The appraisal of Pyare Square.

Landmark Research, Inc.
[s.l.]: [s.n.], [s.d.]

THE APPRAISAL OF

PYARE SQUARE

December 18, 1981

Dr. James Graaskamp
216 Breese Terrace
Madison, WI 53705

Dear Dr. Graaskamp:

I herewith submit the appraisal report that you requested on the property known as Pyare Square, 4610 University Avenue, Village of Shorewood Hills, County of Dane, Wisconsin.

When you authorized this work, you indicated that the value conclusion would serve as a benchmark for listing and negotiating the sale of the subject property. The enclosed report has concluded that the most probable selling price of Pyare Square on October 1, 1981, is

ONE MILLION THREE HUNDRED THOUSAND DOLLARS ($1,300,000).

This conclusion assumes that the buyer will execute an equity cash sale for the property as a condition for securing an industrial revenue bond (IRB) issue to fund 100% of the renovation cost at 12% interest over a 20-year term. Communications with Shorewood Village public officials indicate that an IRB is the most probable form of renovation financing available to the buyer. The probable transaction zone is $1,250,000 to $1,450,000, arrived at through market comparison and reconciliation of external factors on purchase price.

Three specific problem areas warrant your attention. The ability to secure an occupancy permit and then achieve the projected rents will be predicated on the buyer's skill in resolving these deficiencies. First, the HVAC system must be rehabilitated. The report details specific problems and associated cures that will be necessary for the structure to meet current energy codes. Second, extensive design and construction will be required to correct access, parking, and on-site traffic flow concerns from the perspective of both pedestrian safety and state handicap access requirements. Suggested measures include revising the layout, installing a 100-stall parking ramp at a cost of $400,000, and using access rights to Locust Drive and through the Department of Revenue lot to Segoe Road. Third, the marketing of the renovated structure will have to be carefully redirected in order to attract tenants that are able and willing to pay the projected Class A rents. An active preleasing program is advised.

As you will recall, no funds were provided for architectural, legal, or engineering analysis, and so the feasibility of the most probable use scenario must be regarded as only preliminary. Your attention is called to the assumptions, limiting conditions, and controls on use that are included in Section V of this report. You will also note that the current assessment of $900,000, based on a 50% equalization rate, will increase considerably after renovation and occupancy.

Dr. James Graaskamp
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I hope you find the details of this narrative appraisal relevant to your decisions; I would be happy to answer any questions you might have.

Sincerely,

Michael D. Arneson

Michael D. Arneson

MDA:gm
enclosure

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LIST OF EXHIBITS

DIGEST OF FACTS, ASSUMPTIONS, AND CONCLUSIONS

Property: A vacant fourteen-story structure known as Pyare Square at 4610 University Avenue, Shorewood Hills, Wisconsin.

Type of Estate: Fee simple, encumbered by building code restrictions and easements.

Present Owner: Pyare Square Company

Age of Building: Twelve years.

Village Description: Shorewood Hills, Dane County, Wisconsin; suburb of Madison, population 1837.

Neighborhood: Part of the unplatted portion of Section 17, Town of Madison.

Lot Size: 83,657.5 square feet (including utility easements), plus a 30' × 40' access easement to Locust Drive.

Improvements: Three roughly rectangular floors, each containing 9,370 square feet (gross), below an eleven-story cylindrical tower of 45' radius with 6,082 square feet (gross) on each floor. Total gorss floor area is 98,886 square feet, of which 84,969 square feet or 86% is leasable.

Legal Constraints: Zoning C-2; building and fire code violations (require occupancy permit).

Most Probable Use: Complete renovation into 3 floors of Class B office space below 11 floors of Class A office space.

Most Probable Buyer: A local developer-investor for income and appreciation over a five-year holding period.

Probable Terms of Sale: Equity cash purchase of property coupled with an industrial revenue bond at 12% interest over a 20-year term to cover 100% of renovation costs.

Market Transaction Inference: Comparable sales, ranked by weighted price per net rentable area, predicted a central tendency of $1,320,000 with a standard deviation of $160,000 which places a 68% confidence interval at $1,160,000-$1,480,000.

Most Probable Selling Price: As of October 1, 1981, the seller might obtain a price of $1,300,000 under the probable terms of sale. The modified transaction interval, after considering external influences on most probable selling price, ranges from $1,250,000 to $1,450,000.

Current Assessed Value:

Land	$243,000
Building	656,800
Total	$900,000

Total assessment will undoubtedly increase dramatically after renovation and occupancy. The current total assessment is based on a 50% equalization rate. Shorewood Hills taxes property at a rate of 37.5 mills.

I. PROBLEM ASSIGNMENT

The content and structure of an appraisal report are predicated on its role in the decision-making process. As a decision tool, the appraisal establishes a benchmark of value conditioned on limiting assumptions inherent in the property, data base, and other elements of the decision framework. This appraisal is made to assist the owner and his broker in the sale of the subject property in terms of both listing price and expectations regarding a negotiated sales price.

A. The Appraisal Issue

Fire-safety violations, chronic HVAC problems, design deficiencies, and neglect have effectively removed the subject property from the office rental market. In fact, the structure is so debilitated that it can be treated as an empty shell for the purposes of this appraisal. Determining the future use of an empty shell, especially a unique structure like Pyare Square, is a difficult task for the appraiser. Pyare Square has been vacant since the ten-year lease with the Wisconsin Department of Natural Resources (DNR), which occupied the entire building, expired on September 30, 1979. Consequently, the seller has a weak bargaining position and is subject to pressure to liquidate the property.

B. Legal Interest to Be Appraised

The subject property, 4610 University Avenue, consists of two rectangular parcels totaling slightly less than two acres according to the following legal description:

> Part of Section 17, Township 7 North, Range 9 East, Village of Shorewood Hills, Dane County, Wisconsin, to-wit:
>
> Commencing at the South 1/4 corner of Section 17; thence North 0° 25' 13" East, 32.83 feet; thence North 89° 49' 42" West, 382.63 feet to the point of beginning; thence North 89° 49' 42" West, 125.00 feet; thence North 0° 14' 10" West, 463,43 feet; thence along a curve whose radius is 17,138.55 feet and whose long chord bears North 80° 31' 20" East, 126.63 feet; thence South 0° 14' 10" East 484.66 feet to the point of beginning; and
>
> Commencing at the South one-quarter (S 1/4) Corner of said Section 17; thence North 00° 26' 10" East for a distance of 32.83 feet to the North right-of-way line of University Avenue; thence North 89° 49' 42" West along said right-of-way line for a distance of 392.63 feet to the Southeast Corner of the property of Pyare Square Company; thence North 00° 14' 10" West along the easterly line of aforementioned property a distance of 484.66 feet to a point on the southerly right-of-way line of the Chicago Milwaukee Saint Paul & Pacific Railroad and the point of beginning; thence easterly along

> said right-of-way by the arc of a circle curving to the right having a radius of 17,138.55 feet a distance of 355 feet more or less to a point which is 40 feet westerly of the north-south quarter line of said Section 17; thence South 00° 14' 10" East on a line parallel to and 40 feet from the aforementioned north-south quarter line; a distance of 65 feet more or less; thence westerly and parallel to and 65 feet from the aforesaid right-of-way line of Chicago Milwaukee Saint Paul & Pacific Railroad a distance of 355 feet more or less to a point on the East line of aforementioned property of Pyare Square Company; thence North 00° 14' 10" West a distance of 65 feet more or less to the point of beginning.

The fee is unencumbered by mortgages but is subject to a variety of codes and regulations and to a utility easement.

The subject will be appraised as a vacant shell. Existing carpets, bathroom and light fixtures, ceiling materials, curtain walls, and other built-in fixtures and personalty will not be considered in the sale price determination.

C. Value Definition

For the purpose of this appraisal the most appropriate definition of value is that of "most probable selling price," as defined by Richard U. Ratcliff:

> The most probable selling price is that selling price which is most likely to emerge from a transaction involving the subject property if it were exposed for sale in the current market for a reasonable time at terms of sale which are currently predominant for properties of the subject type.[1]

D. Implicit Assumptions

Professor James A. Graaskamp expands on the limitations of this value definition and on the methods of accommodating them in the prediction of most probable selling price:

> The Ratcliff definition recognizes that prediction of a future sales transaction price is a business forecast under uncertain conditions. It is therefore appropriate to state the value conclusions as a central tendency within a range of alternative price outcomes that reflect the imperfections of the real estate market and the negotiation postures of the buyer and seller. A range of sales prices is more useful to the decision-maker than the traditional point estimate of fair market value because it provides the necessary dimensions for establishing listing and bargaining strategy and anticipating probable buyer expectations and market-determined attitudes. The method requires the appraiser to determine the

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[1]R. U. Ratcliff, Valuation for Real Estate Decisions (Santa Cruz, CA: Democrat Press, 1972).

> most probable use of the property and the most probable buyer-investor for that type of property and then to infer a probable transaction price from recent transactions of similar properties. In the absence of market sales or as a test of value conclusions based on sales data, the appraiser may simulate the buyer calculus in making an offer to purchase.[1]

E. Application to the Subject Property

Although few office buildings have been sold at arm's length in the Hilldale area in the recent past, sales transactions in the Madison area have been characterized by some form of seller-financing, sepcially land contracts. The present owner, however, would prefer a cash sale if the price were acceptable.

The most probable use for the subject property will require complete renovation in conformance with the standards set forth in the State of Wisconsin building codes and with any special conditions imposed by the Village of Shorewood Hills. Dollar estimates provided by the appraiser in order to project the anticipated remodeling cost are based on preliminary cost-to-cure assumptions and must be recognized as a limitation on the reliability of the most probable price estimate.

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[1]James A. Graaskamp, SREA, CRE, The Appraisal of 25 N. Pinckney: A Demonstration Case for Contemporary Appraisal Methods (Madison, WI: Landmark Research, Inc., 1977), p. 24.

II. PROPERTY ANALYSIS TO DETERMINE ALTERNATIVE USES

An inventory of property attributes and an analysis of those that appear significant initiate the most probable use identification process. These attributes include physical characteristics of the site and improvements therein, legal constraints on the nature and timing of its use, the relationship (linkages) of the site to various environmental aspects that might attract or repel users, and the preestablished perceptions of the site that citizens tend to have (e.g., prestige or anxiety).

A. Physical Attributes

The subject site, located at 4610 University Avenue, is an L-shaped site comprised of two rectangular parcels. The first parcel fronts 125' on the north side of University Avenue and extends to depths of 463' and 485' along the west and east borders, respectively, to the Chicago, Milwaukee, Saint Paul and Pacific (CMSP&P) Railroad right-of-way. The second (Schmidt) parcel abuts the first at the northernmost section along 65' of the east boundary and runs parallel to the railroad right-of-way for 355' to the east. The total gross area is 83,657.5 square feet, 60,582.5 square feet from the first parcel and 23,075 square feet from the Schmidt parcel (Exhibit 1).

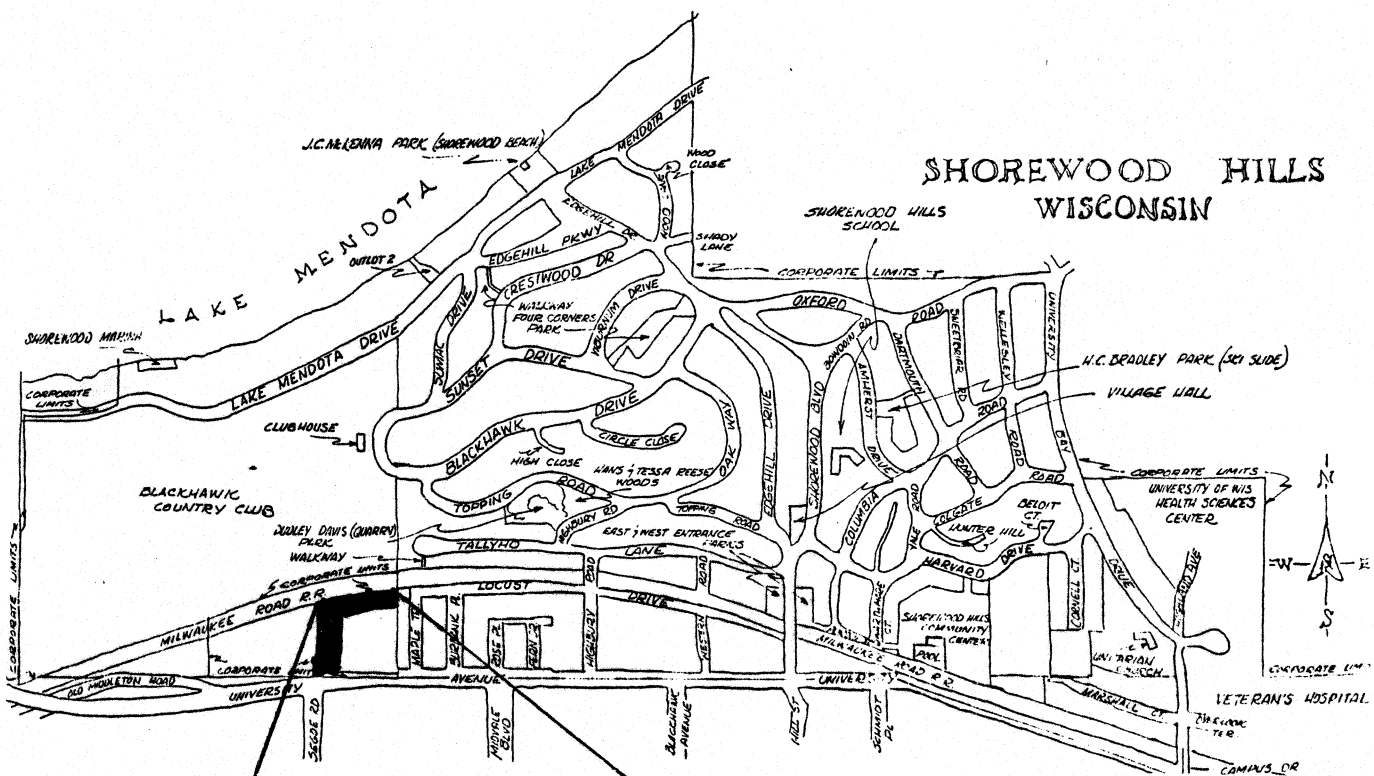
Several easements affect the site. When Pyare Square Company secured the Schmidt parcel on July 26, 1968, the contract included a 30' by 40' pedestrian and vehicular access easement that links the eastern boundary of the parcel to Locust Drive. Future use of this easement will be contingent on approval of traffic flow patterns. In addition, A. Schmidt et al., now called Westshore, retained the right to build and maintain sanitary and storm sewers through the parcel. Westshore assigned this right to Franchise Realty Corp., a subsidiary of McDonald's, on May 24, 1978. Finally, the Madison Metropolitan Sewerage District maintains an easement parallel to and about 50' south of the railroad tracks. These easements are indicated on Exhibit 2.

