JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

- II. CLASSES AT THE UNIVERSITY OF WISCONSIN--MADISON
 - H. Business 555/527: Commercial Property Development and Management
 - 5. Student Projects and Problem Sets

BUSINESS 555

COMMERCIAL PROPERTY DEVELOPMENT AND MANAGEMENT

PERT PROBLEM #2

Refering to the network diagram and printout contained in the <u>PERT User's Manual</u> you will assume that this is a real project that you are currently working on.

PROBLEM STATEMENT

Each person may work with a partner, but no more than one. Each of these teams is to assume that the time estimates are accurate as given, but upon review it is found that the following activities have been left out of the diagram and consequently out of the plan:

ACTIVITY	AVERAGE TIME
Pour Footings	4
Pour Concrete Foundation	2
Lay Brickwork (exterior trim)	6
Install Basement Drain and Plumbing	1
Fasten Gutters and Downspouts	1
Lay Storm Drains For Rain Water	1
Pour Walks	1
Landscaping	3
Finish Roofing and Flashing	2
Grading	2

ASSIGNMENT

The assignment is to incorporate these activities into the diagram, in a logical sequence, redraw the network with the new activities, code the data, have the data processed, evaluate the results, and finally trace the critical path.

Feel free to play with this data set if you wish. You may want to change some of the times or change the design of the network. Also you may want to reduce the amount of float in the project or attempt to meet predetermined dead-lines, either at the end of the project or within it.

DUE DATE

Projects 1 and 2 will be due at class time 2/13/74 that is two weeks from today

Slide Project: Analysis of a Suburban Office Building 540 Frontage Road, Northfield, Illinois

Mand min

Bus. 555 Dr. Graaskamp

Hugh T. Edfors 5/3/74

Building and Rental Data

Construction started in 1966. Completed in 4 phases by 1973. Rambling 2 and 3-story structure.

Land area: 4.5 acres

Net useable rental space: 139,000 sq. ft.

Structure: Steel framing, 20-22 ft. spans reinforced concrete floors

HVAC: Gas fueled central heating. Series of central air conditioning systems (roof mounted), incineration system

Fully carpeted floors. Non-load bearing, wood-framed, drywalled interior walls. 4 ft. module base.

5 single banks of elevators throughout building

Exterior: Black face brick/ward Masonite-type panels and trim. Aluminum trim. Standard fixed windows.

Fully sprinklered parking area under building.

Parking space adjacent to building. Approximately 700-750 parking stalls

Special features: sauna, restaurant/lounge, (800 sq. ft.), atrium. Secretarial services available.

Rentals range from \$6.60 to \$7.50 sq. ft.

All rentals are gross rentals + pro rata share of A/C, utilities. Unlike the so-called "New York" definition of rentable area common in the market area, the rentable area here does not include pro rata share of such accessory areas as public corridors, elevator lobbies, janitor's closets, etc.

Most leases are 2-5 years.

Typical office is about 18' X 25'. Much variation in office size since offices are "custom designed" for tenants. Some range up to 1,000 sq. ft.

Efficiency ratio: about 80%

Occupancy: owner claims 90-95%

The Willow-Hill Executive Center represents the resultant fit of a project within the limiting constraints imposed upon the developer in search of an opportunity. In this example, the developing entity was a small firm engaging in real estate appraisal, sales, development, architectural services, and property management. The uniqueness of this firm is indicated by the fact the principals (architect, broker, appraiser/analyst) are all members of the same family and all have had extensive educational training, at the post-graduate level, in their respective fields. Thus, the development process in this case proceeded perhaps more smoothly than usual since, (1) the advantage of a well-functioning family organization permitted certain pooling-of-knowledge, economies of scale, greater co-operation and incentives towards a common goal, etc., (2) various in-house profit centers were effectively utilized, and (3) perhaps the most significant attribute, excellent knowledge of the area. The firm which developed and now manages this office center had the initial advantage of having a well-defined objective: to search for the opportunity and space to build a commercial income-producing development in a market area near their residences with which they were quite familiar. Thus, as a result, the developer - owners conveniently conduct their own business activities within offices in the building they developed; property management activities obviously are thus more cost-effective and less troublesome.

The type of office space market to which this development appeals can be considered in the commercial category in general terms. Refining this market into more specific terms, the developers wished to sell to a specific segment of the general service-oriented market, specifically, small-sized tenants engaged in highly-skilled, professional service type businesses.

