800 square foot saleable area estimated for residential condominium may also be very difficult given the layout of the Charlesgate. The basement is substantially windowless and both the basement and first floor have large interior areas which will be difficult to include in units as saleable area. On the basis of purchase price to Emerson, residential condominium and hotel may come close to being equal. The advantage to the hotel is that under the right conditions it produces considerably greater value to the developer.

The most direct comparison to the residential condominium is the condominium hotel. Assuming the hotel units are marketable given their precarious dependence on tax benefits at prices close to those projected in the base case analysis, the profit to the developer is \$6.2 million as compared to \$3.8 million for residential condominium. The profit margin could even be reduced to make the hotel units more economi-

cally attractive and still outperform residential. The condominium hotel be marketable given the relatively small investment required, the size of the potential investor pool, and the strength and appeal of the Back Bay market. Investors also get the benefit and prestige of owning and potentially occupying their own share of a downtown hotel. This has been one of the prime motivations for investing in resort condominium hotels and may well be an incentive for investing in what may be a prestigious Back Bay location. Another potential market for the condominium hotel is the corporate user wanting reliable and familiar in town business accommodations.

The strategy for evaluating the potential acquisition of the Charlesgate is to base the proposed purchase price on the feasibility of residential condominium which is allowable under current zoning and less affected by any proposed tax changes. The hotel could be pursued simultaneously using this study as a guide for analyzing its feasibility. If the hotel remains feasible at the time of development, substantial additional value can be generated and possibly shared with Emerson as an incentive to sell the property for development or stay in as a limited partner rather than sell to an institution for reuse as student housing.

\* The spreadsheet analysis through the after tax cash flow exhibit is based on a model for the Lowell Hilton prepared by Bernard Schachter, Arthur Robbins Associates, Providence Rhode Island.

CHARLESGATE HOTEL - 535 BEACON STREET  
SUMMARY OF ASSUMPTIONS

HOTEL SUMMARY

Number of Hotel Rooms	190
Opening Date	01-Jul-87
Percent of First Year in Service	50.00%
Projection Date	01-Jan-80
First Year Room Rate	\$105.00
Inflation Rate	6.00%
Cash on Cash Return Year Five	11.16%
Total Project Cost	\$28,856,529
Equity Required	\$6,456,529
Internal Rate of Return	29.75%
Net Present Value	\$4,121,362

DEVELOPMENT BUDGET

Building Purchase Price	\$10,667,500
Gross Existing Building Area	125,500
Cost per Gross Square Foot	\$85.00
Percent Allocation to Land	15.00%
Renovation Costs/SF	\$45.00
Gross Area of Expansion	14,500
New Construction Costs/SF	\$65.00
Parking Site Purchase Price	\$750,000
Number of Cars	110
Construction Cost per Space	\$7,500
TOTAL CONSTRUCTION COSTS	7,415,000

INVESTMENT ANALYSIS

Ordinary Income Tax Bracket	50.00%
Capital Gains Tax Rate	20.00%
After Tax Discount Rate	18.00%
Management Contract	
Incentive Management Fee Percent	20.00%
Applied to Income Greater than	\$0
After Debt Service	

DEPRECIATION AND AMORTIZATION

Hard and Soft Cost Depreciation Periods	
Building	18
Equipment	5
Investment Tax Credit on Const.	25.00%
Investment Tax Credit on Eqmnt.	10.00%

SALES ANALYSIS

Capitalization Rate	9.00%
Selling Costs for Hotel	2.00%
Selling Costs for Condominium	5.00%

FINANCING

Fifth Year Operating Income	\$3,220,204
Debt Coverage Ratio	1.20
Maximum Loan Amount	\$22,362,527
Construction Loan Amount	\$22,400,000
Interest Rate	11.50%
Commitment Fee	1.00%
Construction Period in Months	12
Average Percent Outstanding	60.00%
First Mortgage Loan Amount	\$22,400,000
Margin Over T-Bill Rate	3.00%
T-Bill Rate	9.00%
Interest Rate	12.00%
Amortization Period	30
Interest Only Period thru Year	5
Commitment Fee	1.00%
Second Mortgage Loan Amount	\$0
Interest Rate	13.00%
Amortization Period	30
Interest Only Period thru Year	
Commitment Fee	
Mortgage Broker Fee	1.00%

SYNDICATION ANALYSIS

Minimum Equity Contribution	\$7,102,181
Total Capital Contribution	\$7,100,000
Number of Units Offered	50
Price per Unit	\$142,000

Phased Pay In Schedule

Year	After Tax Cash Flow Contribution	Capital
1	59,286	\$64,163
2	18,105	\$19,594
3	16,440	\$17,792
4	18,204	\$19,701
5	19,173	\$20,750
6	11,468	\$12,411
7	12,017	\$13,006

Totals \$131,207 \$142,000

Interest Rate on Capital Cont. 12.00%

Distribution of Benefits

	General	
	Partner	Investor
Profits	25.00%	75.00%
Losses	25.00%	75.00%
ITC	25.00%	75.00%
Sale/Refinancing	25.00%	75.00%

Investor Internal Rate of Return 20.09%  
Investor Net Present Value 16,668  
Developer's Net Present Value \$2,642,291

CONDOMINIUM HOTEL CONVERSION ANALYSIS

Total Project Costs	\$28,856,529
Developer Profit on Gross Sales	15.00%
Selling Costs	10.00%
Organizational Expenses	5.00%

Minimum Sale Price \$41,223,612

Established Gross Sale Price	\$41,200,000
Number of Units	190
Price per Unit	\$216,842
Land % of Price	15.00%
FF&E % of Price	15.00%
Building	70.00%

Percent of Purchase Financed 90.00%  
Interest Rate 12.00%  
Amortization Period 30

Phased Pay In Schedule

Capital Contribution % of Purchase 35.00%

Year	After Tax Cash Flow	Capital Contribution	Cum. Net Investment
1	23,266	\$25,425	2,159
2	11,977	\$12,826	3,009
3	11,419	\$12,143	3,733
4	10,355	\$10,777	4,155
5	9,716	\$10,018	4,457
6	3,489	\$4,705	5,673