The site slopes steeply from south to north, dropping from 82' at University Avenue to 50' at the storm sewer drain. These elevations are given in reference to the Madison datum (0.00) that has been established at 845.6' above sea level. The topography constrains parking arrangements and creates potential drainage problems, especially because the entire site is covered by either the structure or asphalt parking surfaces. On the other hand, the topographic variety provides opportunities for innovative site planning. Slopes and slope aspects are indicated on Exhibit 2 as well.

The "Soil Survey Interpretations" (#335) of the Soil Conservation Service indicates that the surface soils are moderately well-drained. Soils are medium-textured silt loams underlain by sandy loams, sand, and gravel to a depth of 60". These soils are generally favorable for most development purposes. Depth to water table exceeds 5' and depth to bedrock is 5' to 10'. The soils have low corrosiveness to both concrete and uncoated steel. The absence of settling cracks in foundation-bearing walls suggests that soil conditions impose no structural limitations for the present structure.

EXHIBIT 1

AREA MAP



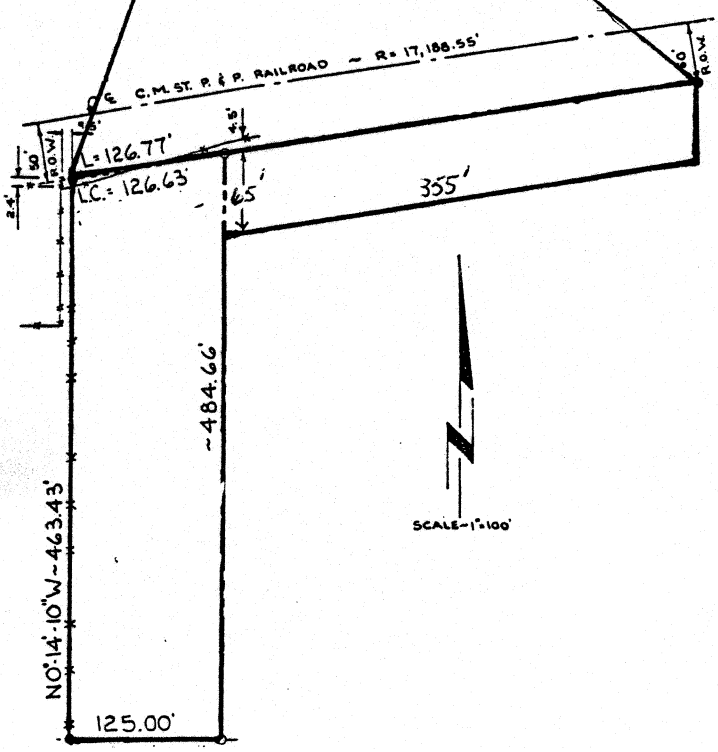
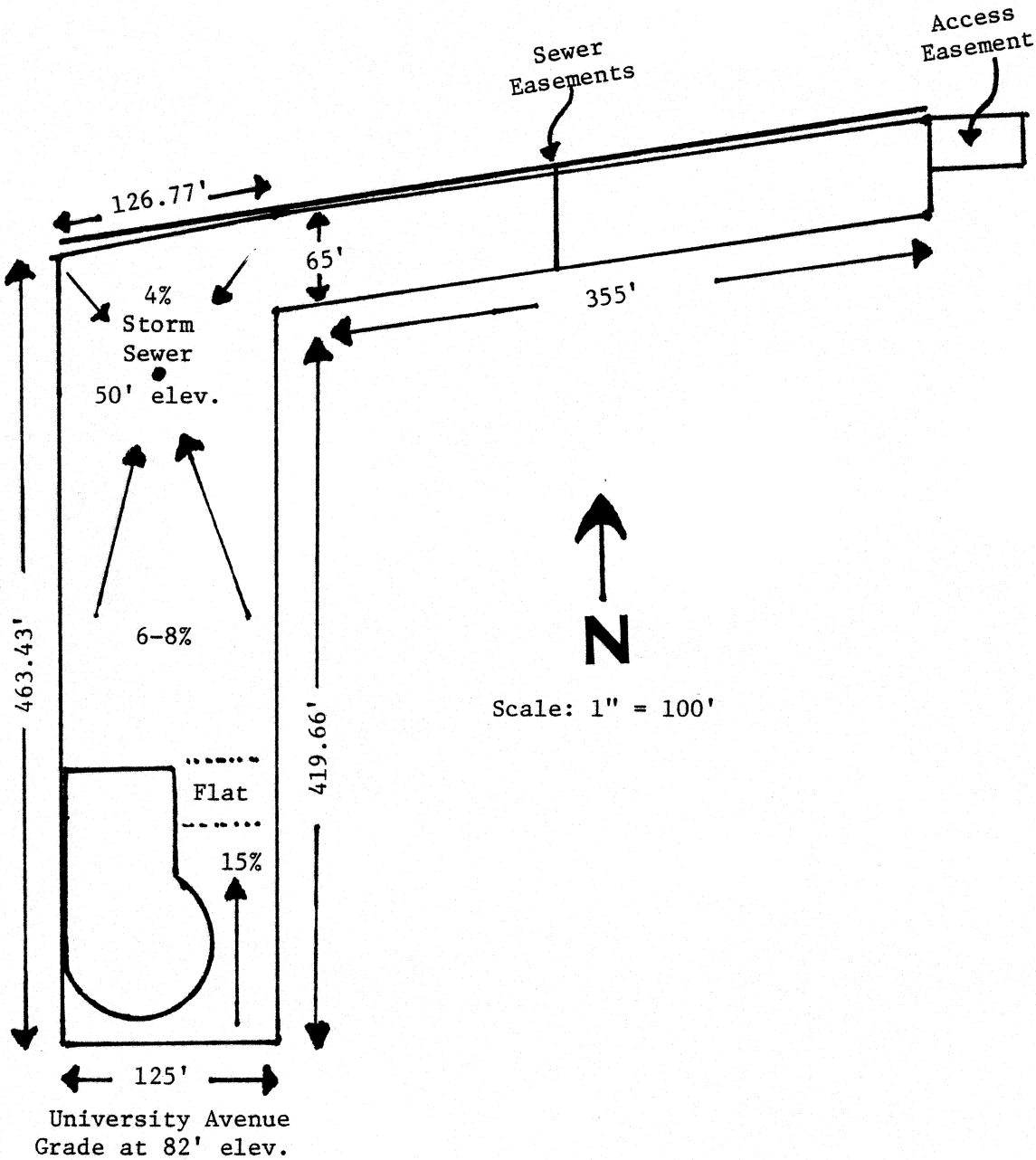


EXHIBIT 2

SITE MAP



B. Legal Constraints

1. Zoning

The Village of Shorewood Hills C-2 zoning governs use of the site and permits service, office, municipal, food service, and certain neighborhood retail sales uses on the site (Appendix A). According to Herbert Roth, president of Shorewood Hills Association, the basic goal of the commercial district zoning is to maintain a productive tax base within the context of the best interests of the public welfare. In addition, Roth noted that Shorewood Hills has no land use plan because the village is essentially fully developed. Land use planning statements are determined on a case-by-case basis using the zoning code as a guideline.

The broad general provisions of the zoning document are decptive if applied literally as mandates to the subject property. The village board of trustees is eager to return Pyare Square to a productive component of the tax base. The buyer might be able to negotiate modifications to the zoning code in order to clear the path for uses that are not premissible at the present time.

2. Political Constraints

The Village of Shorewood is governed by a seven-member board of trustees. One member acts as president. Trustees are elected at large every two years with half of the board turning over at every election such that three new trustees are brought in at one election and then three more trustees plus the president are chosen two years later. This body possesses primary authority over village political and development decisions. No neighborhood associations are active in Shorewood per se, but everyone in the village belongs to the Shorewood League (1,837 people live in Shorewood). General disorganization renders the league an ineffective political entity. Strong political forces periodically result, however, when adjacent residents band together to support or oppose some development proposal. Opposition can be anticipated from this source if noncommercial uses are proposed on the subject site.

C. Linkage Attributes

Linkage attributes are the ties of the subject property to networks of supporting infrastructure that improve convenience and access to activity centers that might interact with the subject property.

The site was originally composed of two parcels, each of which has access to sewer and water. A 15" water pipe and a 36" storm sewer, both running parallel to the railroad tracks, have sufficient capacity to meet any anticipated needs. A 12" water main and a 12" storm sewer run along University Avenue. In addition to sewer and water, two electric meters provide power for the generator and 1,000 ampere general service from University Avenue. Gas is provided by 6" steel pipes, accessed by a 1.5" extension.

The Hilldale area is readily accessible from all directions except the north. University Avenue serves as the major commuter artery linking the downtown to Middleton and the far west side. Midvale Boulevard, Segoe Road, and Whitney Way facilitate north-south traffic. Appendix B maps current traffic counts in the Hilldale area. Despite the subject's proximity to major thoroughfares, access to the site is marginal. Eastbound traffic cannot enter the site because the median, due to the nearby Segoe Road intersection, lacks a left-turn lane. The 35 MPH posted speed limit, the location at the crest of a hill, and the sharp turn into the sloping property create a safety concern if high traffic volume through the site is anticipated. Steep slopes in the parking lot could make it hazardous for users to reach the building during inclement weather. A loading dock is situated at the north end of the building to accommodate delivery trucks. Finally, a railroad borders the northern property line but is not a major attribute at the present time.

Pedestrian traffic is limited to local office workers, especially at lunchtime, and occasional shoppers. Most of these pedestrians work at the Department of Revenue building immediately west of the site and are en route to either McDonald's or Walnut Grove, the subject's neighbors to the east. The Blackhawk Country Club lies north across the railroad tracks. A variety of Class B office buildings and a community shopping center, Hilldale, are located across University Avenue, qualifying the area as a major retail/office node.

D. Dynamic Attributes

Dynamic attributes are mental or emotional responses that a site or project stimulate in the mind of the beholder and that influence his decision-making behavior. Pyare Square is visually prominent, being visible from great distances along University Avenue. The upper floors command superb views of Lake Mendota, Blackhawk Country Club, downtown, or Madison's west side, depending on the orientation of sightlines. Nevertheless, highly publicized structural and mechanical deficiencies have created a negative reputation that might be difficult to overcome. In addition, the approach zone and adjacent power plant condition negative images. Besides being virtually unreachable from the west, the site's location at a busy intersection compounds anxiety. Awkward parking arrangements, steep slopes, and the unappealing orientation and appearance of entrances reinforce the unfavorable image.