As an example, a "typical" tenant might be an advertising agency, law firm,

stockbroker, manufacturer's rep's, consulting firms, etc. of from 1 to 10 associates. Consequently, the client's search for a site in providing space for this professional service-type sub-market was of the paramount importance.

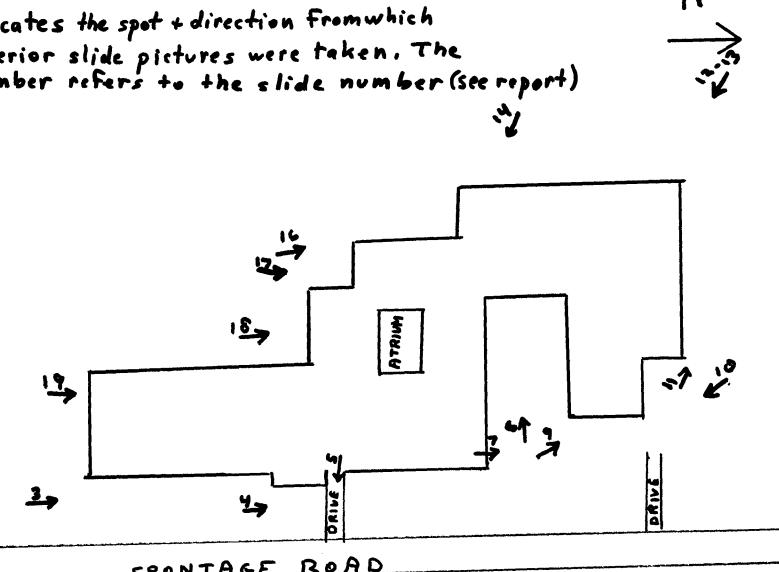
This particular market segment, to whom the adage "time is money" is of utmost importance, predominantly lives in the northern suburbs of the Chicago metropolitan area. Thus, location of an office building appealing to this market segment's needs could logically be near their residences or in Chicago's financial district in the Loop, about 15-20 miles away. However, recognizing the fact that (1) the majority of potential tenants often come from the immediate community; (2) minimization of transportation time is of utmost concern to this market segment, tespecially quick access to airport facilities; and (3) preliminary market analysis indicated that many potential tenants, very affluent, demanded office space for only part time or occasional work (e.g. a retired lawyer or CPA), situated within an affluent community where existing business and social contacts were of significant value, a site was chosen in a suburban area, characterized by one of the highest per-capita incomes in the United States. The excellence of this all-important location factor for this particular market segment can be further seen since the site is at a visually strategic position directly adjacent to major expressway/interstate, the Edens Expressway, serving the affluent northern suburban Chicago area. Thus, with access to this expressway being 1/2 mile away along a frontage road, tenants would enjoy a traveltime to their homes within a matter of minutes, travel-time to the Loop of about 30 minutes, and about 30-35 minutes travel-time to O'Hare Airport, assuming reasonable traffic conditions. Future trends for the area as a locus of high-income professional workers suggest an enhancement to the value

of strategic location of this site, even though competition from similiar professional-oriented buildings will increase.

The subject building was designed to appeal to this professional servicefirm market. As the slides will show that follow, a tasteful, restrained,
yet modern structure was applicable. An expensive aura had to be created;
yet, owing to the high land costs of the area, the cost constraint on the
improvements was severe in order to realize an adequate cash flow. Hence,
the architecture had to provide a structure which looked more expensive
than it actually was, yet with minimal long-term maintenance costs. The
comments accompanying the following pictures will indicate, among other
things, many of these product attributes appealing to the indicated target
market:

Approximate Shape of Building

(3 indicates the spot + direction from which exterior slide pictures were taken. The number refers to the slide number (see report)



FRONTAGE ROAD

Slide No.

Analysis and Comment

1.

From the front of the building the view is toward the south looking toward the city of Chicago, 15 miles away. The frontage road at the near left leads 1/2 mile south to the access point of the important Edens Expressway, seen at the far left. An ideal location for the subject property.

The building has an immediate visual impact on cars travelling towards Chicago; this factor (of image awareness to the weary commuter travelling to Chicago's CBD) is an implicit marketing advantage and should not be taken lightly.

2.