Totals \$70,222 \$75,895

Owner's Internal Rate of Return With Phased Pay In 32.70%

Owner's Internal Rate of Return Without Phased Pay In 29.02%

Developer's Profit \$6,180,000



CHARLESGATE HOTEL - 535 BEACON STREET  
 SENSITIVITY ANALYSIS AND SUMMARY OF RETURN MEASURES - ROOM RATES AT \$115

		HOTEL OPERATIONS SUMMARY				SYNDICATION RETURNS				CONDOMINIUM HOTEL		
		Equity Required	Cash/Cash Return	IRR	NPV	Developer NPV	Investor IRR	NPV	Unit Price	Single Pant. IRR	Pay In IRR	Unit Price
TABLE 1	\$75.00	2,835,872	12.92%	ERR	7,903,907	4,813,441	34.40%	56,138	62,000	38.08%	34.54%	206,842
PURCHASE PRICE	\$85.00	4,384,229	12.23%	48.22%	6,601,760	4,921,043	22.48%	24,846	96,000	33.93%	32.67%	218,421
PER SQUARE FOOT	\$95.00	5,932,585	11.61%	34.44%	5,304,588	5,030,885	17.14%	(6,391)	130,000	30.00%	30.71%	230,526
	\$105.00	7,480,941	11.05%	27.55%	4,007,397	5,140,717	13.86%	(37,628)	164,000	26.51%	28.75%	242,105
	\$115.00	9,029,297	10.54%	23.32%	2,710,191	5,250,543	11.55%	(68,866)	198,000	23.17%	26.65%	253,684
	\$125.00	10,577,654	10.08%	20.38%	1,412,970	5,360,362	9.79%	(100,103)	232,000	19.89%	24.33%	265,263
TABLE 2	\$30.00	1,724,821	13.46%	ERR	8,342,447	4,532,968	54.75%	72,740	38,000	36.33%	29.86%	198,421
CONSTRUCTION COSTS	\$35.00	2,611,290	13.02%	ERR	7,758,302	4,693,897	34.80%	56,066	58,000	35.46%	30.56%	205,263
PER SQUARE FOOT	\$40.00	3,497,759	12.61%	61.47%	7,180,497	4,757,680	27.36%	41,461	76,000	34.61%	31.46%	212,105
	\$45.00	4,384,229	12.23%	48.23%	6,602,684	4,921,459	22.48%	24,856	96,000	33.94%	32.68%	218,421
	\$50.00	5,270,698	11.87%	40.25%	6,024,865	5,085,235	19.25%	8,251	116,000	33.07%	34.17%	225,263
	\$55.00	6,157,167	11.53%	34.96%	5,447,039	5,249,009	16.89%	(8,354)	136,000	32.18%	36.23%	232,105
	\$60.00	7,043,636	11.20%	31.19%	4,869,208	5,312,780	15.26%	(22,959)	154,000	31.45%	39.48%	238,421
	\$65.00	7,930,106	10.90%	28.33%	4,291,372	5,476,549	13.74%	(39,564)	174,000	30.51%	44.98%	245,263
TABLE 3	50.00%	4,384,229	12.23%	48.25%	6,604,219	4,922,150	22.48%	24,873	96,000	33.95%	32.70%	218,421
INCOME TAX BRACKET	35.00%	4,384,229	12.23%	41.13%	5,743,822	4,534,971	20.59%	15,409	96,000	20.43%	19.23%	218,421
TABLE 4	15	4,384,229	12.23%	51.12%	7,092,284	5,141,779	23.54%	30,242	96,000	38.34%	42.22%	218,421
DEPRECIATION PERIOD	18	4,384,229	12.23%	48.25%	6,604,219	4,922,150	22.48%	24,873	96,000	33.95%	32.70%	218,421
	30	4,384,229	12.23%	42.50%	5,628,087	4,482,891	20.46%	14,135	96,000	25.66%	22.40%	218,421
TABLE 5	25.00%	4,384,229	12.23%	48.25%	6,604,219	4,922,150	22.48%	24,873	96,000	33.95%	32.70%	218,421
INVESTMENT TAX CREDIT	20.00%	4,384,229	12.23%	42.55%	5,984,683	4,643,359	21.11%	18,058	96,000	29.85%	27.19%	218,421
	10.00%	4,384,229	12.23%	35.55%	5,181,329	4,281,849	19.46%	9,221	96,000	23.85%	21.29%	218,421
	0.00%	4,384,229	12.23%	30.13%	4,235,452	3,856,205	17.83%	(1,184)	96,000	19.73%	17.80%	218,421
TABLE 6	7.00%	4,384,229	12.23%	48.84%	7,928,183	5,517,934	24.16%	39,437	96,000	35.60%	35.70%	218,421
CAPITALIZATION RATE	9.00%	4,384,229	12.23%	48.25%	6,604,219	4,922,150	22.48%	24,873	96,000	33.95%	32.70%	218,421
	11.00%	4,384,229	12.23%	47.84%	5,761,695	4,543,014	21.15%	15,605	96,000	32.61%	30.13%	218,421
TABLE 7												
SALE @ \$1 OVER LIABILITY (3,176,075)		4,384,229	12.23%	46.64%	3,587,993	3,537,340	15.47%	(7,755)	96,000			
SALE @ ORIGINAL PRICE 9,990,575		4,384,229	12.23%	47.27%	4,687,619	4,059,680	18.92%	3,790	96,000			
TABLE 8	10.00%	4,384,229	12.23%	48.25%	6,604,219	1,076,193	37.80%	101,792	96,000			
GENERAL PARTNER'S SHARE	20.00%	4,384,229	12.23%	48.25%	6,604,219	2,175,038	33.04%	79,815	96,000			
OF OWNERSHIP IN	30.00%	4,384,229	12.23%	48.25%	6,604,219	3,273,883	28.63%	57,838	96,000			
SYNDICATION	40.00%	4,384,229	12.23%	48.25%	6,604,219	4,372,727	24.49%	35,861	96,000			
	50.00%	4,384,229	12.23%	48.25%	6,604,219	5,471,572	20.50%	13,884	96,000			