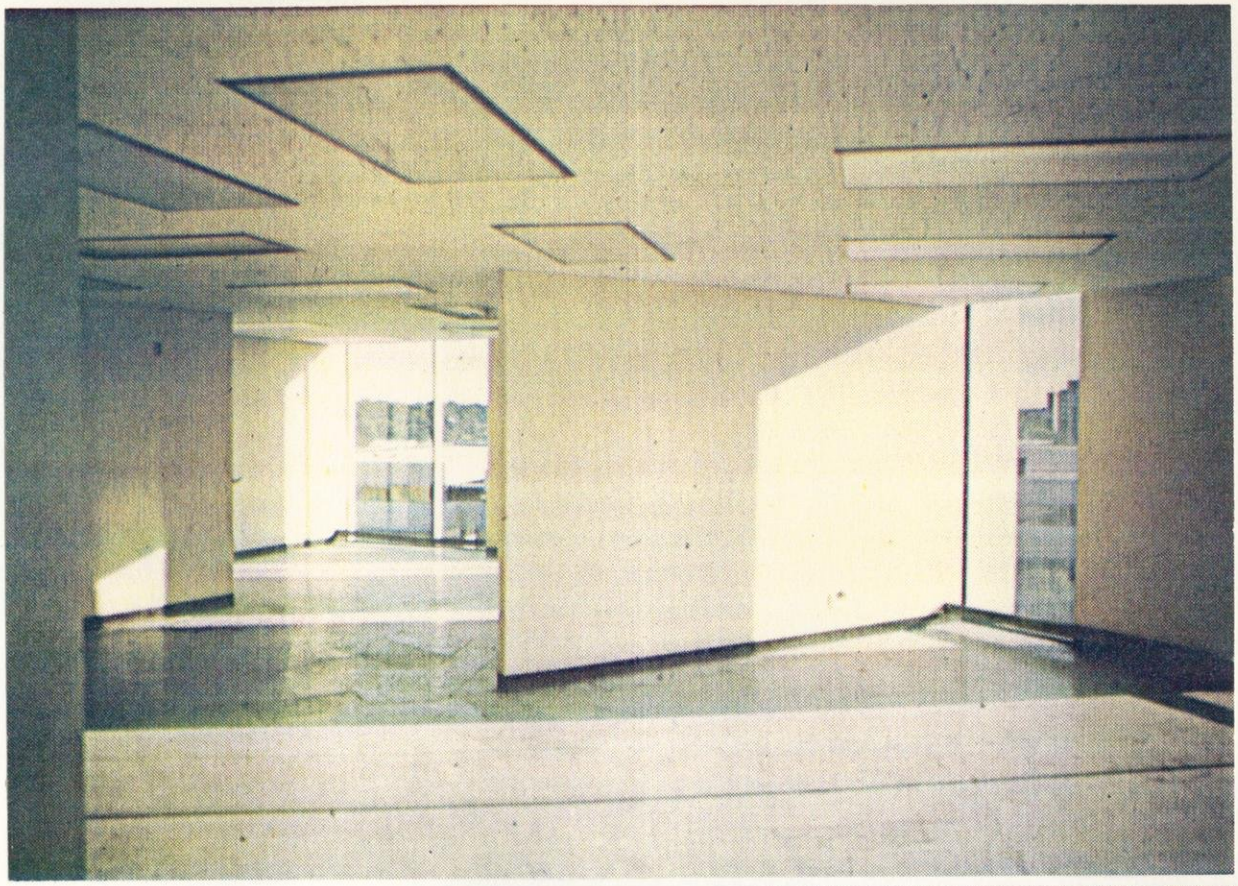
F. Existing Improvements

1. Background and Classification

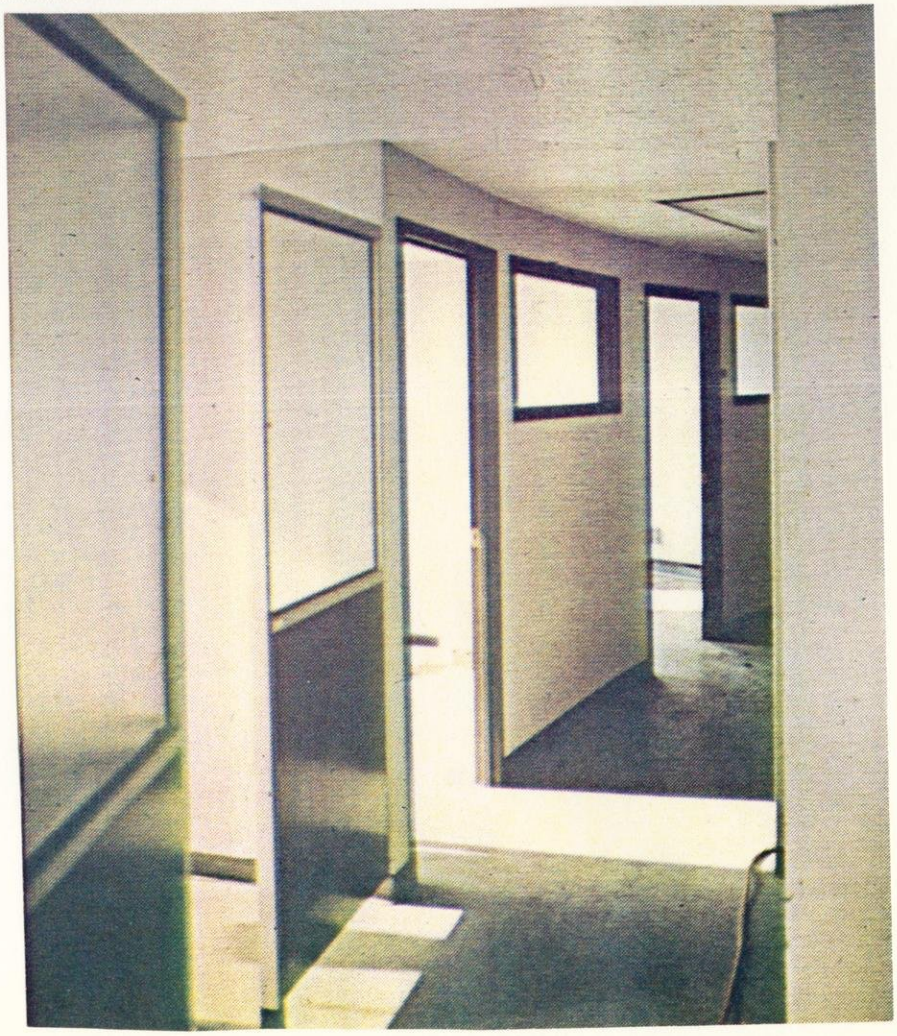
An absentee owner constructed the cylindrical Pyare Square building in 1969 and scrimped on construction costs. Virtually no amenities were provided. Numerous structural, mechanical, and other design deficiencies plagued the building to the point that the DNR elected not to renew its lease. Twenty subsequent months of 100% vacancy forced Pyare Square Company to default on the mortgage with All-State Insurance Company. Concomitant neglect has reduced the building's exterior, interior, and parking lot to a state of

veritable blight. The topography is such that the plaza entrance is actually on the third floor level facing University Avenue. However, since most people drive to the site, they tend to enter the building from the parking lot at either the first or second floor. The following photographs provide a general visual orientation to the property:

Gutted room typical of 1st through 3rd floors



Vacant office in cylindrical portion of the building



Hallway circumscribing the central core of the cylinder

Elevator lobby area

The first three floors of Pyare Square are structurally comparable as are the fourth through fourteenth floors. These dimensions convert to an estimated gross footage of 98,886 square feet as tabulated in Exhibit 3. Exhibit 4 illustrates the layout of typical floors.

EXHIBIT 3

GROSS FOOTAGE OF THE SUBJECT PROPERTY

Floors	Floor Area (sq. ft.)	Number of Floors	Total Floor Area (sq. ft.)
1-3	9,370	3	28,110
4-14	6,082	11	66,902
15	3,874		3,874
Total			98,886

EXHIBIT 6

PHOTOGRAPHS OF THE SUBJECT PROPERTY

4802-4804 East Broadway

An extensive catalogue of mechanical design comments and recommendations are included as Appendix D. Other significant observations include:

- General deterioration of the building's exterior, interior, and parking lot has resulted from neglect.
- Major flaws in HVAC design and construction can be corrected only through extensive system rehabilitation and replacement programs.
- Faulty air-flow patterns, extreme temperature differentials resulting from malfunctioning HVAC systems, and the absence of fire alarms/ sprinkler systems have created fire-safety hazards.
- Nonmechanical design deficiencies, specifically the lack of guardrails or equivalent protection for glass window walls and overly steep entrance steps, have created safety hazards.

Other less apparent deficiencies and building code violations might have to be corrected before an occupancy permit will be issued.

4. Interior Finishes

Water damage from broken plumbing has ruined approximately 10% of the carpets and ceilings. Nearly all of the baseboard heaters have been damaged by occupants standing on them to adjust curtains. Temporary room partitions installed during the DNR's occupancy have damaged walls and floors. Extensive specialized wiring, plumbing, and exhaust systems are no longer appropriate. Many lights, bathroom facilities, and other fixtures have been damaged beyond repair.

5. Renovation Problems

The inventory of deficiencies and recommended remedies, Appendix D, provides considerable insight into potential renovation problems. Because the most serious deficiencies relate to fire safety, the Village of Shorewood Hills requires that a sprinkler system be installed if substantial remodeling occurs. This could constrain renovation options. Further fire safety hazards resulting from air pressure differentials in the stairwells will require additional renovation attention.

The present heating and cooling system, even when fully functional, failed to maintain proper temperature levels on the 4th through 14th floors. The hot water boiler, air conditioning, and air handling system must be redesigned and/or replaced in order to satisfy the structure's heating requirements. Although past operating expenses are not particularly relevant for the renovated structure, the heat loss calculations in Appendix E indicate that renovation must considerably improve the structure's present energy inefficiency in order to reduce heat loss below the current 20 BTU/sq. ft. state standard. Beyond the mechanical aspects, additional insulation, new drapes and/or blinds, and alterations to the windows will be necessary to increase energy efficiency.

The exposed exterior surfaces of the building and parking lot will require a facelift to upgrade the approach zone and to bring the structure in line with standards relative to handicap access. Beyond the appearance, the parking lot capacity and layout are unacceptable for most contemplated uses. The site needs about 50 more stalls to meet minimum acceptable parking ratios for office use. The parking area behind McDonald's is physically remote from the building. The steep slope between the parking lot and the building creates a safety hazard for pedestrians moving between the lot and the building. In addition, if vehicle access rights are secured to Locust Drive and through the State Revenue Building property, traffic flows through the Pyare Square site will cause additional planning and pedestrian safety concerns, although access will be improved considerably. Parking inadequacy is a key detriment to the subject that must be resolved by the buyer before the rent potentials will be realized.

III. MOST PROBABLE USE

This section presents a comparative analysis of alternative uses. Having completed an inventory of the positive and negative attributes of the property, the significant limitations on future use, and the immediate linkages of the location, the appraiser must identify possible uses. Each use must exploit the marketable attributes of the property, neutralize its negative characteristics, and operate within the limits of justified, prudent investment.

A. General Market Characteristics

The search for a use should begin with the possibility of renting Pyare Square as Class A office space. Although no Class A offices are located in the Hilldale area, the Madison market has been reasonably strong. Class B demand fluctuates on a property-to-property basis in the Hilldale area, although most well-maintained properties have experienced low vacancies over the past few years. Exhibit 6 summarizes the office rental market as it pertains to Pyare Square.

The westside apartment rental market is strong, particularly in the Hill Farms area where young, single-white-collar workers seek conventional, moderately priced units (Exhibit 7). The apartment complexes in the Hilldale area are 10-20 years old. Most units command rents of $320+ for one-bedroom units and $375+ for two-bedroom units. The market for existing apartments will continue to be strong into the foreseeable future because little undeveloped land remains on the near west side and because market rents are not high enough to make new apartment proposals financially profitable at the present time.

Condominium conversion is a relatively recent phenomenon in the Madison area. Activity has been limited to converting existing apartment complexes and institutional residences into condominiums, although other conversions are in the planning stages (Exhibit 8). Since most of the Hilldale area was developed during a 20-year period following World War II, commercial structures are too new to be prime targets for converters. Consequently, few condominium conversions have been attempted on the near west side, although an institutional residence was converted to condominiums in Shorewood Hills a few years ago.

Two potential market subgroups might desire condominium units in the Hilldale area. The white-collar group identified as apartment renters might purchase a condominium unit in anticipation of the tax shelter and value appreciation aspects of home ownership. The second component of demand results from a demographic phenomenon in Shorewood Hills. Many families in Shorewood are entering the empty-nest phase of the family life cycle as children grow up and move out of the household. Consequently, many elderly couples are finding that their residences exceed their needs and that maintenance is an increasing burden. Both of these market segments seek small, low-maintenance units that provide quality appointments.

EXHIBIT 6

OFFICE SPACE VACANCIES AND RENTS IN THE MADISON AREA

Building	Address	Space Available	Total Leasable Area	Percent Vacancy	Rents/ Square Feet	Services[a]
Class A space						
Verex Building	150 E. Gilman	0	145,000	0%	$11.50-$12.50	Full service
Anchor Building	27 W. Main	0	98,000	0	$9.00	Full service
30-On-the-Square	30 W. Mifflin	6,000	71,844	1	$8.50	Full service
First Wisconsin Bank	1 S. Pinckney	0	350,000	0	$11.00-$13.00	Full service
United Bank Tower	222 W. Washington	0	160,000	0	$10.00	Full service
Total A space		6,000	824,844	1%	$8.50-$13.00	
Class B space						
Tenney Building	110 E. Main	9,000	76,000[b]	20%	$9 + electric	Heat, water, air, janit.
Churchill Building	16 N. Carroll	0	40,000	0	$7.00	Full service
Atrium	23 N. Pinckney	500	15,000	3	$8.00	None
Odana Office Park	5733 Odana Road	32,000	118,500	27	$6.50-$8.50	Minimal
Firehouse	301 N. Broom	1,183	8,500	14	$7.00-$8.00	Some
Blackhawk	702 Blackhawk Drive	0	20,000	0	$7.50	Some
Total B space		42,683	278,000	15%	$6.00-$8.50	

[a]Generally a full service lease includes janitorial services, security, and base year expenses; however, a number of variations may be established in the lease.

[b]Includes 5,400 square feet of retail space and 4,000 square feet of lower-level space.

EXHIBIT 7

APARTMENT RENTAL COMPARABLES

Name	Room Type	Monthly Rent	Size in Sq. Ft.	Rent/ Sq.Ft.	Comments
Park Tower	1-bdrm.	$280	550	$.51	includes heat;
	2-bdrm.	345	750	.46	free parking
Carolina Apts.	1-bdrm.	323	621	.52	includes heat;
	2-bdrm.	378	864	.44	free parking; pool
Normandy	1-bdrm.	343	750	.46	underground
	2-bdrm.	387	900	.43	parking @$20/
	3-bdrm.	431	1050	.41	mo.; pool
The Sovereign	1-bdrm.	320	650	.49	includes heat
	2-bdrm.	380	1000	.38	

EXHIBIT 8

CONDOMINIUM COMPARABLE PROPERTIES

Name	Recent Sales and Resales
Marbella	99 units plus 36-unit, three-story addition: 850 sq.ft. 1-bdrm: 11/79 for $47,500; 6/81 for $52,500 1,110 sq.ft. 2-bdrm: 10/79 for $59,400; 10/80 for $67,900 1,212 sq.ft. 2-bdrm: 10/79 for $69,900; 3/81 for $87,000 1,140 sq.ft. 4-bdrm: 10/79 for $59,400; 7/80 for $63,200
Parkwood Village	101 units, 31 sales since 3/6/81; 15 units available (list): 2-bdrm; 1.5 baths: $64.900 3-bdrm; 1.5 baths: $68,900 3-bdrm; 2.5 baths: $69,900 2-bdrm; 1.5 baths, ranch style: $71,500 3-bdrm; 2.5 baths w/vasement: $74,900
Epernay	40 units; marketed as adult-only; started 8/81(list prices): 2-bdrm; 1 bath, 1000 sq. ft.: $56,900 2-bdrm; 1.5 baths, 1200 sq. ft.: $60,900
The Cove	49 units; all with lake views 2 bdrm; 1200-1300 sq.ft.: $72,500-$86,000 3-bdrm; 2100 sq. ft.: $165,000-$175,000

B. Alternative Uses for Pyare Square

A combination of the physical characteristics of the property and the general demand characteristics in the Hilldale area suggests the following alternative scenarios for use of the subject property (Appendix F).

Scenario 1: The present shell would be completely renovated as Class A office suites, except for the first 3 floors, which would be Class B space.