The approach northwards to the building. Minimal sign size and good landscaping help the project stand out from rather dreary surroundings.

3.

Upon closer approach in this northerly direction (an approach most tenants and visitors undertake) the initial impact of contrasting textures and attention to landscaping is inviting.

4.

The restrained main entrance to the building. The street number should be made more conspicuous. Also, the site planning, in the same street is soluting the main entrance (whose initial impact is of extreme importance) makes it more symbolic than functional. Access to this entrance from the only available parking stalls (located under and behind the building) is confusing, rather difficult, and dangerous. It appears that little use is actually made of this entrance by tenants/visitors who drive.

5.

This view, showing entrance to the parking areas under the buildings, indicates the non-functional planning for the front entrance. It is seen that access to the main entrance (part of the main entrance lobby is at the far right of this photo) requires the pedestrian to walk up this entrance driveway competing for space with oncoming cars. No pedestrian path to the main entrance is thus provided. However, there are access stairs under the building in the parking area (as later slides will show). However, some of these are farther away than the main entrance for many points and are all initially confusing to the newcomer, as no directional cues are present.

6.

A view looking out of main entrance, showing lack of pedestrian walk. Good use of low-maintenance landscaping.

7.

View towards secondary entrance at NE corner of building. Effective use of inexpensive, maintenance free wood railroad ties as a decorative, yet functional retaining wall. The parked delivery truck indicates a significant problem in the site planning: confusion as to how to reach building entrance points to the person unfamiliar with the office center. Related to this problem is the failure to provide specific areas for delivery, including parking, and lack of directional cues thereto.

8.

A view into an interior parking area between building wings.

The strang interplay of massive horizontal lines and numerous vertical is contrasting window mullions and steel framing members vapparent.

9. A view of the secondary entrance. Again, confusion to the unfamiliar since no signs vavailable. Building directory inside this entrance only lists those tenants in these wings; one attempting to locate other tenants — with the same property address, but different wings — would not know where to go.

This view gives a good indication of the size of much of the rentable office space preferred by the tenant.

10.

11.

12.

and

13.

14.

15.

Note the spotlights at the building corner providing a sense of security for late-night office workers. Also, the fact of landlord control over such items of tenant use as curtains (uniform white color) is apparent.

This view of a rear elevation shows the considerable area available for parking. The different wall/window treatment for this western-facing elevation appears to have functional significance as well as providing for architectural variety in this particular wing (built at a later date as part of phase IV). The reduction in relative glass area here and relatively more extensive use of face brick may have been designed for energy conservation and comfort reasons on this western-facing wall. Note that such tenant cars as a \$14,000 Citroën SM, \$9,000 Mercedes, Cadillacs, etc. give some to which indication of the type of market segment this office space complex appeals.

Various differences in exterior wall elevations here indicate the construction of this building in incremental phases.

The ceiling of the parking area under building should have at least received a paint covering to conceal the unsightly effects of drywall taping and sealing. This visual eyesore is inconsistent with the image of the building and could have been remedied with a minimal cost. Evidence of fire sprinkling system and alarm bell is seen in this area.

16. and 17.

Two views of southerly facing walls. Again note the relation between glass and brick area for these elevations facing the sun.

Use of stained glass is effective in creating colorful effects in interior from sunlight.

18.

Note here an imaginative use of landscape architecture and an extension of the style of the interior atrium. However, difficulties may arise in time as tree size and landscaping maintenance problems increase in the future; perhaps shrubbery would have been better.

19.

This close view of an exterior wall indicates the interplay of grass, brick, wood, and glass textures. Note that the black horizontal panels seen between the windows are not metal. The architect was successful here in making inexpensive building materials (Masonite-type panels) appear like expensive anodized/painted steel or aluminum plates. Wood mullions seen here are visually effective, but present maintenance problems. The mullions, as seen here on the building which was part of phase I 1969 construction, need a protective coating (e.g. Creosote).

20.

A closer view of the main entrance, leading directly to an impressive, tasteful lobby. It appears as if credence has been given to the basic idea that initial impressions one receives at the main entrance of a building are significant.

21-25.

Various scenes of this lobby. Note how the horizontal aluminum fascia is extended out from the interior to form a canopy over entering cars. Note the use of paintings and furnishings in an attempt to appeal to the tasts of the tenant.

26.