CHARLESGATE HOTEL - 535 BEACON STREET  
 SENSITIVITY ANALYSIS AND SUMMARY OF RETURN MEASURES - ROOM RATE AT \$95

	HOTEL OPERATIONS SUMMARY				SYNDICATION RETURNS				CONDOMINIUM HOTEL			
	Equity Required	Cash/Cash Return	IRR	NPV	Developer NPV	Investor IRR	NPV	Unit Price	Single Pant. IRR	Pay In IRR	Unit Price	
TABLE 1	\$75.00	7,070,572	10.65%	25.50%	2,862,100	519,004	21.84%	32,721	156,000	27.45%	36.67%	203,684
PURCHASE PRICE	\$85.00	8,618,929	10.08%	21.33%	1,559,953	528,123	18.33%	3,399	190,000	22.87%	32.56%	215,263
PER SQUARE FOOT	\$95.00	10,167,285	9.56%	18.48%	262,782	537,490	15.85%	(25,829)	224,000	18.33%	28.28%	226,842
	\$105.00	11,715,641	9.09%	16.35%	(1,034,409)	546,856	13.96%	(55,057)	258,000	13.41%	23.16%	238,421
	\$115.00	13,263,997	8.67%	14.66%	(2,331,616)	556,222	12.45%	(84,285)	292,000	7.30%	15.83%	250,000
	\$125.00	14,812,354	8.28%	13.29%	(3,628,836)	565,587	11.20%	(113,513)	326,000	-4.58%	-1.36%	261,579
TABLE 2	\$30.00	5,959,521	11.11%	27.73%	3,300,641	507,535	23.78%	43,943	132,000	26.35%	27.92%	195,263
CONSTRUCTION COSTS	\$35.00	6,845,990	10.74%	25.07%	2,716,496	447,535	21.74%	31,687	150,000	25.18%	28.83%	202,105
PER SQUARE FOOT	\$40.00	7,732,459	10.40%	23.01%	2,138,691	487,852	19.86%	17,552	170,000	24.17%	30.38%	208,421
	\$45.00	8,618,929	10.08%	21.34%	1,560,878	528,169	18.33%	3,416	190,000	22.88%	32.58%	215,263
	\$50.00	9,505,398	9.77%	19.94%	983,058	568,485	17.04%	(10,719)	210,000	21.47%	36.59%	222,105
	\$55.00	10,391,867	9.49%	18.74%	405,233	508,801	16.09%	(22,855)	228,000	20.15%	47.77%	228,421
	\$60.00	11,278,336	9.22%	17.70%	(172,599)	549,117	15.11%	(36,991)	248,000	18.39%	ERR	235,263
	\$65.00	12,164,806	8.97%	16.79%	(750,434)	589,432	14.24%	(51,127)	268,000	16.60%	ERR	241,579
TABLE 3	50.00%	8,618,929	10.08%	21.34%	1,562,412	528,246	18.33%	3,445	190,000	22.89%	32.62%	215,263
INCOME TAX BRACKET	35.00%	8,618,929	10.08%	19.26%	629,689	481,609	16.69%	(14,276)	190,000	6.62%	9.06%	215,263
TABLE 4	15	8,618,929	10.08%	22.42%	2,039,288	552,089	19.23%	12,506	190,000	28.05%	61.81%	215,263
DEPRECIATION PERIOD	18	8,618,929	10.08%	21.34%	1,562,412	528,246	18.33%	3,445	190,000	22.89%	32.62%	215,263
	30	8,618,929	10.08%	19.26%	608,660	480,558	16.62%	(14,676)	190,000	13.72%	15.56%	215,263
TABLE 5	25.00%	8,618,929	10.08%	21.34%	1,562,412	528,246	18.33%	3,445	190,000	22.89%	32.62%	215,263
INVESTMENT TAX CREDIT	20.00%	8,618,929	10.08%	19.96%	960,843	498,167	17.26%	(7,984)	190,000	19.34%	23.24%	215,263
	10.00%	8,618,929	10.08%	18.34%	180,797	459,165	16.01%	(22,805)	190,000	14.30%	15.83%	215,263
	0.00%	8,618,929	10.08%	16.71%	(737,646)	413,243	14.71%	(40,256)	190,000	10.90%	11.98%	215,263
TABLE 6	7.00%	8,618,929	10.08%	22.93%	2,635,885	581,919	20.03%	23,841	190,000	26.37%	37.47%	215,263
CAPITALIZATION RATE	9.00%	8,618,929	10.08%	21.34%	1,562,412	528,246	18.33%	3,445	190,000	22.89%	32.62%	215,263
	11.00%	8,618,929	10.08%	20.09%	879,293	494,090	16.98%	(9,534)	190,000	18.80%	27.23%	215,263
TABLE 7		8,618,929	10.08%	14.73%	(886,496)	392,477	10.91%	(42,817)	190,000			
SALE @ \$1 OVER LIABILITY (2,262,736)		8,618,929	10.08%	19.23%	483,247	474,287	16.04%	(17,059)	190,000			
SALE @ ORIGINAL PRICE 14,138,231		8,618,929	10.08%	19.23%	483,247	474,287	16.04%	(17,059)	190,000			
TABLE 8	10.00%	8,618,929	10.08%	21.34%	1,562,412	1,037,313	17.35%	(6,736)	190,000			
GENERAL PARTNER'S SHARE	20.00%	8,618,929	10.08%	21.34%	1,562,412	2,055,447	15.35%	(27,099)	190,000			
OF OWNERSHIP IN	30.00%	8,618,929	10.08%	21.34%	1,562,412	3,073,581	13.31%	(47,461)	190,000			
SYNDICATION	40.00%	8,618,929	10.08%	21.34%	1,562,412	4,091,715	11.18%	(67,824)	190,000			
	50.00%	8,618,929	10.08%	21.34%	1,562,412	5,109,849	8.91%	(88,187)	190,000			

CHARLESGATE HOTEL - 535 BEACON STREET  
 SENSITIVITY ANALYSIS AND SUMMARY OF RETURN MEASURES - WITHOUT BUILDING EXPANSION