Scenario 2: The present shell would be completely renovated into a 220-room hotel. The third floor would house a restaurant. The main lobby, conference rooms, and administrative offices would be on the second floor. The first floor would be allocated to housekeeping, maintenance, and storage functions.

Scenario 3: The existing shell would be completely renovated as a moderate-to-luxury 77-unit apartment tower underlain by three floors of Class B office space. Each apartment floor would have five 1-bedroom (625 sq. ft.) and two 2-bedroom (935 sq. ft.) units.

Scenario 4: The present shell would be completely renovated as high-rise residential condominiums underlain by 3 floors of Class B office space. Each condominium floor would have one 1-bedroom (625 sq. ft.) and five 2-bedroom (875 sq. ft.) units.

The parking lot should be rehabilitated into a bilevel parking ramp, with 100 stalls on the second level, for each scenario except the apartments. The steep topography lends itself to this improvement. The appraiser believes the long-term profitability of the property is jeopardized without adequate parking facilities. The projected cost of the ramp, at $4,000 per stall, is $400,000. An entrance from the second floor to the second level of the ramp should be provided, along with stairs between the two ramp levels.

C. Economic Ranking of Alternatives

The alternative uses that might be plausible for the subject property can first be ranked in terms of general budget parameters inherent in the revenues and expenses for each. These financial projections must then be screened for effective demand, risk, and political compatibility. The model in Exhibit 9 converts rents into justified investment by determining a market rent for each use and assuming an acceptable cash breakeven point for financial planning and budgeting. This process capitalizes funds available for debt service or cash dividends into amounts of justified investment. Caution must be exercised when interpreting these results. This residual approach can be misleading if there are even small errors in the cash-flow forecasts, but if estimating bias is consistent when applied to the alternative uses, the approach ranks the alternatives in terms of their ability to pay for the subject property as is. The cost assumptions and calculations, provided in Appendix F, are summarized in Exhibit 10. A preliminary ranking without regard to future reversion value demonstrates that Scenarios 1 and 4 are the preferable uses of Pyare Square.

EXHIBIT 9

BASIC LOGIC FOR RANKING ALTERNATIVE PROGRAM SCENARIOS
BY JUSTIFIED PURCHASE BUDGET

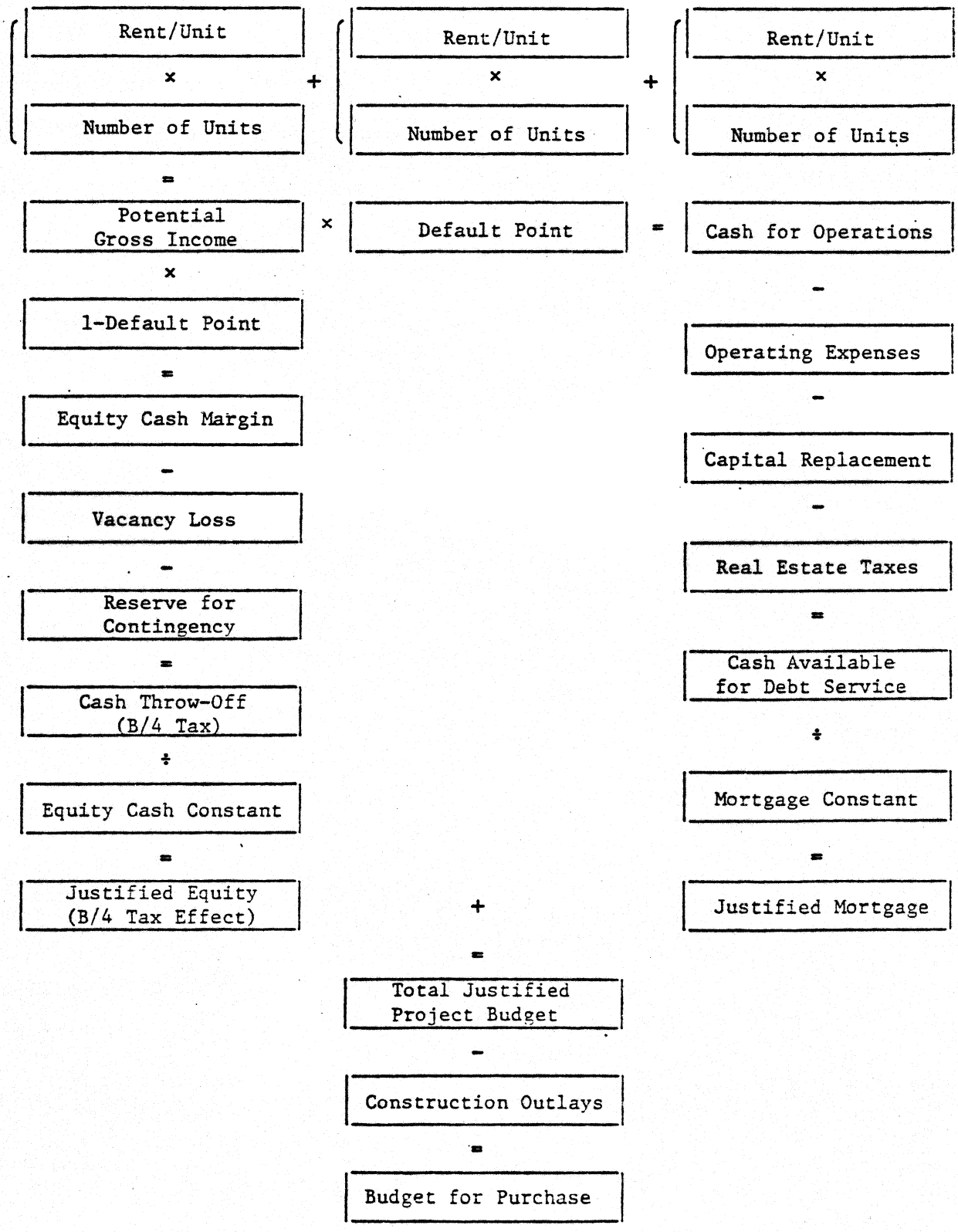


EXHIBIT 10

SUMMARY OF BUDGETS FOR ALTERNATIVE USE SCENARIOS

Budget Item	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Remodeling and refurbishing budget	-$3,366,580	-$6,395,000	-$3,414,225	-$3,140,630
Justified investment for property as is	3,777,109	1,706,000	2,354,505	3,677,371
Total justified investment in subject property as is	$ 410,529	-$4,689,000	$ -59,720	$ 536,741

D. Risk Ranking of Alternatives

Four risks are inherent in the proposed alternative scenarios. The first risk stems from renovation requirements. In an undertaking as extensive as the remodeling of Pyare Square, the possibility for time delays and cost overruns must be considered. Second, the marketability of the space to be provided will dictate the degree of success of the selected use. Few projects are able to withstand long sell-up or lease-up periods under adverse economic conditions. Third, business risks are inherent in any investment opportunity. Namely, management competence and expertise influence the profitability of the enterprise. Fourth, capital risk, which depends on the availability and terms of financing, is the risk that debt service requirements might not be met by cash flow if gross income declines or if expenses increase. This in turn affects the likelihood and timing of repayment of investor funds. A fifth risk, political acceptability, is considered next as a separate concern.

E. Political Compatibility of Alternatives

Residential uses would be frowned on by the residents of Shorewood Hills, although condominium conversion would encounter less opposition than a rental proposal. Although residential uses conflict with the commercial district zoning guidelines, appropriate code and classification modifications might be promulgated to accommodate a well-conceived proposal. Commercial proposals would be politically acceptable, although the office scenario would presumably stir less initial opposition from residents than would a transient hotel scenario. Clearly, the support of local officials can have a marked effect on the viability of any alternative use. The buyer is advised to work with local political forces in developing an alternative use proposal.

F. Conclusions

The determination of most probable use reconciles the tradeoffs between the technical problems of renovation, market revenue uncertainties, and risk exposure. Exhibit 11 displays the final decision matrix.

EXHIBIT 11

SUMMARY MATRIX OF FEASIBILITY OF ALTERNATIVE SCENARIOS

Feasibility Factor	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Justified investment	$410,529	-$4,689,000	-$59,720	$536,741
Renovation risks	minor	serious	serious	serious
Effective market demand	moderate	untested	strong	untested
Political acceptability	most acceptable	mixed	strongly negative	slightly negative
Financial risk	Function of ability to market space thus minimizing lease-up period and vacancy losses	Depends on ability to maintain high occupancy rates and to generate restaurant trade	Depends on property appreciation rates and on ability to renovate	Function of ability to minimize sell-out period & office vacancies

Given the Village of Shorewood Hills' history of bad experiences with multifamily projects and the high risk inherent in hotel ventures, the prudent investor would favor office uses in order to minimize his risk exposure and to stabilize his gross revenues from the subject property.

The most probable use of the subject property would be as a shell for renovation to 11 floors of Class A office suites above three floors of Calss B office space.

IV. PREDICTION OF PRICE FROM MARKET SALES

Recent market sales in a given area are the most reliable predictors of the most probable buyer and what he might be willing to pay for another property in that area. This section will discuss the market comparison approach to most probable price and will provide financial tests of this price.

A. Most Probable Buyer

A review of other buildings in Madison, some of which have sold as shells, reveals that the buyers have been local professional real estate investors with enough capital and expertise to be able to execute extensive renovation and re-leasing (Exhibits 12-19). Investor-purchasers exhibit distinct investment decision traits. Recent increases in financing costs force many investors to rely on favorable seller-financing. Instead of seeking a direct return on equity, many investors look for property appreciation potential. The property's potential to yield a fair return on future resale is a quality these investors prefer. Purchasers are sensitive to renovation costs and alternative layout options.

> Therefore, the most probable buyer will be a professional real estate developer who expects to completely renovate and redirect marketing of the subject property. The most probable buyer might try to generate surplus funds above the sales price, which could then be escrowed for renovation. The professional investor will negotiate only after protracted exposure of the property to the market in order to consummate a purchase at a price well below assessed valuation.

B. Most Probable Price

Sufficient commercial buildings have been purchased and sold in Madison in recent years to justify applying the market comparison approach. The probable price and range of a transaction involving the subject property and a probable buyer of the type defined above can be inferred from market price behavior of past transactions. Of course, there are great differences among these properties with respect to their location, size, marketability, condition, and other factors. These differences will be reconciled through a ranking system that is weighted for the priorities of investor-developers in the current market. The scale for this system, shown in Exhibit 20, results in a weighted score for each property. The point total, a measure of the desirability of a given property to the most probable buyer, is then divided into the cash equivalent price[1] to provide a common denominator for

[1]The cash equivalent price is the sales price adjusted for terms of financing that were out of line with the market at the time of sale (Appendix G).

EXHIBIT 12

COMPARABLE PROPERTY #1

110 E. MAIN/TENNEY BUILDING

Date of sale: 10/76
Sale price: $1,150,000
Terms of sale: 8% interest, 30-year term, land contract
Time adjusted cash equivalent price: $1,391,008
Use at time of sale: Rental office space
Grantor: First Wisconsin Bank
Grantee: Dr. Maloof
Gross building area: 105,000 sq. ft.
Net rentable area: 76,000 sq. ft.
Building description: a 47-year old, ten-story building; fire resistant, reinforced concrete; with automatic elevators; no parking; 30% vacancy
Present use: Office building
Locational factors: Located on the easterly corner of the Capitol Square, 4 blocks from State Street Mall, 2 blocks from City-County Building
Available rental information: Currently the building is 65% leased at rates between $5.75 and $6.25 per square foot

EXHIBIT 13

COMPARABLE PROPERTY #2

149 EAST WILSON

Date of sale: 8/23/78
Sale price: $270,000
Terms of sale: $50,000 down, seller took back $220,000 mortgage @ 8%, 10 years, 30-year amortization
Time adjusted cash equivalent price:
Use at time of sale: Vacant
Grantor: General Sales and Supply Co.
Grantee: Wilton Properties II
Tax parcel number: 0709-242-0108-4
Assessed value at time of sale: Total $279,200; land $110,700
Frontage: 98.1 ft.
Lot area: 15,670 sq. ft.
Gross building area: 40,283 sq. ft.
Net rentable area: 32,000 sq. ft.
Building description: Three-story, stucco-covered ordinary brick construction, automatic elevator, no parking
Present use: Leased to State of Wisconsin personnel department
Available rental information: Leased for $5/sq. ft.; tenant pays all services; CPI escalator for operating expenses; 5-year term with two 1-year options; option to buy after year 3 for $1,000,000

EXHIBIT 14

COMPARABLE PROPERTY #3

16 NORTH CARROLL

Date of sale: 9/13/74 improvements; 10/77 land
Sale price: $560,270 improvements; $55,000 land
Recorded: Vol. 533, p. 847, agreement acknowledges installment sales contract for improvements and leasehold; Vol. 873, pp. 47, 50, 52, 54 warranty deeds; fee underlying leasehold was purchased.
Terms of sale: Improvements--installment sale $7,963 down, $150,000 traded in equity in unidentified project, with balance of $402,307 payable in 10 years at 7% interest, with 20-25 years amortization schedule.
Time adjusted cash equivalent price: $781,741
Use at time of sale: Office, retail space on first floor vacant
Grantor: Gay Building Company
Grantee: Hovde Realty, Inc.
Tax parcel no.: 0709-231-0902-3
Assessed value at time of sale: 1974 total $328,308; land $139,385, improvements $188,923; 1977 total $888,000; land $145,300, improvements $742,700
Sale price as % of assessed value: 1974 improvements only, 297%; 1977 land only, 38%
Lot size: 44 ft. × 132 ft.
Frontage: 44 ft. on N. Carroll
Zoning: C-4
Gross building area: 42,250 sq. ft.
Net rentable area: 35,725 sq. ft.
Building description: Masonry and concrete structure, two automatic elevators
Rental information: At time of sale of improvements $4.75-5.00 sq. ft., with janitorial service, heat and light included; 1,000 sq. ft. vacant. At time of land sale $6.25 sq. ft. with same services included; fully occupied.