The single elevator in the main lobby flanked by a rather flamboyant building directory. Note that mention is not made of tenants located in the other wings of the northern parts of this building, although of the same street address. Also, directions are completely lacking. The lobby, while attractive, fails to provide directional cues to the visitor and could confuse one unfamiliar with the building plan.

27. and 28. Views of one of the entrances in the parking area under the building. Perhaps the soothing effects of the flowing water is a conciliatory attempt to placate the frustration of a visitor looking for a directory, signs, or directional information.

29.

One of the interior stairways required for fire code regulations; pure function here.

30.

One of the features offering a competitive edge for this office venture is the relatively wide hallways. Of course Muzak is available. Throughout this office building, subtle attempts have been made to make the work environment an extension of home comforts. For example, note the plush living room furniture at the space at the end of the hall, carpeting, stained wood trim, soft lighting, etc.

31.

A small lobby/waiting room for a custom-designed office. Note the stained glass motif as a continuation of that seen on some exterior windows.

32.

A typical sized office for the executive. The view outside is of the Edens Expressway and a forested open space area beyond.

33.

Another view from a typical office. This view is upon an atrium in the building, with a continuation of the motif seen on the exterior canopy of slide #18. This type of office space is much in demand and commands a premium rental; an imaginative, yet inexpensive use of otherwise wasteful space above the restourant.

34.

Vending machine room. Note the use of simulated wood-grained vending machines to maintain the "soft" wood textures throughout the buildings. This is an example of close attention to detail.

35.

Another example of a feature providing a competitive edge for the project: a sauna, which is heavily used.

and 36.

Because of adverse lighting conditions, pictures taken of the restaurant/bar of this office building were not suitable for use. However, the amenities offered by this excellent competitive edge are thought to be one reason for this project's steady high occupancy. The restaurant/bar facility provides a dark,cozy, and masculine mood through extensive use of rough-textured materials and furnishings. Rough-hewn massive oak tables, extensive stone and brick work, leather chairs and booths, fireplace, etc. are all features designed to appeal to the market segment for which this building's office space was directed. Furthermore, in realization that the highly-paid professional/executive tenants would have high opportunity costs for their time, it was excellent strategy to provide this type of restaurant, since its appeal would probably be more conducive to the often highly-productive business luncheon than the traditional

cafeteria style restaurant. Of course, having such a facility available to the busy tenant saves him much valuable time since he has little reason to drive to competitive restaurants. Although this restaurant facility perhaps has been included, as a loss leader type of product, its value seems certain as it appeared that it also attracted customers from outside this office center. The restaurant/bar facility represents another feature providing a competitive edge for this development.

VOYAGER VILLAGE BUSINESS 555 12/17/73

EDWARD OLSEN

A+

Script for carousel V6b

When plans were first introduced publicly that N.E. Isaacson and associates were going to develop over 6,000 acres in north-western Wisconsin as a year-round recreational complex, a strong negative sentiment evolved. The coalition formed included present lake home dwellers, year round residents of Polk and Burnett Counties, and environmental groups. The latter group created a great deal of controversy, as an ad hoc organization called the Ernie Swift Memorial carried out numerous acts of sabotage against the development. Local papers reported disturbances weekly as this last bastion of environmental quality pursued its goal of destroying Isaacson's natural wooden signs.

Most of my acquaintances were irate at the thought of a development of this sort, with the strongest opposition coming from friends who owned lake homes on nearby North Sand Lake and made it sound as if their lake was on the verge of extinction. Now Voyager Village is accepted by the locals, and I feel that this acceptance stems from the fact that Voyager Village has established itself as a viable alternative to the relentless onslaught of the "urban mobile army" which starts manuevers on Friday night and concludes all day Sunday, while settling down in between times their Winnebego's, Airstreams, boats, snowmobiles, and assorted paraphenalia into overcrowed, unplanned, unsanitary "camps" that blight nearly every lake and resemble something like migrant worker camps rather than vacation retreats.

In the pages and slides that follow, I will attempt to demonstrate how Voyager Village has achieved the great success it has; in less than three years of operation over 60% of the lots sold, a 15% buildout

rate, and in a normally lax selling period such as December, full page columns after columns of real estate transfers originating from Voyager Village.

The major reason for the success of Voyager Village is the driving force behind the development, N.E. Isaacson. Therefore, the paper will examine Isaacson as a developer, how he has carried out his objectives and concepts in Voyager Village, and will then focus on the final package that is offered and how this package is marketed to the public.