		HOTEL OPERATIONS SUMMARY				SYNDICATION RETURNS				CONDOMINIUM HOTEL		
		Equity Required	Cash/Cash Return	IRR	NPV	Developer NPV	Investor IRR	NPV	Unit Price	Single Pent. IRR	Pay In IRR	Unit Price
TABLE 1	\$75.00	7,000,503	10.48%	23.90%	2,268,445	(553)	21.69%	31,379	154,000	25.31%	32.25%	228,750
PURCHASE PRICE	\$85.00	8,548,859	9.88%	20.06%	965,969	(3,745)	18.22%	2,297	188,000	20.53%	28.31%	242,500
PER SQUARE FOOT	\$95.00	10,097,215	9.35%	17.40%	(331,179)	(6,937)	15.77%	(26,679)	222,000	15.64%	23.83%	256,250
	\$105.00	11,645,571	8.87%	15.39%	(1,628,350)	(10,129)	13.90%	(55,656)	256,000	9.98%	17.86%	270,000
	\$115.00	13,193,928	8.44%	13.79%	(2,925,541)	(13,320)	12.41%	(84,632)	290,000	1.47%	7.16%	283,750
	\$125.00	14,742,284	8.05%	12.48%	(4,222,747)	(16,512)	11.17%	(113,609)	324,000	ERR	ERR	297,500
TABLE 2	\$30.00	5,889,451	10.96%	25.88%	2,707,137	21,604	23.51%	41,932	130,000	24.40%	25.61%	218,750
CONSTRUCTION COSTS	\$35.00	6,775,920	10.57%	23.48%	2,122,552	46,488	21.26%	27,969	150,000	23.12%	26.13%	226,875
PER SQUARE FOOT	\$40.00	7,662,390	10.22%	21.60%	1,544,761	(28,629)	19.72%	16,143	168,000	21.99%	27.09%	234,375
	\$45.00	8,548,859	9.88%	20.06%	966,960	(3,745)	18.22%	2,316	188,000	20.54%	28.33%	242,500
	\$50.00	9,435,328	9.57%	18.77%	389,151	21,139	16.97%	(11,510)	208,000	18.92%	30.42%	250,625
	\$55.00	10,321,797	9.28%	17.65%	(188,665)	46,203	15.89%	(25,337)	228,000	17.32%	35.24%	258,125
	\$60.00	11,208,267	9.00%	16.68%	(766,488)	(29,093)	15.08%	(37,164)	246,000	15.14%	52.40%	266,250
	\$65.00	12,094,736	8.74%	15.82%	(1,344,316)	(4,209)	14.23%	(50,992)	266,000	12.72%	ERR	273,750
TABLE 3	50.00%	8,548,859	9.88%	20.07%	968,599	(3,745)	18.23%	2,349	188,000	20.55%	28.36%	242,500
INCOME TAX BRACKET	35.00%	8,548,859	9.88%	18.14%	68,831	(3,745)	16.56%	(15,646)	188,000	4.54%	7.18%	242,500
TABLE 4	15	8,548,859	9.88%	21.07%	1,417,423	(3,745)	19.11%	11,326	188,000	25.66%	48.05%	242,500
DEPRECIATION PERIOD	18	8,548,859	9.88%	20.07%	968,599	(3,745)	18.23%	2,349	188,000	20.55%	28.36%	242,500
	30	8,548,859	9.88%	18.15%	70,951	(3,745)	16.52%	(15,604)	188,000	11.67%	13.61%	242,500
TABLE 5	25.00%	8,548,859	9.88%	20.07%	968,599	(3,745)	18.23%	2,349	188,000	20.55%	28.36%	242,500
INVESTMENT TAX CREDIT	20.00%	8,548,859	9.88%	18.88%	431,680	(3,745)	17.21%	(8,389)	188,000	17.45%	21.22%	242,500
	10.00%	8,548,859	9.88%	17.50%	(264,915)	(3,745)	16.04%	(22,321)	188,000	12.95%	14.69%	242,500
	0.00%	8,548,859	9.88%	16.07%	(1,084,758)	(3,745)	14.80%	(38,718)	188,000	9.82%	11.12%	242,500
TABLE 6	7.00%	8,548,859	9.88%	21.68%	1,967,345	(3,745)	19.91%	22,324	188,000	24.51%	33.59%	242,500
CAPITALIZATION RATE	9.00%	8,548,859	9.88%	20.07%	968,599	(3,745)	18.23%	2,349	188,000	20.55%	28.36%	242,500
	11.00%	8,548,859	9.88%	18.79%	333,034	(3,745)	16.89%	(10,362)	188,000	15.25%	22.03%	242,500
TABLE 7												
SALE @ #1 OVER LIABILITY (2,022,846)		8,548,859	9.88%	13.23%	(1,312,071)	(9,623)	10.90%	(43,147)	188,000			
SALE @ ORIGINAL PRICE 13,848,963		8,548,859	9.88%	18.03%	13,480	(3,745)	16.09%	(16,753)	188,000			
TABLE 8	10.00%	8,548,859	9.88%	20.07%	968,599	948,001	16.37%	(16,686)	188,000			
GENERAL PARTNER'S SHARE	20.00%	8,548,859	9.88%	20.07%	968,599	1,899,747	14.48%	(35,721)	188,000			
OF OWNERSHIP IN	30.00%	8,548,859	9.88%	20.07%	968,599	2,851,493	12.53%	(54,756)	188,000			
SYNDICATION	40.00%	8,548,859	9.88%	20.07%	968,599	3,803,239	10.49%	(73,791)	188,000			
	50.00%	8,548,859	9.88%	20.07%	968,599	4,754,984	8.29%	(92,825)	188,000			



CHARLESBATE HOTEL - 535 BEACON STREET  
DEVELOPMENT BUDGET

PRJ. DATE: 01-Jan-80  
OPEN. DATE: 01-Jul-87

DESCRIPTION	AMOUNT	% subtotal	% total cost
<b>PURCHASE PRICE</b>	10,667,500		36.97%
Land as a percent of purchase =	15.00%	1,600,125	5.55%
Building	9,067,375		31.42%
Land Purchase for Parking	750,000		
<b>CONSTRUCTION</b>			
Renovation Costs	5,647,500		
Expansion Costs	942,500		
Parking Structure	825,000		
Construction Contract	7,415,000	91.98%	
Elevators	270,000	3.35%	
Contingency Items at 2.00%	148,300	1.84%	
Temporary Heat	15,000	0.19%	
Per Diem Extension	68,000	0.84%	
Exterior Building Signs	35,000	0.43%	
Owner Interior Finishes	60,000	0.74%	
Building Permit/Taxes/Fees	40,000	0.50%	
Utility Relocation	10,000	0.12%	
<b>TOTAL</b>	<b>\$8,061,300</b>	<b>100.00%</b>	<b>27.94%</b>
<b>ARCHITECT AND ENGINEERING</b>			
Architects Fee at 6.00%	483,678	75.14%	
Soil Tests & Eng.	50,000	7.77%	
Surveys	10,000	1.55%	
Interior Design	100,000	15.54%	
<b>TOTAL</b>	<b>\$643,678</b>	<b>100.00%</b>	<b>2.23%</b>
<b>FURNITURE/FIXTURES/EQUIPMENT</b>			
Guest Room Furn./Fix./Carpet	805,048	23.50%	
Pub. Area FF&C/Plants/Art/Lighting	911,246	26.60%	
Drapes and Installation	58,237	1.70%	
Furniture Installation	68,515	2.00%	
Carpet Installation	65,089	1.90%	
Kitchen Design	27,406	0.80%	
Kitchen Fire Control	6,851	0.20%	
Kitchen Equip. and Installation	537,840	15.70%	
Sound System and Communication	47,960	1.40%	
Auto. Bar	30,832	0.90%	
Laundry Equipment	106,198	3.10%	
Cash Registers	116,475	3.40%	
Office F&E, Lockers (85,000)	126,752	3.70%	
Linens, Blks, Bedspds, Uniforms	188,415	5.50%	
SSU Equip. & Supplies	322,019	9.40%	
<b>TOTAL-As a percent of bldg &amp; const.</b>	<b>20.00%</b>	<b>\$3,425,735</b>	<b>100.00%</b>

DESCRIPTION	AMOUNT	% subtotal	% total cost
<b>ADMINISTRATIVE &amp; PRE-OPENING</b>			
Rooms	57,295	4.46%	
Food & Beverage	226,998	17.67%	
Administration & General	187,687	14.61%	
Sales	223,529	17.40%	
Other Depts.	45,348	3.53%	
Advertising	286,862	22.33%	
Brand Opening	124,740	9.71%	
Task Force	62,306	4.85%	
Travel	37,383	2.91%	
Contingency	19,398	1.51%	
<b>TOTAL-As a percent of bldg &amp; const.</b>	<b>7.50%</b>	<b>\$1,284,651</b>	<b>100.00%</b>
<b>FRANCHISE/LEGAL/ACCTG./MISC.</b>			
Franchise Fee	30,000	3.74%	
Appraisals & Feasibility	25,000	3.11%	
Title Insurance	40,000	4.98%	
Project Insurance	18,000	2.24%	
Legal & Accounting	590,000	73.47%	
Development Overhead	100,000	12.45%	
<b>TOTAL-As a percent of bldg &amp; const.</b>	<b>4.69%</b>	<b>\$803,000</b>	<b>100.00%</b>
<b>FINANCING COSTS</b>			
Interest on Construction Financing	1,545,600	69.70%	
total const. loan of 22,400,000			
financed in const. for 12 months			
with an avg. balance of 60.00%			
at an interest rate of 11.50%			
Construction loan commitment fee at 1.00%	224,000	10.10%	
Permanent loan commitment fee at 1.00%	224,000	10.10%	
Mortgage broker fee at 1.00%	224,000	10.10%	
<b>TOTAL</b>	<b>\$2,217,600</b>	<b>100.00%</b>	<b>7.68%</b>
<b>RESERVES</b>			
Working Capital	600,000		
Contingency as a percent of const. 5.00%	403,065		
<b>TOTAL</b>	<b>\$1,003,065</b>		<b>3.48%</b>
<b>TOTAL PROJECT COSTS</b>	<b>\$28,856,529</b>		<b>100.00%</b>