EXHIBIT 15

COMPARABLE PROPERTY #4

137 EAST WILSON

Date of sale: 10/10/78
Sale price: $240,000
Terms of sale: Trades and mortgages at market rate
Time adjusted cash equivalent sale: $240,000
Use at time of sale: Empty shell
Grantor: Internal Revenue Service
Grantee: Martin F. Rifkin, c/o Contact Realty
Tax parcel number: 0709-242-0109-2
Zoning: C-2 commercial
Assessed value at time of sale: Total $1,000,000; land $165,000
Frontage: 98 ft.
Gross building area: 30,000 sq. ft.
Net rentable area: 25,500 sq. ft.

EXHIBIT 16

COMPARABLE PROPERTY #5

301 N. BROOM STREET

Date of sale: 11/30/79
Sale price: $110,000
Recorded: Vol. 1675, p. 18
Terms of sale: Land contract, $20,000 down, 8.75% interest. Principal and interest payable in monthly installments of $795, provided entire purchase money and interest fully paid on or before August 15, 1984; sale represents portion of larger conveyance of $450,000.
Time adjusted cash equivalent price: $96,570
Use at time of sale: Vacant--previously fire station
Grantor: Estate of Sherman Martin Cox
Grantee: Frederic E. Mohs, et al.
Tax parcel number: Not listed in assessment books
Assessed value: Not listed in assessment books
Sale price as % of assessed value: N/A
Lot size: 8.712 sq. ft.
Frontage: Broom Street 132', W. Johnson Street 66'
Zoning: C-2
Gross building area: 5,760 sq. ft.; first floor, 1,920 sq. ft.
Other rentable square footage: 3,840
Building description: Brick exterior, poured concrete bearing walls, concrete floors, heating and electrical systems had to be completely replaced; original structure was essentially a shell; building is being completely renovated plus construction of new addition
Present uses: Basement area is tenant occupied; 1st and 2nd floors offered for rent at $10.25/sq. ft. including parking and janitorial services; absorption somewhat sluggish.
Locational factors: 1 block west of State Street, corner of Broom and W. Johnson; heavy auto traffic; on-site parking.

EXHIBIT 17

COMPARABLE PROPERTY #6

212 EAST WASHINGTON AVENUE

Date of sale: 12/13/77
Sale price: $472,000
Recorded: Vol. 894, p. 695, warranty deed
Terms of sale: Seller took a $140,000 second mortgage; property also subject at time of sale to $190,000 mortgage with Wisconsin Alumni Reserach Foundation and $175,000 mortgage with Affiliated Bank. Grantee agreed to assume and pay latter two mortgages.
Time adjusted cash equivalent price: $574,209
Use at time of sale: Offices for Ray-O-Vac Co.
Grantor: Carol M. and Jerome J. Mullins
Grantee: Washington Associates
Tax parcel number: 0709-133-3103-2
Assessed value: Total $670,100; land $334,000, improvements $335,700
Sale price as % of assessed: 70%
Lot size: 22,680 sq. ft.
Frontage: 189 ft. on E. Washington Ave., 120 ft. on N. Butler
Zoning: C-4
Gross building area: 48,000 sq. ft.
First floor gross area: 12,000 sq. ft.
Net rentable area: 38,000 sq. ft.
Building description: Four-story, fire resistant concrete and masonry structure, elevator
Present use: Office space; adjacent parking lot
Locational factors: 1 block from Square, 4.5 blocks from City-County Building, directly across street from GEF-1, 4.5 blocks from State Street Mall
Rental information: None available

EXHIBIT 18

COMPARABLE PROPERTY #7

JACKSON BUILDING/102-110 NORTH HAMILTON

Date of sale: 7/29/77
Sale price: $330,000 for three parcels
Recorded: Vol. 846, p. 371, warranty deed
Terms of sale: 5-year balloon mortgage @ 8.5% interest
Time adjusted cash equivalent price: $395,464
Use at time of sale: 102 N. Hamilton vacant, 110 N. Hamilton restaurant
Grantor: Jackson Realty Corp.
Grantee: Gary J. DiVall
Tax parcel number: 0709-144-1504-1
Assessed value at time of sale: Total $360,000; land $153,900, improv. $206,500
Sale price as % of assessed value: 92%
Lot size: Approximately 11,000 sq. ft.
Frontage: East Mifflin 15 ft., N. Hamilton 46 ft., N. Pinckney 132 ft. for 102 N. Hamilton building
Zoning: C-4
Description: 102 N. Hamilton, gross building area 28,000 sq. ft., first floor gross area 6,700 sq. ft.; 110 N. Hamilton, gross building area 1,100 sq. ft., one-story above grade
Estimated net rentable area: 28,000 sq. ft.
Total gross building area: 27,000 sq. ft.
Building description of 102 N. Hamilton: Concrete and steel structure, 3 stories, plus basement at grade entrance on N. Pinckney, 1st floor plus mezzanine; structure can carry more floors, automatic elevator
Locational factors: 2 blocks from State Street Mall, 4 blocks from City-County building, 2 blocks from GEF-1, 1.5 blocks to 1st Wisconsin Plaza
Rental information: Adjacent property, one of three parcels, has 1,000 sq. ft. @ $600/mo. net for restaurant use

EXHIBIT 19

COMPARABLE PROPERTY #8

202 N. HENRY STREET

Date of sale: March 30, 1979
Sale price: $257,000
Recorded: Vol. 1048, p. 635, quit claim deed
Terms of sale: Seller assigned land contract to buyer; land contract originated April 1, 1978, $185,000 at 10%, amortized 20 years; balloons April 1, 1981
Time adjusted cash equivalent price: $262,933
Use at time of sale: Vacant
Grantor: Roger K. Gaumnitz
Grantee: Michael G. Duffy
Tax parcel number: 0709-231-0601-1
Assessed value: Total $244,000--land $144,000, improvements $100,000
Sales price as % of assessed value: 105%
Lot size: 13,068 sq. ft.
Frontage: 190' on N. Henry; 66' on Dayton
Zoning: C-4
Gross building area: 26,000 sq. ft.
Estimated net rentable area: 24,000 sq. ft.
Building description: 2-story warehouse, brick exterior, concrete foundation, 2 garage entries on Henry, structurally sound, but needs extensive rehabilitation for occupancy
Present use: Vacant
Locational factors: Directly behind Civic Center (was old Ward's warehouse), 66 feet from State Street, 2 blocks to Square
Other: Condominium conversion July 1, 1979; sold 1st floor to Reisner for restaurant for $155,000
Rental information: None available

EXHIBIT 20

SCALE FOR SCORING COMPARABLES ON PROBABLE BUYER CONSIDERATIONS

Location	5 = Neighborhood of stable or increasing prices 3 = Neighborhood of stagnant prices 1 = Neighborhood of declining or deteriorating prices
Vacancy at sale	5 = Mostly occupied, 10% or less vacancy 3 = Partially occupied 1 = Vacant at time of sale
Building condition and remodeling required	5 = Minimal improvements required, good condition 3 = Average renovation, fair condition 1 = Empty shell, major renovation required, poor condition
Accessibility	5 = Easily accessible, visible entrance or entrances 3 = Some accessibility problems 1 = Very difficult access, one-way streets or no islands
Parking	5 = Adequate, available parking 3 = Limited, expensive parking 1 = No parking

comparison purposes. This common denominator is further refined by weighting it for net rentable area. The result is a dollar per point per square foot figure, which is then related to the sale price of the subject property by computing the mean price per point. This statistical procedure produces the predicted price per unit as a central tendency and the standard deviation as a means to measure the range and reliability of the sales price prediction.

C. Market Comparison Approach to Most Probable Price

The first step in market inference was the collection of recent comparable sales that were:

- Arm's-length transaction.
- Preferably sold as vacant shells.
- Located in office/retail nodes.
- Ordinary mid/high-rise construction types.

Exhibit 21 summarizes the comparable sales selected for use in predicting most probable price for the subject site. Of the eight sales, one was for cash; the balance required some form of nonmarket seller-financing.

EXHIBIT 21

PROPERTIES SELECTED FOR USE AS COMPARABLES

Property	Date of Sale	Terms of Sale
110 E. Main	10/76	land contract
149 E. Wilson	8/78	seller-financing
16 N. Carroll	9/74	installment
137 E. Wilson	10/78	cash
301 N. Broom	11/79	land contract
212 E. Washington	12/77	seller-financing
102-110 N. Hamilton	7/77	land contract
202 N. Henry	3/79	land contract

Each property was then scored for key attributes thought to influence buyer behavior. Location in a neighborhood of increasing or stable prices was perceived to be desired by the prudent investor. Vacancy presented a depressing effect on most probable sales price and was therefore viewed as a negative factor. The amount of renovation required to bring the building into code compiance is an investor concern. Well-maintained structures are clearly preferred. Accessibility affects the utility of the property both from a physical and emotional standpoint. Inadquate on-site or off-site parking reduces the desirability of a property. The final weighted matrix is presented in Exhibit 22.

Exhibit 23 displays the calculations for generating a predicted price for the subject property and an estimate of the reliability of the prediction.

The market comparison price prediction for Pyare Square is about $1,300,000 with a standard deviation of about $160,000; the suggested transaction range then is $1,160,000 to $1,480,000. This initial transaction interval must now be adjusted to reflect unique external influences and must be tested to determine if the property generates an acceptable yield to the most probable buyer if purchased at the most probable price.

D. External Influences on Most Probable Price

The acceptance of the most probable price estimate is contingent on the acceptability of certain estimates and assumptions to the most probable buyer. The projected income stream for the property is subject to variation. Realization of the income forecast depends on the purchaser's ability to renovate the structure in conformance with applicable fire and building codes and within the renovation budget parameters. Although these are significant potential risks for the buyer, detailed engineering studies are beyond the

EXHIBIT 22

WEIGHTED MATRIX FOR COMPARABLE PROPERTIES OF 4610 UNIVERSITY AVENUE

Feature	Weight	Weight/Weighted Ratings								
		110 E. Main	149 E. Wilson	16 N. Carroll	137 E. Wilson	301 N. Broom	212 E. Washington	102-110 Hamilton	202 Henry	Pyare Square
Location	.10	3/.3	3/.3	3/.3	3/.3	5/.5	3/.3	3/.3	5/.5	5/.5
Vacancy	.20	3/.6	1/.2	5/1.0	1/.2	1/.2	1/.2	3/.6	1/.2	1/.2
Building condition & remodeling required	.35	3/1.15	1/.35	3/1.15	1/.35	1/.35	1/.35	3/1.15	1/.35	1/.35
Accessibility	.15	1/.15	1/.15	1/.15	1/.15	1/.15	3/.45	1/.15	1/.15	3/.45
Parking	.20	1/.2	1/.2	1/.2	1/.2	5/1.0	5/1.0	1/.2	1/.2	3/.6
Total weighted score	100%	2.4	1.2	2.8	1.2	2.2	2.3	2.4	1.4	2.1
Time-adjusted cash equivalent (TACE) price[1]		$1,391,008	$270,694	$781,741	$271,200	$96,570	$574,209	$395,464	$262,933	...
Total net rentable area (NRA)		76,000	32,000	35,725	25,500	5,760	38,000	28,000	24,000	84,969
TACE price per sq.ft.(NRA)		$18.30	$8.46	$21.88	$10.64	$16.77	$15.11	$14.12	$10.96	...
Mean price per point per sq. ft.		$7.63	$7.05	$7.82	$8.86	$7.62	$6.57	$4.88	$7.82	...

[1]See Appendix E for cash equivalency calculations.

EXHIBIT 23

CALCULATION OF MOST PROBABLE PRICE USING
MEAN PRICE PER POINT EQUATION METHOD

Comparable Property	Selling Price per NRA	Weighted Point Score	$\frac{\text{Price per NRA}}{\text{Weighted Point Score}} = (x)$
1	$18.30	2.4	$7.63
2	8.46	1.2	7.05
3	21.88	2.8	7.82
4	10.64	1.2	8.86
5	16.77	2.2	7.62
6	15.11	2.3	6.57
7	14.12	2.4	5.88
8	10.96	1.4	7.82
		Total	$59.25

Central tendency $(\bar{x}) = \frac{\Sigma x}{n} = \frac{59.25}{8} = 7.41$

Dispersion (std. dev.=s) $= \sqrt{\frac{\Sigma(x-\bar{x})^2}{n-1}} = \sqrt{\frac{5.71}{7}} = .90$

where:

x		$\bar{x}$		$\lvert(x-\bar{x})\rvert$	$(x-\bar{x})^2$	n	n-1
7.63	-	7.41	=	.22	.05	8	7
7.05		7.41		.36	.13		
7.82		7.41		.41	.17		
8.86		7.41		1.45	2.10		
7.62		7.41		.21	.04		
6.57		7.41		.84	.71		
5.88		7.41		1.53	2.34		
7.82		7.41		.41	.17		
					5.71		

Value range: $\bar{x} \pm s = 7.41 \pm .90$ [8.31,6.51]

Estimate of value of subject property =

NRA of subject × Weighted point score × [Sample mean of price per NRA per total weighted score ± s]

(84,969) × (2.1) × [7.41 ± .90]

High estimate:[1] $1,480,000
Central tendency: $1,320,000
Low estimate: $1,160,000

[1]All value estimates are rounded.

scope of this appraisal. The buyer might consider contracting an engineering study and then adjusting his offer to reflect variances between the engineer's findings and the appraiser's projected renovation budget.

An investor-purchaser anticipates value appreciation. Consequently, the reversion assumption influences the present value of the property. The buyer will consider the various factors that result in property appreciation: ability to increase net operating income, perhaps by reducing operating expense, changes in the expectations of future buyers, and the likelihood of experiencing reductions in the cost of funds. Finally, the buyer recognizes the pressures on the seller to liquidate the property. The seller will need to concede something in purchase price to achieve a cash sale.

These factors tend to depress the upper range of sales price since they represent either concessions on the part of the seller or perceived risk exposures on the part of the buyer. Thus, the appraiser establishes $1,450,000 as the upper limit of sales price.