N.E. Isaacson of Reedsburg, Wisconsin is generally considered one of the premier lake developers in the country. What sets Isaacson above others is his sincere devotion to the concept of improving on nature. Isaacson began his current practice of keeping one step ahead of state regulatory agencies when he established minimum lot setbacks of 100 feet in 1960 at Upper Oconomowoc Lake.

Isaacson expects Voyager Village, his most ambitious undertaking to date, to become the standard bearer for the recreational development industry. A look at the land plan affords one insight into why Isaacson feels so strongly.

Voyager Village clustering in a very effective manner. Of the total 6,500 acres, 55% or 3,575 acres are designated open and are governed by a mandatory homeowners association. (See enclosure, Summary of Protective Covenants) Features owned and maintained by the Association include beach facilities, a lighted runway, golf course, ski hill, riding stable, etc. Aside from the obvious benefits derived from such facilities, they serve a purpose of providing for interaction between residents. A definite sense of community so essential

to a project of this nature, is apparent to even the casual passerby.

The land remaining for building is divided into 30 subdivison tracts which vary in size from 52 to 328 lots per tract. There is a total of 2,025 lots.

The inevitable result of the clustering is that the lots are relatively small. This does not present difficulties, if anything, one is struck by an uncrowded feeling. This is due to a number of factors: the land is very wooded (residents are prevented from cutting over 30% of the trees), there is a minimum required setback of 200 feet from the 8 lakes, all construction is required to be painted a natural stain which blends with the habitat, and of course the open areas which are left in a natural state.

Each subdivision has a central theme designed to fit the personality of the residents. As a consequence, the various amenities are utilized to their fullest. For example, the Spring Green subdivision (see enclosed map) is centered around the sixteenth and seventeenth holes of the championship golf course. The lots are wooded, the views are pleasing green fairways, etc. A word about the golf course. As an avid golfer I have played the young course many times, and each time I am more impressed. Designed by William Spears, nothing was sacrificed. Water holes were created and giant rolling greens, numerous bunkers and sandtraps combine to provide beautiful views and a challenging course, something that is permanent and will only improve over time.

The subdivisions and amenities, though quite spread out, are linked by miles of roads and trails. The automobile problem has been handled well as in many areas of the complex they are not in evidence, while the roads and directional signs that do exist are unassuming and seperated both visually and physically from the rest of the project.

This will be further illustrated by the slides.

Voyager Village, then, is a well planned, sophisticated example of how recreational land can be developed. The package is much more easily marketed because it sells itself in many ways. The rest of my paper is based primarily on a discussion with sales manager Paul Johnson, and will attempt to show how good planning pays off in marketing the project.

Over 90% of the Voyager Village market will come from the Minneapolis-St. Paul metropolitan area, which is easily accessible by a little over $1\frac{1}{2}$ hour drive. This easy access has changed since the projects conception, and Johnson expressed a real concern over the energy shortage which is bound to have a negative effect. The main thrust in promotion is to make people aware of the existence of Voyager Village. This is done through radio ads aired almost exclusively over the Twin City station WCCO radio, which is one of the most powerful stations in the Midwest. The ads are handled by the announcing team of Boone and Erickson, both veterans possesing a great deal of credibility. There are also spot TV ads and newspaper copy.

The Voyager Village staff feels very strongly that once awareness is achieved, the project will sell itself when people visit the project. The off-site sales office is located in Minneapolis and is engaged in obtaining names through such means as exhibitions at fairs, telephone books, etc. Once this is done, prospects are invited to dinner parties which include movies, slide shows, speakers, all of which are designed to instill curiousity and will hopefully lead up to the desired visit which is achieved through a free one day membership pass allowing

prospects to drive up, use the facilities, and "be a part of Voyager Village," Upon arrival, the prospect is confronted by one of about 20 salesmen. They then get a feel of price and are shown three lots. The salesmen are very low key and seem sincere in their belief in the Voyager Village concept. The stress is on creating a feel of belonging, the relaxed way of life at Voyager Village, and the impressive amenities that present an alternative to the usual fishing and swimming available at conventional lake property. It is sold as a year round second home which includes membership in a first class country at an appreciably lower cost (\$4,000-12,000) than conventional lake property. Lake property is currently selling at a minimum of \$100 per front foot, hence a bare minimum 100 foot beach lot costs \$10,000. Coupled with the lower price is the added inducement that property values have increased 48.6%, and that marketability will be enhanced by the addition of a resale office upon achieving sell-out.