CHARLESGATE HOTEL - 535 BEACON STREET  
INVESTMENT ANALYSIS

PROJECTION DATE: 01-Jan-80  
EXP. OPENING DATE: 01-May-85

DESCRIPTION	<-----HARD COSTS----->		<-----SOFT COSTS----->		OTHER COSTS	#-YEARS	10.00% ITC ITEMS	25.00% ITC ITEMS
	18-YEAR	5-YEAR	18-YEAR	5-YEAR				
LAND					2,350,125	0		
WORKING CAPITAL					600,000	0		
TOTAL NON-AMORTIZABLE COSTS	0	0	0	0	2,950,125		0	
ADMINISTRATIVE & PRE-OPENING					1,284,651			
FRANCHISE FEE					30,000	20		
FINANCING COSTS								
Construction loan commitment fee at			224,000			1		
Permanent loan commitment fee at			224,000			1		
Mortgage broker fee at			224,000			1		
TOTAL AMORTIZABLE COSTS	0	0	672,000	1,284,651	30,000		0	
ORIGINAL BUILDING COST	9,067,375							
CONSTRUCTION								
Construction Contract	7,415,000						7,415,000	
Elevators		270,000					320,700	
Contingency Items	148,300						148,300	
Temporary Heat	15,000						15,000	
Per Diem Extension	68,000						68,000	
Exterior Building Signs	35,000						35,000	
Owner Interior Finishes	60,000						60,000	
Building Permit/Taxes/Fees	40,000						40,000	
Utility Relocation	10,000						10,000	
ARCHITECT AND ENGINEERING	643,678						643,678	
FURNITURE/FIXTURES/EQUIPMENT		3,425,735					3,425,735	0
LEGAL/ACCTG./MISC. (1)			638,233	134,767			638,233	
FINANCING COSTS							0	
Construction Interest @			1,545,600				1,545,600	
CONTINGENCY			403,065				403,065	
ITC REDUCTION TO BASIS	0						3,746,435	11,021,876
TOTAL DEPRECIABLE COSTS	17,502,353	3,695,735	2,586,898	134,767	0			

(1) ADJUSTMENT OF LEGAL/ACCTG./MISC. COSTS:  
Total Legal/Acctg./Misc. costs are allocated to 18-year and 5-year in the same ratio as Hard Costs.

(2) ADDITIONAL LEASED EQPT.:  
(Pass-through of ITC and 5-year depreciation)

EQUIPMENT LEASE

	Value	Annual Payments	Lease Term
Phone System	235,000	67,300	5 (Purchase Option @ #1)
TV's/Music/P.A.		26,000	7 (Purchase Option @ #1)
Computer system	134,000		
Paging system	20,000	38,000	5 (Purchase Option @ 10% of cost)
Meta System	18,000		
TOTAL EQUIPMENT	407,000	131,300	

ITC CALCULATION

Total ITC Items	3,746,435	11,021,876
TOTAL ITC AT 10.00%	4,153,435	
TOTAL ITC AT 25.00%		11,021,876
CREDIT	415,344	2,755,469
TOTAL ITC CREDIT		3,170,812

CHARLESGATE HOTEL - 535 BEACON STREET  
DEPRECIATION AND AMORTIZATION TABLES

DEPRECIATION INFORMATION:

	1987	1988
Percentage of Year in Service		
*Soft* opening on: 01-Jul-87	0.50	1.00

DEPRECIATION PERIODS:

HARD AND SOFT COSTS	
Building	18 years
Equipment, Misc.	5 years

DEPRECIATION ALLOCATION:

18 Year Hard and Soft	10,044,625	20,089,251
5 Year Hard and Soft	2,110,751	4,237,502
TOTAL DEPRECIABLE BASE	24,326,753	

DEPRECIATION TABLES:

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
18-Year Hard and Soft	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556	0.0556
5-Year Hard and Soft	0.15	0.22	0.21	0.21	0.21										

DEPRECIATION EXPENSE:

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
18-Year Hard and Soft	558,035	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	
5-Year Hard and Soft	635,625	932,250	889,875	889,875	889,875											
TOTAL DEPRECIATION EXPENSE	1,193,660	2,048,320	2,005,945	2,005,945	2,005,945	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	3,348,208

DEPRECIATION OF REPLACEMENT RESERVES

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
Expenditures	0	0	500,000			1,000,000			1,500,000			2,000,000			2,500,000	
5-Year Depreciation Schedule	0.15	0.22	0.21	0.21	0.21											
1987 500,000			75,000	110,000	105,000	105,000	105,000									
1990 1,000,000						150,000	220,000	210,000	210,000	210,000						
1993 1,500,000									225,000	330,000	315,000	315,000	315,000			
1996 2,000,000											300,000	440,000	420,000	420,000	420,000	
1999 2,500,000														375,000	2,125,000	
TOTAL DEPRECIATION EXPENSE	0	0	75,000	110,000	105,000	255,000	325,000	210,000	435,000	540,000	315,000	615,000	755,000	420,000	795,000	5,893,208

AMORTIZATION EXPENSE:

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
ADMINISTRATIVE & PRE-OPENING	128,465	256,930	256,930	256,930	256,930	128,465										
FRANCHISE FEE	750	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	8,250
FINANCING COSTS																
Const. loan commitment fee	6,222	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444
Permanent loan commitment fee	6,222	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444
Broker Fee	6,222	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444	12,444
TOTAL AMORTIZATION EXPENSE	147,882	295,763	295,763	295,763	295,763	167,298	38,833	38,833	38,833	38,833	38,833	38,833	38,833	38,833	38,833	45,583