On the other hand, Pyare Square has several unique qualities that set it apart from the typical office structure. Pyare Square may be the only office building in the Hilldale area with bona fide Class A potential. Tasteful rehabilitation coupled with effective marketing would minimize the market risk and produce essentially a new building. In addition, the unusual architecture and height create a prominent visual landmark. Continuous population growth on the west side and in Middleton through the past decade solidifies the site's desirable location on University Avenue. Finally, the development of McDonald's and Walnut Grove next to the subject indicates a resurgence of vitality in this area that could translate to enhanced property values and appreciation expectations.

For these reasons, the appraiser believes that the sale price for Pyare Square will fall somewhere in the upper portion of the transaction range and establishes the lower limit of sale price at $1,250,000.

E. Tests of Preliminary Most Probable Price Determination

Since actual market sales formed the foundation for the most probable price determination, it is useful to test the probable price against investment yields and risk ratios. Two investment tests will be applied:

- The front-door approach to convert total investment to minimum required rents.
- The BFCF after-tax yield forecast using a basic cash-flow model provided by EDUCARE Network, Inc.[1]

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[1]A nonprofit cooperative for the purchase of computer services from G.E. Timeshare, Inc. It is used by appraisers and is sponsored by the American Institute of Appraisers, the Society of Real Estate Appraisers, and the American Society of Real Estate Counselors.

1. Minimum Rent Required

If the most probable buyer paid $1,300,000 for Pyare Square as is and spent $3,400,000 renovating the shell as estimated in Scenario 1 (Appendix F), he would have a total investment of $4,700,000 in the property. The most favorable financing is provided by an industrial revenue bond (IRB) to cover 100% of the renovation costs at 12% interest with a 20-year term. The purchase price of $1,300,000 would constitute the cash equity contribution. Exhibit 24 shows the conversion of these capital requirements to required net income and suggests that the minimum required gross rent would be $905,680, or $80,897 more than the gross rents expected under Scenario 1 (824,783). This deficit would come out of the desired cash dividend to equity and leave the investor with 4.1% cash-on-cash return. This marginal return forces the investor to depend on future appreciation realized on resale to increase the overall return. The renovation budget proposed in Scenario 1 is consistent with an investor looking for appreciation potential since appreciation expectations could not be realized without extensive renovation.

A strategy calling for 75% loan-to-value conventional financing at 13% interest, 25-year term plus lender participation in 50% of the cash throw-off was tested but has been eliminated because negative cash throwoff during the early years of the project reduces the loan's attractiveness to a lender over the projected holding period.

2. After-Tax Yield

The tax consequences on the investment must be considered. Assuming that a marginal income tax rate of 50% plus 35% of capital gains in excess of $50,000 applies to the purchaser, the $4,700,000 investment can be tested with a simplified after-tax cash-flow model provided by EDUCARE Network, Inc., on the GE Time-Sharing Service. Known as BFCF, the model assumes that there is only one depreciable asset, determined in this case to be 90% of the total investment. The balance is attributable to the land value. The income is assumed to increase by 5% per year, and the asset is assumed to have a 15-year useful life. The resale price was estimated by compounding the $4,700,000 investment at 6% annually over the holding period. The appraiser believes this is a conservative approach because the investor-developer expects to create an increment in value in excess of his investment through renovation. Computer input and output components are reproduced in Exhibit 25.

The after-tax yield under these assumptions would exceed 12%, judged to be a marginal return considering that tax-exempt certificates presently yield about 10%. The average debt cover ratio of 1.24 might be acceptable to institutional investors if an active preleasing program is undertaken. The most probable price of $1,300,000 barely meets the minimum tests of a risk investment for an investor-purchaser over a five-year holding period, given what the appraiser believes are conservative income growth and appreciation assumptions.

EXHIBIT 24

MARKET RENTS REQUIRED BY MOST PROBABLE PURCHASE PRICE OF $1,300,000

Capital Budget		
Probable purchase price		$1,300,000
Projected renovation budget		3,400,000
Total capital investment		$4,700,000
Minus: IRB to finance 100% of renovation		3,400,000
Total cash equity		$1,300,000
Operating Budget		
Annual debt service (12%, 20-yr. term, mortgage constant = .132130)		$ 449,243
Required debt cover ratio		× 1.3
Net operating income required		$ 584,016
Plus: Real estate taxes (Scenario 1)	$123,717	
Operating expenses (Scenario 1)	140,213	
Vacancy losses (Scenario 1)	57,734	321,664
Minimum gross rent required		$ 905,680
Minus: Gross rents expected in Scenario 1		824,783
Equals: Equity dividend		$ (80,897)
Plus: Equity cushion		134,773
Cash for equity (4.1%)		$ 53,876

EXHIBIT 25

AFTER-TAX CASH FLOW PROJECTIONS

```
BUS BFCF
VER 11/2/78

LATEST CHANGES & ADDITIONS:
1) 1976 LAW RE RECAPTURE OF EXCESS DEPRECIATION.
2) DEBT SERVICE RATIO & MTG BAL EACH YR-MODE M
3) SHORT FORM OUTPUT (EXCLUDES DATA SUMMARY) MODE FP

DO YOU WANT INSTRUCTIONS? N
1. ENTER PROJECT NAME? PYARE SQUARE APPRAISAL
2. PROJECTION PERIOD:? 5
   TO REPEAT PREV YRS NOI FOR BAL OF PROJ ENTER 0
3. ENTER N.O.I.:
? 503108,528274,554688,582422,611543
4. VALUE:? 4700000
5. MTG. RATIO, INT., TERM & NO. PAY/YR:
? .7234,.12,20,12
6. IMP./TOTAL VALUE RATIO & IMP. LIFE:? .9,15
7. DEPRECIATION METHOD? 1
   IS OWNER A TAXABLE CORPORATION, Y OR N? Y
8. FED CORP TAX AS OF 7/76=22% OF 1ST $25,000; 48% OVER
   TO THESE RATES WILL BE ADDED U'R STATE RATE. ENTER (SEP BY COMMA)
   1) OTHER INCOME >$25000, Y OR N 2) STATE CORP TAX RATE? N,.5
9. RESALE PRICE:? 6300000


I.R.R. BEFORE TAXES IS  24.9508 %.

AFTER TAX I.R.R. IS 12.6483 %.

AVERAGE DEBT SERVICE RATIO IS 1.23766
```

MORTGAGE ANALYSIS
PYARE SQUARE APPRAISAL
****

YEAR	N.O.I.	DEBT SERV	DEBT SERV RATIO	MTG BAL
1	$503,108	$449,240	1.12	$3,356,390
2	528,274		1.18	3,307,280
3	554,688		1.23	3,251,930
4	582,422		1.30	3,189,570
5	611,543		1.36	3,119,290
AVG.	$556007		1.24	

EXHIBIT 25--*continued*

AFTER TAX CASH FLOW PROJECTION
PYARE SQUARE APPRAISAL
09-Dec-81

DATA SUMMARY
****

VALUE:	$ .47E 7	MTG. AMT.:	$ .339998E 7
NOI 1ST YR:	$ 503108	MTG. INT.:	12 %
ORG. EQUITY:	$ .130002E 7	MTG. TERM:	20 YRS
IMP.VALUE:	$ .423E 7	MTG. CONST.:	.13213
CORP OWNER	NO OTHER INC	IMP. LIFE:	15 YRS
TAX RATE<25000	72 %		TAX>25000: 98 %

YEAR	CASH FLOW	MTG. AMORTZ	BOOK DEP.	TAXABLE INCOME	INCOME TAX	AFTER TAX CASH FLOW
1	53868	43588	282000	-184545	-132873	53868
2	79034	49116	282000	-153851	-110774	79034
3	105448	55345	282000	-121208	-87271	105448
4	133182	62364	282000	-86455	-62249	133182
5	162303	70273	282000	-49425	-35587	162303
	$ 533835	$ 280686	$ 1410000	$ -595484	$ -428754	$ 533835

DEP. METHOD: STRAIGHT LINE

1ST YR EQ. DIV: 4.14363 %

SALE PRICE	$ 6300000
BASIS	3,290,000
CAPITAL GAINS	3,010,000
CAP GAINS TAX	1,468,400
EXCESS DEP TAX	0
MORTGAGE BALANCE	3,119,290
AFTER TAX EQ REV	$ 1712310

AVG DEBT SERV RATIO: 1.24

IF PURCHASED AS ABOVE, HELD 5 YEARS & SOLD FOR $ .63E 7 THEN
I.R.R. IS 24.9508 % BEFORE TAXES; 12.6483 % AFTER TAXES.

NO REPRESENTATION IS MADE THAT THE ASSUMPTIONS RELATIVE TO
CURRENT TAX PROVISIONS USED IN THIS PROJECTION WILL BE
ACCEPTABLE TO TAXING AUTHORITIES.

V. APPRAISAL CONCLUSIONS AND LIMITING CONDITIONS

A. Value Conclusion

An appropriate benchmark for the cash sales price of the subject property can be derived from Ratcliff's "most probable selling price" definition of value:

> The most probable selling price is that selling price which is most likely to emerge from a transaction involving the subject property if it were exposed for sale in the current market for a reasonable period of time at terms of sale which are currently predominant for properties of the subject type.

Market transactions by investor-purchasers have typically included some form of seller-financing. However, general economic conditions have deteriorated considerably since the sale date of most of the comparables. The appraiser believes that the subject will sell for equity cash in conjunction with the IRB. Cash sales normally command a lower price. Because Pyare Square falls into the higher end of the projected transaction zone, the appraiser feels the central tendency is the appropriate value conclusion for a cash sale. Conversations with Shorewood Village public officials indicate that an IRB is the most probable form of financing for the buyer.

> On this basis, the conclusion is that the most probable selling price is $1,300,000 cash, provided the buyer is able to secure 100% financing of renovation costs through an IRB issue at 12% interest over a 20-year term.

B. Certification of Independent Appraisal Judgment

I hereby certify that I have no interest, present or contemplated, in the property and that neither the employment to make the appraisal nor the compensation is contingent on the value of the property. I certify that I have personally inspected the property and that, according to my knowledge and belief, all statements and information in this report are true and correct, subject to the underlying assumptions and limiting conditions.

Based on the information contained in this report and on my experience as an appraiser, my opinion is that the most probable selling price, as defined herein, of Pyare Square is

ONE MILLION THREE HUNDRED THOUSAND DOLLARS ($1,300,000)

assuming that the buyer is able to secure an IRB issue to cover 100% of the renovation costs at 12% interest over a 20-year term.

Michael D. Arneson

Michael D. Arneson

December 18, 1981

Date

C. Statement of Limiting Conditions

This appraisal has been made subject to certain conditions, caveats, and stipulations, either expressed or implied in the prose as well as in the following:

1. Contributions of other professionals

   - An engineering report detailing the mechanical deficiencies of Pyare Square and an engineer's heat loss calculations were available to the appraiser. The appraiser relied on these analyses in deriving non-professional renovation estimates, although he is not liable for the accuracy of these analyses.

   - Limited accounting records of monthly operating expenses for the vacant shell were available and it was not clear how renovation would affect operating expenses. Therefore, expenses are estimated to be appropriate for skillful management of the property but are not represented to be historically based.

   - Because no legal advice was available, the appraiser assumes no responsibility for legal matters. The appraiser assumed that existing nonconformity with fire codes will prevent occupancy of the building as is by a new owner.

2. Facts and forecasting under conditions of uncertainty

   - Information furnished by others in this report is believed to be reliable but is in no sense guaranteed by the appraiser. MINITAB, a preprogrammed statistical package, and BFCF executed most of the computations but the appraiser cannot guarantee program infallibility.

   - All information furnished regarding property for sale, rentals, financing, or projections of income and expenses is from sources deemed reliable. No warranty is made as to the accuracy thereof, and it is submitted subject to errors, omissions, and changes that might have occurred subsequent to its collection.

3. Assumptions applied by the client

- The client has provided no direct information as to constraints or purposes; the appraisal was permitted as a graduate class problem. No fees were paid and all information was collected by graduate students from publicly available sources. It was not possible to inspect interiors of comparables.

4. Controls on use of appraisal

- Values for various components of the subject parcel and improvements as contained within the report are valid only when making a summation and are not to be used independently for any purpose and must be considered invalid if so used.

- Possession of this report or any copy thereof does not carry with it the right of publication nor may the same be used for any other purpose by anyone without the previous consent of the appraiser or the applicant and, in any event, only in its entirety.

- Neither all nor any part of the contents of this report shall be conveyed to the public through advertising, public relations, news, sales, or other media without the written consent and approval of the author, particularly regarding the valuation conclusions and the identity of the appraiser.

APPENDICES

APPENDIX A

VILLAGE OF SHOREWOOD HILLS ZONING CODE

13.08 "C-2" COMMERCIAL DISTRICT

In the "C-2" District the following regulations shall apply, except as otherwise provided herein:

(1) Use. Only the following uses are permitted in the "C-2" Commercial District:

(a) Retail sales and service uses such as:

(1) Art Shops, Artist's and Professional Studios, Beauty Parlors, Clothing Stores, Drug Stores, Hardware Stores, Post Office Stations.

(2) Shops for the following and similar occupations: Barber, Jeweler, Watchmaker, Tailor, Cleaning and Pressing.

(b) Business and professional offices.

(c) Municipal Buildings.

(d) Bakeries, cafes, confectionaries, ice cream shops, restaurants.

(e) Other neighborhood retail sales uses which are similar in character to those enumerated above and which will not be dangerous or otherwise detrimental to persons residing or working in the vicinity thereof, or to the public welfare, and will not impair the use, enjoyment or value of any property; but not including any of the following uses:

(1) Wholesale or jobbing businesses.

(2) Manufacturing and processing other than an accessory use customarily incidental to permitted retail sales and service uses.

(3) Commercial recreation uses such as amusement parks, bowling alleys, billiard and pool halls, dance halls, and skating rinks.

(4) Mortuaries.

(5) Used car lots.

(6) Similar business and industrial uses.

(2) Height and Area Regulations "C-2" Commercial Districts.

(a) Building Height Limitation.

(1) No principal structure shall exceed 130 feet in height above the natural ground level of that portion of the premises on which said building is to be located. No more than one such structure shall be erected on any single parcel.

(2) No accessory structure shall exceed 40 feet in height above the natural ground level of that portion of the premises on which said accessory building is to be located. There shall be no limitation as to the number of accessory structures to be located on any single parcel except as limited by section (2)(b)(2) hereof.

(3) Natural ground level shall be determined by computing the average elevation of the natural topography of the land on that portion of any parcel on which a building is to be constructed.

(4) Roof structures for the housing of elevators, stairways, cooling towers, ventilating fans or similar equipment required to operate and maintain the building, fire or parapet walls, sky lights, aerials, electrical transmission and communication poles, towers and equipment, flag poles, chimneys, and flues, smoke stacks, may be erected above the height limits herein prescribed except that no such structure above the height limit shall be allowed for the purpose of providing additional floor space for uses permitted in this section nor shall the same exceed the height of the structure to which it is affixed by more than 15% of the actual height of said structure.

(b) Required Minimum Spaces and Facilities. The establishment of permitted buildings and uses in the "C-2" District shall include the following required minimum spaces and facilities around them; said requirements being for the purpose of avoiding congestion in the public streets and traffic hazard and other dangers.

(1) Permitted buildings and uses, except automobile parking and loading spaces, driveways, walks, and screen planting spaces shall comply with the setback requirements of the "R-2" Residence District and shall not be closer to the boundary line of any residence district than 25 feet.

(2) No minimum lot width or area is required, except that no building or buildings shall occupy in excess

of fifty (50%) per cent of the area of either an interior or corner lot. The aforementioned maximum permitted building area shall be reduced by five (5%) per cent for each 10 feet of building height in excess of 75 feet above the natural ground level of that portion of the premises on which such building is to be located. Nothing in this subsection shall remove other height limitations in this section.

(3) Side Yard.

(a) Except as otherwise set forth herein, no side yard shall be required, however, if any side yard is provided it shall be not less than six (6) feet wide.

(b) Where a building is on a lot abutting a residential district, a six (6) foot side yard will be required.

(c) Where one side yard abuts upon a railroad right-of-way, said side yard shall be a minimum of 40 feet in width.

(4) Rear Yard. Accessory Buildings; Loading and Un-Loading.

(a) There shall be a rear yard having a minimum depth of forty (40) feet.

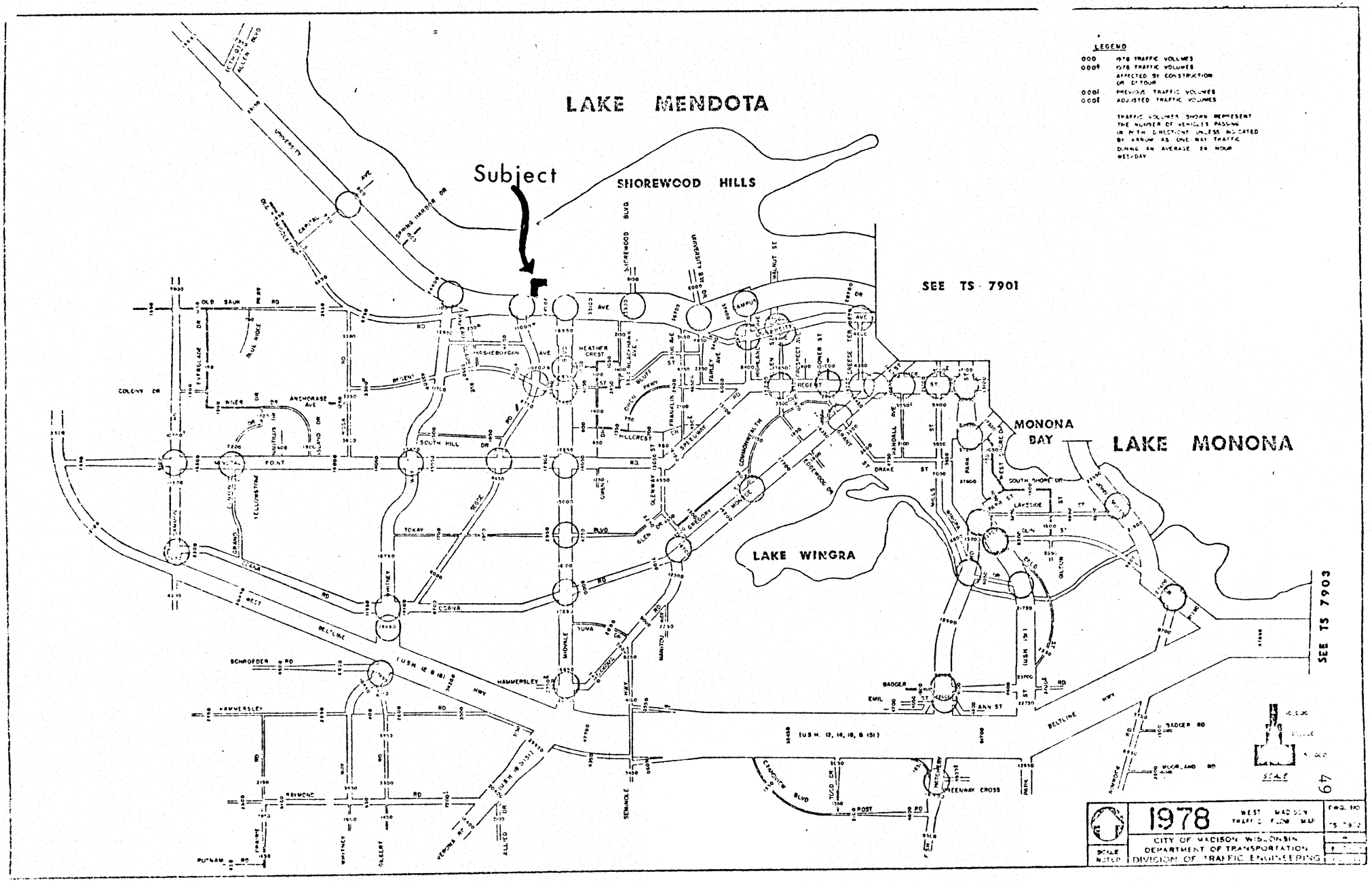
(b) Accessory buildings shall not occupy more than thirty (30%) per cent of the area of the required rear yard and shall not be closer than six (6) feet from the rear lot line except where the rear yard abuts upon a railroad, no accessory building shall be located therein.

(c) Off-street parking consisting of one parking space of 200 square feet shall be provided for each 600 square feet of office floor space in any principal building constructed hereunder and sufficient space off the public street shall be provided for the loading and unloading of trucks if regular deliveries of merchandise, materials or supplies are made to any building or structure erected under the provisions of this section.

(d) Adequate facilities for the removal or incineration of burnable trash and rubbish shall be provided.

APPENDIX F

MADISON TRAFFIC COUNTS



APPENDIX C

MECHANICAL SYSTEM DETAILS[1]

1. Heating system

a. Heating is provided by two gas-fired hot water boilers in the penthouse. One boiler is out of service and the second boiler also requires major repairs.

b. Radiation is provided at the exterior walls of the building with two-pipe direct return system and a separate 222 GPM radiation pump. There is no control valve on radiation and the water temperature is varied with outside temperature through a 3-way valve. Radiation on 4th through 14th floor is provided with two loops covering the complete floor.

c. Hot water is also provided to air-handling units heating coils for heating space with 425 GPM hot water pump.

2. Cooling system

a. Cooling is provided through a 260-ton electric centrifugal chiller located in the penthouse supplying 42°F water with 690 GPM chilled water pump. Condenser water pump of 750 GPM circulates water through the chiller to the cooling tower. Chemical treatment seems to be very marginal. Chilled water is pumped to the cooling coils in the air-handling units.

3. Air-conditioning and ventilation system

a. There are six (6) air-handling systems serving the complete complex as follows:

1. One multizone blow-thru air-handling unit located on the first floor serving 3 floors. There are only three zones, each serving one complete floor.

2. Five air-handling units with face and bypass dampers serving 11 floors (4th-14th). Five thermostats located at 7th floor control, each air-handling unit heating or cooling coil to maintain space temperature.

3. Unit #2 serves west and northwest zone.
#3 serves interior zone.
#4 serves north zone.
#5 serves east and northeast zone.
#6 serves south and southeast zone.

b. Center core is used as a return air plenum. Return air is provided with two fans in the penthouse. Penthouse is used as a return air and relief plenum.

c. Air is supplied to floors through concrete shafts located at the exterior of the building. Air is supplied to each floor with 3'6" duct at ceiling. Ceiling plenums are used as supply plenums.

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[1]Source: MDI Mechanical System Design Review and Recommendations.

APPENDIX D

MECHANICAL DESIGN COMMENTS AND RECOMMENDATIONS[1]

Design Review

MDI completed the system design review and the preliminary calculations. The following are the comments:

a. The radiation as installed cannot keep the building up to temperature. The additional heating has to be supplemented by the air system on all floors except 1st floor.

b. The heating system as intalled on 4th through 14th floors will not perform properly due to different solar exposures and the direct return water system. A direct return system is hard to balance for proper flow in each area.

c. The breaking of pipes in different areas can be attributed to freezing, defects in manufacturing, and improper expansion joints and anchors.

d. The hot water boiler problem seems to be a thermal shock that breaks the pipe at the joints. The water is leaking in the present boiler, requiring immediate repair.

e. The air-handling unit heating coil on the 1st floor might have frozen. It is removed and lying on the unit with some panels taken off.

f. Chemical treatment to the chiller does not seem to be adequate for proper control of water condition.

g. The concrete air shafts serving 4th through 14th floors seem to be leaking air. Also, the ducts for taking air off at each floor from the shaft are not properly sealed. It is assumed that the inner block wall of the air shaft is properly sealed.

h. Air-handling system serving 1st, 2nd, and 3rd floor is big enough to handle these floors.

i. The air system as provided for the south, east, and west side on the 4th through 14th floors is almost 40 to 50% low in capacity. The air-handling units serving the north side has enough air to take care of north side and can provide air to the interior space. The other units have to be reworked for proper air distribution.

j. Domestic hot water circulating pump is broken and needs replacement.

k. The cooling load preliminary calculations are based on no drapes or venetian blinds.

1. The existing building structure is poorly insulated with large areas of glass. The exposed concrete columns and floors act as a radiant heating system during summer and radiant cooling system during winter, making people very uncomfortable at the exterior walls.

m. Temperature control system seems to be out of calibration.

Recommendations

Most of the mechanical problems on this project are attributed to the general building construction. We would like to rectify the source of the problems rather than ptach up the system. We are listing the recommendations with different alternatives. The cost of the retrofit can be evaluated after the acceptance of certain recommendations. The recommendations are as follows:

1. General building construction

a. Insulate with styrofoam and stucco the exterior of the exposed columns and exposed floor slab at each floor.

b. Provide solar film on exterior glass to reduce cooling load 20 to 25%.

c. Venetian blinds and/or drapes can be considered to reduce solar load.

d. New interior glass area shall be reduced to 50% with insulated panels at bottom and top with air space in-between glass. The reduction in glass will help reduce additional solar cooling load and heating load to match the existing radiation.

e. Additional insulation shall be considered for walls and roof on 1st through 3rd floor.

2. Mechanical systems

Heating

a. Replace boilers if the cost of fixing is too high. The new boilers shall be cast iron to avoid thermal shock.

b. Check piping system for lime-up as the make-up to the existing hot water system is continuous due to a leak in the boiler.

c. Repipe radiation with additional zones and control valves on radiation with flow meters.

or

Revise the piping to make the system reverse return with controls on south zone only.

or

Provide damper on radiation with manual controls, which is objectionable to the tenant most of the time.

d. Radiation has to be replaced if the area of glass is not reduced.

e. Replace damaged radiation and provide new supports, anchors, and expansion joints as required.

f. If the 1st floor, 2nd floor, and 3rd floor areas are subdivided, radiation shall be provided on west wall.

Cooling system

a. The chiller shall be checked for lime-up. All controls shall be calibrated. Provide additional gauges, as required, to establish proper flow of chilled water and condenser water.

b. Provide temperature differential across chiller to reset chilled water temperature for energy conservation.

c. Provide demand-limiting switch on the chiller to keep the electrical demand down.

d. Provide adequate chemical treatment system.

e. Clean up condenser water piping system if limed up.

Air-handling and ventilation system

a. Existing air shaft will be used for supplying air to 4th through 14th floor. The air shafts have to be lined with insulation and sealed. New duct take-offs may be required at different floors. If the shafts cannot be lined and if static pressure cannot be maintained, it is almost impossible to make the system work.

b. Ceiling plenum can be used as a return air plenum.

c. Variable volume boxes can be installed above the ceiling with air outlets.

d. The supply air distribution system has to be reworked for proper air flow at the loads. The existing air handling systems in the penthouse will be big enough to handle 4th through 14th floors with variable air volume system as the load can be shifted from morning to evening. The existing air distribution system seems inadequate as more air quantities are distributed at low load side and less air at high load sides, particularly east, west, and south.

e. The controls will be revised to proper variable volume system throughout complex.

f. The outside air supply will be reduced as per new codes and toilet exhausts.

g. Air handling unit serving 1st, 2nd, and 3rd floor may have to be replaced.

h. If the air shafts can be fixed, a sheet metal duct (oval or rectangular) can be dropped with openings at each floor to make the system function properly.

i. Air-handling system will not be used for heating because of the operating cost.

j. Access panels shall be provided for fire dampers at each floor.

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[1]Source: MDI Mechanical System Design Review and Recommendations.

APPENDIX E

HEAT LOSS CALCULATIONS[1]

Thermal conductivity value* = U = 1/R

*units of BTU/hour-sq. ft./°F

R = thermal resistivity

U for 1/4" glass = 1.13

U for double pane, 1/4" glass panes, with a 1" dead air space between panes = .53

U for exterior walls = .1

U for ceiling with insulation = .0345

U for ceiling without insulation = .1

Thermal conductivity @ "typical" winter temperature of 68°F inside and 0°F outside: delta T = 68°F

For single pane: thermal conductivity = U × ΔT = 1.13 BTU/hour-sq. ft./°F × 68°F = 76.84 BTU/hour-sq. ft.