CHARLESGATE HOTEL - 535 BEACON STREET															
STATEMENT OF PROJECTED CASH FLOW BEFORE INCOME TAXES															
PROJ. DATE: 01-Jan-80	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
ROOMS	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190
OCCUPANCY RATE	70%	73%	76%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
AVERAGE RATE	\$105.00	\$111.30	\$117.98	\$125.06	\$132.56	\$140.51	\$148.94	\$157.88	\$167.35	\$177.40	\$188.04	\$199.32	\$211.28	\$223.96	\$237.39
GUEST ROOM REVENUE	2,548,613	5,634,618	6,218,148	6,938,145	7,354,433	7,795,699	8,263,441	8,759,248	9,284,803	9,841,891	10,432,404	11,058,348	11,721,849	12,425,160	13,170,670
TOTAL REVENUE	4,098,876	9,062,029	10,000,508	11,158,461	11,827,989	12,537,647	13,289,906	14,087,301	14,932,539	15,828,491	16,778,200	17,784,892	18,851,986	19,983,105	21,182,091
INCOME BEFORE FIXED CHARGES	1,202,408	2,810,771	3,246,651	3,709,143	3,931,692	4,167,593	4,417,649	4,682,708	4,963,670	5,261,490	5,577,180	5,911,810	6,266,519	6,642,510	7,041,061
FIXED CHARGES AND RESERVES															
Insurance	30,000	63,600	67,416	71,461	75,749	80,294	85,111	90,218	95,631	101,369	107,451	113,898	120,732	127,976	135,654
Real Estate Taxes	50,000	100,000	250,000	265,000	280,900	297,754	315,619	334,556	354,630	375,908	398,462	422,370	447,712	474,575	503,049
FF&E Reserve	20,494	158,586	300,015	334,754	354,839	376,129	398,697	422,619	447,976	474,855	503,346	533,547	565,560	599,493	635,463
NET OPERATING INCOME	1,101,914	2,488,586	2,629,220	3,037,928	3,220,204	3,413,416	3,618,221	3,835,314	4,065,433	4,309,359	4,567,921	4,841,996	5,132,516	5,440,467	5,766,895
DEBT SERVICE:															
First Mortgage	1,101,914	2,488,586	2,629,220	2,688,000	2,688,000	2,855,613	2,855,613	2,855,613	2,855,613	2,855,613	2,855,613	2,855,613	2,855,613	2,855,613	2,855,613
Second Mortgage Financing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH FLOW SUBTOTAL	0	0	0	349,928	532,204	557,803	762,608	979,702	1,209,821	1,453,747	1,712,308	1,986,383	2,276,903	2,584,854	2,911,282
INCENTIVE MANAGEMENT FEE 20.00%	0	0	0	89,986	106,441	111,561	152,522	195,940	241,964	290,749	342,462	397,277	455,381	516,971	582,256
CASH FLOW BEFORE TAXES	0	0	0	279,943	425,763	446,243	610,087	783,761	967,856	1,162,997	1,369,847	1,589,107	1,821,523	2,067,883	2,329,026
INCENT. FEE/CASH FLOW	0%	0%	0%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
CHARLESGATE HOTEL - 535 BEACON STREET															
PROJECTION OF TAXABLE INCOME AND LOSSES															
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
INCOME BEFORE DEBT SERVICE AND RESERVES	1,122,408	2,647,171	2,929,235	3,372,682	3,575,043	3,789,546	4,016,918	4,257,933	4,513,409	4,784,214	5,071,267	5,375,543	5,698,075	6,039,960	6,402,357
EXPENSES:															
Interest on First Mortgage	1,344,000	2,717,050	2,744,466	2,758,296	2,766,731	2,776,179	2,766,647	2,755,971	2,744,014	2,730,622	2,715,623	2,698,825	2,680,010	2,658,938	2,635,337
Interest on Second Mortgage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incentive Management Fee	0	0	0	89,986	106,441	111,561	152,522	195,940	241,964	290,749	342,462	397,277	455,381	516,971	582,256
Depreciation - Base Bldg.	1,193,660	2,048,320	2,005,945	2,005,945	2,005,945	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069	1,116,069
Depreciation - Reserves	0	0	75,000	110,000	105,000	255,000	325,000	210,000	435,000	540,000	315,000	615,000	755,000	420,000	795,000
Amortization	147,882	295,763	295,763	295,763	295,763	167,298	38,833	38,833	38,833	38,833	38,833	38,833	38,833	38,833	38,833
TOTAL EXPENSES	2,685,542	5,061,134	5,121,175	5,239,990	5,279,880	4,426,108	4,399,071	4,316,814	4,575,881	4,716,274	4,527,988	4,866,004	5,045,294	4,750,811	5,167,496
TAXABLE INCOME - LOSS	(1,563,134)	(2,413,963)	(2,191,940)	(1,867,308)	(1,704,837)	(636,562)	(382,153)	(58,881)	(62,472)	67,940	543,279	509,539	652,782	1,289,148	1,234,861

CHARLESGATE HOTEL - 535 BEACON STREET  
 SALE ANALYSIS YEAR 15

SALE OPTION 1 - Capitalization Rate		9.00%
NET OPERATING INCOME FOR	1999	5,766,895
Capitalization Rate at		9.00%
-----		
SALE PRICE		64,076,608
LESS:		
SELLING COSTS AT	2.00%	1,281,532
FIRST MORTGAGE BALANCE		21,961,140
SECOND MORTGAGE BALANCE		0
-----		
NET PROCEEDS BEFORE TAXES		40,833,936
CAPITAL GAINS TAX		10,901,232
-----		
NET PROCEEDS FROM SALE (MPFS)		29,932,704
-----		
SALE PRICE		64,076,608
LESS:		
SELLING COSTS AT	2.00%	1,281,532
LAND		2,350,125
DEPRECIABLE BASIS		5,893,208
UNAMORTIZED COSTS		45,583
-----		
LONG TERM GAIN FROM SALE		54,506,159
CAPITAL GAINS TAX AT	20.00%	10,901,232

SALE OPTION 2 - \$1 Over Liabilities		
SALE PRICE		22,400,363
LESS:		
SELLING COSTS AT	2.00%	439,223
FIRST MORTGAGE BALANCE		21,961,140
SECOND MORTGAGE BALANCE		0
-----		
NET PROCEEDS BEFORE TAXES		1
CAPITAL GAINS TAX		2,732,688
-----		
NET PROCEEDS FROM SALE (MPFS)		(2,732,687)
-----		
SALE PRICE		22,400,363
LESS:		
SELLING COSTS AT	2.00%	448,007
LAND		2,350,125
DEPRECIABLE BASIS		5,893,208
UNAMORTIZED COSTS		45,583
-----		
LONG TERM GAIN FROM SALE		13,663,439
CAPITAL GAINS TAX AT	20.00%	2,732,688
-----		
LONG TERM GAIN FROM SALE		ERR
CAPITAL GAINS TAX AT	20.00%	ERR

SALE OPTION 3 - Sale at Original Purchase Price		
SALE PRICE		41,200,000
LESS:		
SELLING COSTS AT	2.00%	824,000
FIRST MORTGAGE BALANCE		21,961,140
SECOND MORTGAGE BALANCE		0
-----		
NET PROCEEDS BEFORE TAXES		18,414,860
CAPITAL GAINS TAX		6,417,417
-----		
NET PROCEEDS FROM SALE (MPFS)		11,997,444
-----		
SALE PRICE		41,200,000
LESS:		
SELLING COSTS AT	2.00%	824,000
LAND		2,350,125
DEPRECIABLE BASIS		5,893,208
UNAMORTIZED COSTS		45,583
-----		
LONG TERM GAIN FROM SALE		32,087,083
CAPITAL GAINS TAX AT	20.00%	6,417,417