For double pane: thermal conductivity = U × ΔT = .53 BTU/hour-sq. ft./°F × 68°F = 36.04 BTU/hour-sq. ft.

For ceiling with insulation of R=29 and a depth of 10": thermal conductivity = U × ΔT = .0345 BTU/hour-sq. ft./°F × 68°F = 2.35 BTU/hour-sq. ft.

For concrete exterior walls: thermal conductivity = U × ΔT = .1 BTU/hour-sq. ft./°F 68°F = 6.8 BTU/hour-sq. ft.

Total thermal flows*

*thermal flow = conductivity × area

Areas	
Total glass surface area =	18,830 sq. ft.
Total exterior wall surface area =	24,112 sq. ft.
Total ceiling surface area =	15,145 sq. ft.
Total	58,087 sq. ft.

Single pane glass thermal flow = 76.84 × 18,830 = 1,446,897

Double pane glass thermal flow = 36.04 × 18,830 = 678,633

Concrete exterior walls thermal flow = 6.8 × 24,112 = 163,961

Ceiling w/o insulation thermal flow = 6.8 × 15,145 = 102,986

Ceiling with insulation thermal flow = 2.35 × 15,145 = 35,591

Total thermal conductivity*

$$*\text{thermal conductivity} = \frac{\text{total flows-BTU/hour}}{\text{total areas-sq. ft.}}$$

Before improvements

$$= \frac{(1,446,897 + 163,633 + 102,986)}{(18,830 + 24,112 + 15,145)} = 29.5 \text{ BTU/sq. ft.}$$

After improvements

$$= \frac{(678,633 + 163,961 + 35,591)}{(18,830 + 24,112 + 15,145)} = 15.1 \text{ BTU/sq. ft.}$$

---

[1]As calculated by Gerry Hermann (engineer) and Steven Clauson.

APPENDIX F

SCENARIO 1

CLASS A OFFICE TOWER

1. PROGRAM:

Renovate existing shell for office suites.
Construct 100-stall parking ramp above existing parking lot.

2. REVENUE UNITS:

First 3 floors: 7,500 sq. ft. GLA of Class C space on each floor.
4th through 14th floors: 5,679 sq. ft. GLA of Class A space on each floor.

3. CAPITAL OUTLAYS:

$30/gross sq. ft. for renovation, $10/sq. ft. of which is a tenant allowance:

$30/sq. ft. 98,886 =	$2,966,580
100-stall ramp @$4000/stall	400,000
	$3,366,580

4. POTENTIAL ANNUAL INCOME:

Floors	Area(sq. ft.)	Rent($/sq. ft.)	PGI	
1-3	3 × 7500 = 22,500	$ 7.00	$157,500	
4-6	3 × 5679 = 17,037	9.00	153,333	
7-8	2 × 5679 = 11,358	10.00	113,580	
9-11	3 × 5679 = 17,037	11.00	187,407	
12-14	3 × 5679 = 17,037	12.50	212,963	
Total	84,969			$ 824,783

Vacancy losses: 7 % of PGI

5. PROJECTED ANNUAL EXPENSES:

Operating expenses (17% of gross rent)	$ 140,213
Real estate taxes (15% of gross rent)	123,717
	$ 263,930

6. TERMS OF FINANCING:

20-year IRB at 12% interest, monthly payments, mortgage constant = .132130, debt cover ratio = 1.3

SCENARIO 1

CLASS A OFFICE TOWER

R/U		R/U		R/U				
×	+	×	+	×				
N/U		N/U		N/U				
=								
GI 824,783	×	DP .85	=	Cash 701,065				
×				−				
1-DP .15				OE 140,213				
=				−				
ECM 123,717				CR 21,683				
−				−				
VAC (7%) 57,734				RET 123,717				
−				=				
RES 21,683				CDS 415,452				
=				÷				
CT 44,299				MC .132130				
÷				=				
EC .07				JM 3,144,267				
=								
JE 632,842		+						
		=						
		JPB 3,777,109						
		−						
		CO 3,366,580						
		=						
		BP 410,529						

SCENARIO 2

220-UNIT HOTEL

1. PROGRAM:

Renovate existing shell for hotel units.
Renovate 3rd floor for restaurant.
Renovate 1st and 2nd floors for housekeeping, maintenance, and storage.

2. REVENUE UNITS:

1st and 2nd floors: 14,000 sq. ft.
3rd floor: 7500 sq. ft. restaurant
4th through 14th floors: twenty 250 sq. ft. hotel rooms/floor

3. CAPITAL OUTLAYS:

$25,000 per room for renovation of rooms and public lobbys: $25,000/room × 220	$5,500,000
$40/sq. ft. for restaurant: $40/sq. ft. × 7500 sq. ft.	300,000
$15/sq. ft. for housekeeping, maintenance, storage $15/sq. ft. × 13,000 sq. ft.	195,000
100-stall parking ramp @ $4000/stall	400,000
Total	$6,395,000

4. POTENTIAL ANNUAL INCOME:

Hotel rooms (365 nights×220 rooms/night×$40/room)	3,212,000
Restaurant space rents (7500 sq.ft.×$10/sq.ft.)	75,000
Total	$3,287,000
Vacancy losses: 40% of room PGI	1,284,800

5. PROJECTED ANNUAL EXPENSES:

Operating expenses (45% of gross rent)	$1,479,150
Real estate taxes (12% of gross rent)	394,440
Total	$1,873,590

6. TERMS OF FINANCING:

20-year IRB at 12% interest, mortgage constant = .132130, debt cover ratio = 1.3

SCENARIO 2

220-UNIT HOTEL

R/U		R/U		R/U				
×	+	×	+	×				
N/U		N/U		N/U				
=								
GI 3,287,000	×	DP .50	=	Cash 1,643,500				
×				−				
1-DP .50				OE 1,479,150				
=				−				
ECM 1,643,500				CR 264,000				
−				−				
VAC 1,284,800				RET 394,440				
−				=				
RES 102,800				CDS -494,090				
=				÷				
CT 255,900				MC .132130				
÷				=				
EC .15				JM 0				
=		+						
JE 1,706,000		=						
		JPB 1,706,000						
		−						
		CO 5,995,000						
		=						
		BP -110,845						

SCENARIO 3

77-UNIT APARTMENT TOWER WITH 3 FLOORS OF CLASS B OFFICE SPACE

1. PROGRAM:

Renovate 1st floor as storage.
Renovate 2nd and 3rd floors as Class B office space.
Renovate 4th through 14th floors as apartments.

2. REVENUE UNITS:

2nd and 3rd floors (15,000 sq. ft. GLA)
4th through 14th floors (77 apartments)

3. CAPITAL OUTLAYS:

4th through 14th floors (65,801 sq. ft. @$25/sq.ft.)	$1,645,025
1-bedroom units (55 bathrooms×$50/sq.ft.×50 sq.ft.)	137,500
2-bedroom units (22 bathrooms×$50/sq.ft.×65 sq.ft.)	71,500
	$1,854,025
$20/sq.ft. × 28,010 sq.ft.	560,200
Total	$2,414,225

4. POTENTIAL ANNUAL INCOME:

Apartments:

Floors	No.of Units	Monthly Rent/Unit	No. of Floors	12 Months	PGI	
4-6	5	$325	3	12	$ 58,500	
	2	400	3	12	28,800	
7-9	5	345	3	12	62,100	
	2	425	3	12	30,600	
10-12	5	370	3	12	66,600	
	2	460	3	12	33,120	
13-14	5	400	3	12	48,000	
	2	510	3	12	24,480	$ 352,200

Offices:

2nd floor (7500 sq.ft.×$6/sq.ft.)	$45,000	
3rd floor (7500 sq.ft.×$6.50/sq.ft.)	48,750	93,750

Vacancy losses:

Apartments: 2% × 352,200	$ 7,044	
Offices: 5% × 93,750	4,688	
PGI $445,950-vacancy =		$ 434,219

5. PROJECTED ANNUAL EXPENSES:

Real estate tax: 12% of gross rent	$ 53,514	
Operating expenses: 45% of gross rent/office	42,188	
55% of gross rent/apt.	193,710	
Total		$ 289,412

6. TERMS OF FINANCING:

25 yr. amortization, 10 yr. term, 12% interest, monthly payment loan, mortgage constant = .126384

SCENARIO 3

77-UNIT APARTMENT TOWER WITH 3 FLOORS OF CLASS C OFFICE SPACE

R/U		R/U		R/U				
×	+	×	+	×				
N/U		N/U		N/U				
=								
GI	445,950	× DP	.80	= Cash	356,760			
×				−				
1-DP	.20			OE	95,702			
=				−				
ECM	89,190			CR	2,230			
−				−				
VAC	11,732			RET	53,514			
−				=				
RES	4,460			CDS	205,314			
=				÷				
CT	72,998			MC	.126384			
÷				=				
EC	.10			JM	1,624,525			
=								
JE	729,980	+						
		=						
		JPB	2,354,505					
		−						
		CO	2,414,225					
		=						
		BP	-59,720					

SCENARIO 4

77-UNIT CONDOMINIUMS AND OFFICE

1. PROGRAM:

2. REVENUE UNITS:

Floors 1-3 office 3×7500=22,500 sq. ft. NLA
4-14 condos 1×11×625=6,875 sq. ft. NLA
5×11×875=48,125 sq. ft. NLA

Total NLA = 77,500 sq. ft.

3. CAPITAL OUTLAYS:

One 1-bedroom/1 bath @ 625 sq. ft.
Five 2-bedroom/1 bath @ 875 sq. ft.
3 floors office space 7500 sq. ft.

Floors 4-14 $30/sq.ft.×GBA(69,931-4,125)	$1,974,180
1 bedroom $50/sq.ft.×(50 sq.ft. bath×11)	27,500
2 bedrooms $50/sq.ft.×(65 sq.ft. bath×55)	178,750
	$2,180,430
Renovate office space $20/sq.ft.×28,010	560,200
100-stall parking ramp	400,000
Total	$3,140,630

4. POTENTIAL INCOME:

Condominiums (one-time sale):

Floors	No.of Units	No. of Floors			
4-6	1	3	35,000	$ 105,000	
	5	3	45,000	675,000	
7-9	1	3	40,000	120,000	
	5	3	50,000	750,000	
10-12	1	3	42,500	127,500	
	5	3	52,500	787,500	
13-14	1	2	45,000	90,000	
	5	2	55,000	550,000	$3,205,000
Office (annual)					$ 135,000

5. PRESENT VALUE OF CONDOMINIUM INCOME STREAM:

$3,205,000 gross income ÷ 18 mos. = $178,056 every month for 18 mos.

$178,056 monthly income × present value of an annuity where the factor is 16.909 (8%) = $3,010,739.

6. JUSTIFIED PROJECT BUDGET (JPB):

JPB = PV (condominium sales) + JPB (offices)

= $3,010,739 + $666,632

= $3,677,371

SCENARIO 4

77-UNIT CONDOMINIUMS AND OFFICE

R/U		R/U		R/U
×	+	×	+	×
N/U		N/U		N/U

=

GI	135,000	×	DP	.85	=	Cash	114,750

×

1-DP	.15

=

ECM	20,250

-

VAC	1,620

-

RES	4,050

=

CT	14,580

÷

EC	.11

=

JE	132,545

+

=

JPB	666,632

-

CO	560,200

=

BP	106,000

-

OE	22,950

-

CR	4,050

-

RET	20,250

=

CDS	67,500

÷

MC	.126384

=

JM	534,087

APPENDIX G

CASH EQUIVALENCY CALCULATIONS

Average interest rates for commercial buildings between 25,000 and 100,000 square feet:[1]

Year	Average Interest Rate
1980	.1342
1979	.1092
1978	.0982
1977	.0916
1976	.0967
1975	.1009
1974	.1029

110 East Main (time of sale 10/76)

(1,150,000×.75) × .088056 = $75,948 annual debt payment

75,948×(9.676) =	$ 734,891	PV of payments
	+287,500	Downpayment
	$1,022,391	Cash equivalent
	× 1.36	Time adjustment[2]
	$1,391,008	

149 East Wilson (time of sale 8/78)

$220,000 × .088056 = 19,371 annual debt payment

19,371×(9.57) =	$ 185,387	PV of payments
	50,000	Downpayment
	$ 235,387	Cash equivalent
	× 1.15	Time adjustment
	$ 270,694	

16 North Carroll (time of sale 9/74)

402,307 × .084816 = $34,122 annual debt payment

34,122×(8.313)×(.375) =	$106,525	PV balloon
	+157,963	Downpayment
34,122×(6.566)	224,070	PV payments
	$488,588	Cash equivalent
	× 1.6	Time adjustment
	$781,741	

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[1] Investment Bulletin, American Council of Life Insurance.

[2] Time adjustment factor derived from Federal Reserve Bulletin, GNP deflator index.

137 East Wilson (time of sale 10/78)

Cash to seller	$240,000	Cash equivalent
	1.13	Time adjustment
	$271,200	

301 North Broom (time of sale 11/79)

9,450×(3.605) =	$34,390	PV of payments
	20,000	Downpayment
9,450×(3.86)	35,869	PV balloon payment
	$91,259	Cash equivalent
	× 1.06	Time adjustment
	$96,570	

212 East Washington (time of sale 12/77)

Assume cash equivalent price	$472,000	
	× 1.217	Time adjustment
	$574,209	

102-110 North Hamilton (time of sale 7/77)

330,000×.75×(.0966273) = $23,915 annual debt payment

23,915 × 3.87 =	$ 92,636	PV payments
23,915 × 5.82 =	139,258	PV balloon at time zero
	82,500	Downpayment
	$314,395	Cash equivalent
	× 1.26	Time adjustment
	$395,464	

202 Henry Street (time of sale 3/79)

185,000 × (.1158) = $21,423 annual debt service

21,423 × 1.71 =	$ 36,717	PV of payments
21,423 × 6.155 =	131,867	PV of balloon at time zero
	72,000	Cash to seller
	$240,584	Cash equivalent
	× 1.09	Time adjustment
	$262,933	