CHARLESGATE HOTEL - 535 BEACON STREET  
 SYNDICATION ANALYSIS - PROJECTION OF PARTNERSHIP CONTRIBUTIONS AND BENEFITS

TOTAL PROJECT COSTS		28,856,529		GENERAL PARTNER DISTRIBUTION:					INVESTOR/LIMITED PARTNER DISTRIBUTION					DESCRIPTION OF INVESTOR UNITS				
LESS: First Mortgage		(22,400,000)																
CASH REQUIRED		6,456,529		Profits 25.00%					Profits 75.00%					Number of Units (NU) 50				
Syndication Costs at 10.00%		645,653		Losses 25.00%					Losses 75.00%					Unit Cost 142,000				
				ITC 25.00%					ITC 75.00%									
MINIMUM EQUITY CONTRIBUTION		7,102,181		Sale/Refinancing 25.00%					Sale/Refinancing 75.00%									
TOTAL CAPITAL CONTRIBUTION (TCC)		7,100,000		Tax Bracket 50.00%					Tax Bracket 50.00%									
<b>PROJECT BENEFITS SUMMARY</b>		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
CASH FLOW BEFORE TAXES (6,456,529)		0	0	0	279,943	425,763	446,243	610,087	783,761	967,056	1,162,997	1,369,047	1,589,107	1,821,523	2,067,883	32,261,730		
TOTAL TAX SAVINGS (PAYABLE)		781,567	1,206,981	1,095,970	933,654	852,419	318,281	191,077	29,440	31,236	(33,970)	(271,639)	(254,769)	(326,391)	(644,574)	(617,431)		
TOTAL INVESTMENT TAX CREDIT		3,170,812																
SALE/REFINANCING PROCEEDS																29,932,704		
Cap rate @ 9.00%																		
TOTAL BENEFITS (6,456,529)		3,952,379	1,206,981	1,095,970	1,213,596	1,278,182	764,524	801,163	813,202	999,092	1,129,027	1,098,207	1,334,337	1,495,132	1,423,309	31,644,299		
AFTER TAX RETURNS		NPV AT 18.00%	4,121,362	IRR 29.75%	BEFORE TAX RETURNS					NPV AT 12.00%	3,041,398	IRR 15.41%						
<b>GENERAL PARTNER BENEFITS</b>		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
CASH FLOW BEFORE TAXES (2,181)		0	0	0	89,986	106,441	111,561	152,522	195,940	241,964	290,749	342,462	397,277	455,381	516,971	8,065,433		
TAX SAVINGS (PAYABLE)		195,392	301,745	273,992	233,413	213,105	79,570	47,769	7,360	7,809	(8,492)	(67,910)	(63,692)	(81,598)	(161,144)	(154,358)		
INVESTMENT TAX CREDIT		792,703																
SALE/REFINANCING PROCEEDS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,483,176		
TOTAL BENEFITS (2,181)		988,095	301,745	273,992	303,399	319,545	191,131	200,291	203,300	249,773	282,257	274,552	333,584	373,783	355,827	7,911,075		
AFTER TAX RETURNS		NPV AT 18.00%	2,642,291	BEFORE TAX RETURNS	NPV AT 12.00%	2,372,300												
<b>TOTAL INVESTOR BENEFITS</b>		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
CASH FLOW BEFORE TAXES (7,100,000)		0	0	0	209,957	319,322	334,682	457,565	587,021	725,092	872,248	1,027,385	1,191,030	1,366,142	1,550,912	24,196,298		
TAX SAVINGS (PAYABLE)		586,175	905,236	821,977	700,240	639,314	238,711	143,307	22,080	23,427	(25,477)	(203,730)	(191,077)	(244,793)	(483,431)	(463,073)		
INVESTMENT TAX CREDIT		2,378,109																
SALE/REFINANCING PROCEEDS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,449,528		
TOTAL BENEFITS (7,100,000)		2,964,285	905,236	821,977	910,197	958,636	573,393	600,873	609,901	749,319	846,771	823,655	1,000,753	1,121,349	1,067,482	23,733,224		
AFTER TAX RETURNS		NPV AT 18.00%	833,418	IRR 20.09%	BEFORE TAX RETURNS					NPV AT 12.00%	23,445	IRR 12.03%						
<b>INDIVIDUAL UNIT BENEFITS</b>		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
CASH FLOW BEFORE TAXES		0	0	0	4,199	6,386	6,694	9,151	11,756	14,518	17,445	20,548	23,837	27,323	31,018	483,926		
TAX SAVINGS (PAYABLE)		11,724	18,105	16,440	14,005	12,786	4,774	2,866	442	469	(510)	(4,075)	(3,822)	(4,896)	(9,669)	(9,261)		
INVESTMENT TAX CREDIT		47,562	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SALE/REFINANCING PROCEEDS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	448,991		
TOTAL BENEFITS (142,000)		59,286	18,105	16,440	18,204	19,173	11,468	12,017	12,198	14,986	16,935	16,473	20,015	22,427	21,350	923,655		

CHARLESGATE HOTEL - 535 BEACON STREET  
 CONDOMINIUM HOTEL CONVERSION ANALYSIS

TOTAL PROJECT COST	28,856,529	CONDOMINIUM HOTEL PRICING PER UNIT					CONDOMINIUM FINANCING					DEPRECIATION ASSUMPTIONS					
		PROFIT ON GROSS SALES	15.00%	ESTABLISHED GROSS PRICE	41,200,000	PERCENT OF PURCHASE PRICE FINANCED	90.00%	TOTAL FINANCED PER UNIT	195,158	INTEREST RATE (Interest only yr 1-5)	12.00%	TERM	30	LAND % OF PRICE	15.00%	FF&E % OF PRICE	15.00%
SELLING COSTS	10.00%	TOTAL NUMBER OF UNITS	190											percent	total	term	
ORGANIZATION EXPENSES	5.00%											15.00%	32,526	5			
TOTAL SALE PRICE	41,223,612	SALE PRICE PER UNIT (UP)	216,842											70.00%	151,789	18	
AMORTIZATION PERIOD	0.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
TOTAL INCOME BEFORE DEBT SERVICE AND DEPRECIATION	1,101,914	2,488,586	2,629,220	2,967,943	3,113,763	3,301,855	3,465,699	3,639,374	3,823,469	4,018,610	4,225,459	4,444,719	4,677,135	4,923,496	5,184,638		
INVESTMENT TAX CREDIT	3,170,812																
INCOME PER HOTEL UNIT	5,800	13,098	13,838	15,621	16,388	17,378	18,241	19,155	20,124	21,151	22,239	23,393	24,617	25,913	27,288		
PRINCIPAL AND INTEREST	11,709	23,419	23,419	23,419	23,419	24,089	24,089	24,089	24,089	24,089	24,089	24,089	24,089	24,089	24,089		
CASH FLOW BEFORE TAX	(21,684)	(5,916)	(10,321)	(9,581)	(7,798)	(7,031)	(6,711)	(5,849)	(4,934)	(3,966)	(2,938)	(1,850)	(696)	527	1,824	63,723	
PRINCIPAL REDUCTION	0	0	0	0	0	708	798	899	1,013	1,142	1,287	1,450	1,634	1,841	2,074		
INTEREST	11,709	23,419	23,419	23,419	23,419	23,381	23,291	23,190	23,076	22,947	22,802	22,639	22,455	22,248	22,015		
DEPRECIATION																	
Furniture Fixtures & Equipment	3,253	6,505	6,505	6,505	6,505	3,253											
Building	4,216	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433		
TAXABLE INCOME (LOSS)	(13,379)	(25,259)	(24,519)	(22,736)	(21,969)	(17,688)	(13,483)	(12,468)	(11,385)	(10,229)	(8,996)	(7,679)	(6,272)	(4,768)	(3,160)		
INVESTMENT TAX CREDIT	16,688																
TAX BENEFITS AT	50.00%	23,378	12,630	12,259	11,368	10,984	8,844	6,742	6,234	5,692	5,115	4,498	3,839	3,136	2,384	1,580	
CASH FLOW AFTER TAX	(21,684)	17,468	2,308	2,679	3,570	3,954	2,133	893	1,300	1,727	2,176	2,648	3,144	3,663	4,208	4,779	
SALE PROCEEDS																60,524	
TOTAL BENEFITS	(21,684)	17,468	2,308	2,679	3,570	3,954	2,133	893	1,300	1,727	2,176	2,648	3,144	3,663	4,208	65,302	
AFTER TAX IRR	29.02%	BEFORE TAX IRR					-2.69%										
NET PRESENT VALUE AT	18.00%	9,353	NET PRESENT VALUE AT					0.00%	(23,194)								
SALE PRICE - Cap. at	9.00%	303,195	SALE PRICE					303,195									
LESS: Selling Commission	5.00%	15,160	Selling Commission					15,160									
First Mortgage Balance		182,313	Land					32,526									
			Basis					29,515									
NET PROCEEDS BEFORE TAX		105,723	Long Term Gain					225,995									
CAPITAL GAINS TAX	20.00%	45,199	Capital Gains Tax					45,199									
NET PROCEEDS FROM SALE		60,524															



CHARLESGATE HOTEL - 535 BEACON STREET  
 CONDOMINIUM HOTEL CONVERSION ANALYSIS

TOTAL PROJECT COST	20,856,529	CONDOMINIUM HOTEL PRICING PER UNIT					CONDOMINIUM FINANCING					DEPRECIATION ASSUMPTIONS				
		PROFIT ON GROSS SALES	15.00%	ESTABLISHED GROSS PRICE	41,200,000	PERCENT OF PURCHASE PRICE FINANCED	80.16%	TOTAL FINANCED PER UNIT	173,815	LAND % OF PRICE	15.00%	FF&E % OF PRICE	15.00%	BUILDINGS	70.00%	
SELLING COSTS	10.00%	TOTAL NUMBER OF UNITS	190	INTEREST RATE (Interest only yr 1-5)	12.00%	TERM	30	percent	total	term						
ORGANIZATION EXPENSES	5.00%	SALE PRICE PER UNIT (UP)	216,842													
TOTAL SALE PRICE	41,223,612															
AMORTIZATION PERIOD	0.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
TOTAL INCOME BEFORE DEBT SERVICE AND DEPRECIATION	1,101,914	2,488,586	2,629,220	2,967,943	3,113,763	3,301,855	3,465,699	3,639,374	3,823,469	4,018,610	4,225,459	4,444,719	4,677,135	4,923,496	5,184,638	
INVESTMENT TAX CREDIT	3,170,812															
INCOME PER HOTEL UNIT	5,800	13,098	13,838	15,621	16,388	17,378	18,241	19,155	20,124	21,151	22,239	23,393	24,617	25,913	27,288	
MORTGAGE AMOUNT	191,417	184,277	181,149	178,272	174,025	173,815	173,815	173,815	173,815	173,815	173,815	173,815	173,815	173,815	173,815	
PRINCIPAL AND INTEREST	11,485	22,113	21,738	21,393	20,883	21,455	21,455	21,455	21,455	21,455	21,455	21,455	21,455	21,455	21,455	
CASH FLOW BEFORE TAX	(5,685)	(9,015)	(7,900)	(5,772)	(4,495)	(4,076)	(3,214)	(2,300)	(1,331)	(304)	785	1,939	3,162	4,459	5,833	
CAPITAL CONT./SALE PROCEEDS	(25,425)	(12,826)	(12,143)	(10,777)	(10,018)	(4,705)	0	0	0	0	0	0	0	0	80,462	
NET BEFORE TAX CASH FLOW	(31,110)	(21,842)	(20,043)	(16,549)	(14,513)	(8,782)	(3,214)	(2,300)	(1,331)	(304)	785	1,939	3,162	4,459	86,295	
PRINCIPAL REDUCTION	0	0	0	0	0	631	711	801	902	1,017	1,146	1,291	1,455	1,639	1,847	
INTEREST DEPRECIATION	11,485	22,113	21,738	21,393	20,883	20,824	20,744	20,654	20,552	20,438	20,309	20,163	20,000	19,815	19,607	
Furniture Fixtures & Equipment	3,253	6,505	6,505	6,505	6,505	3,253										
Building	4,216	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	8,433	
TAXABLE INCOME (LOSS)	(13,155)	(23,953)	(22,838)	(20,710)	(19,433)	(15,131)	(10,936)	(9,932)	(8,861)	(7,720)	(6,502)	(5,203)	(3,816)	(2,335)	(752)	
INVESTMENT TAX CREDIT	16,688															
TAX BENEFITS AT 50.00%	23,266	11,977	11,419	10,355	9,716	7,566	5,468	4,966	4,431	3,860	3,251	2,601	1,908	1,167	376	
CASH FLOW BEFORE TAX (after capital contribution)	(0)	(0)	(0)	0	0	(4,076)	(3,214)	(2,300)	(1,331)	(304)	785	1,939	3,162	4,459	5,833	
CASH FLOW AFTER TAX	23,266	11,977	11,419	10,355	9,716	3,489	2,254	2,666	3,100	3,556	4,036	4,540	5,070	5,626	6,209	
SALE PROCEEDS															80,462	
CAPITAL CONTRIBUTIONS	25,425	12,826	12,143	10,777	10,018	4,705										
TOTAL BENEFITS	0	(2,159)	(850)	(724)	(422)	(302)	(1,216)	2,254	2,666	3,100	3,556	4,036	4,540	5,070	5,626	86,671
AFTER TAX IRR	32.70%															
NET PRESENT VALUE AT 18.00%	8,773															
BEFORE TAX IRR																
NET PRESENT VALUE AT 0.00%	(23,348)															
SALE PRICE - Cap. at 9.00%	303,195															
LESS: Selling Commission 5.00%	15,160															
First Mortgage Balance	162,374															
NET PROCEEDS BEFORE TAX	125,661															
CAPITAL GAINS TAX 20.00%	45,199															
NET PROCEEDS FROM SALE	80,462															