The complete, well planned offering has paid off. Johnson said that in his three year association with Voyager Village there has been "... no major source of irritation, maybe three people have voiced displeasure with the project." He said the most common reaction has been an attitude such as, "... more beautiful than we expected."

Voyager Village seems like a natural for condominiums and plans call for opening one and two bedroom sites in the spring. The expected advantages offered will be capturing the market segment that wants to avoid maintenance, and perhaps more importantly as a sales tool. The condominiums will enable people to spend more than one day visiting, and Johnson was optimistic that the longer exposure time will be a definite sales plus.

Voyager Village will also begin relying more heavily on word of mouth selling through present owners.

In summary, Isaacson has achieved, through intelligent planning and execution, a complete amenity package that in a very short life has, for all practical purposes, made it. It is a great testimonial to the developer that a project of this size can be carved out of veritable wilderness with a minimal amount of environmental disturbance. More developments of this nature are needed in the future not only to provide for the necessary orderly control over the growing second home market, but to dispel the general negative public opinion toward recreational developers and their products.

Description of Slides

Refer to enclosed site map for locations of the following facilities.

- 1.) Apparently all amti-Voyager Village sentiment has not subsided, as evidenced by this defaced billboard 30 miles south of the project. "Minnesotans go home" and "Swampies"(slang for tourists) are the messages scrawled on sign.
- 2.) Same as #1.
- 3.) Directional signs leading to project. They serve the purpose while avoiding being obtrusive.
- 4.) Sign designed by the architect that designed the clubhouse. He now is on Isaacson's staff.
- 5.) Sign pointing the way to Voyager Village, located just off Highway 35, about 15 miles from the project.
- 6.) Another directional sign.
- 7.) Example of signs used to identify subdivisions.
- 8.) Sign identifying riding stable.
- 9.) Riding stable, which is located on Highway A, some miles from the center of the development.
- 10.) Same as #9.
- 11.) Sign identifying ski hill and chalet. By most standards, the hill is not very challenging.
- 12.) Ski chalet.
- 13.) Rope tow leading up the hill.
- 14.) Ski chalet.
- 15.) Sign designating the camper storage area. Owners are not allowed to park campers on their property when they are absent. This area is secluded from view.
- 16.) Camper storage area.
- 17.) Same as #16.
- 18.) The sales office, a 2500 square foot rennovated summer home located on Birch Island Lake. It is very rustic and provides a relaxed, easy going atmosphere for prospects. Future plans call for possible conversion to a restaurant and nightclub, which would be ideal because of the lake view and patio in front.
- 19.) Sales office.

- 20.) Entry path leading to the sales office is made of railroad ties. The path winds along a wooded trail near a small pond.
- 21.) Parking area near sales office which is protected from view by pine trees.
- 22.) Sales office from the shore of Birch Island Lake.
- 23.) Same as #22.
- 24.) Same as #23.
- 25.) Interior view of sales office entry area. Note Boone and Erickson poster on wall.
- 26.) Fireplace in sales office.
- 27.) Another fireplace in sales office provides a relaxed waiting area for prospects. The right side of this room is all glass and overlooks Birch Island Lake.
- 28.) Same as #27.
- 29.) Same as #28.
- 30.) View of clubhouse as you enter the main recreational area. The clubhouse houses the dining room, bar, Olympic indoor pool, showers, saunas, and auditorium. Parking is seperate from recreation area.
- 31.) Fireplace inside dining room.
- 32.) View of clubhouse from one of the main roads. Golf course borders on the right.
- 33.) The bar with the window in the background overlooking the pool. The bar doesn't take advantage of the view of the pool.
- 34.) A north-side view of the clubhouse. This part of the facility houses the pool. The north exposure provides less than ideal conditions for sunning.
- 35.) Example of typical home. The homes are generally modest. Note how the natural stain blends with the woods.
- 36.) Another home.
- 37.) Another home.
- 38.) Sign advertising Four Seasons Modular Homes which is a newly acquired subsidiary of N.E. Isaacson's. (See enclosed brochure.)
- 39.) One of the Four Seasons model homes.

- 40.41.&42 are miscellaneous homes.
- 43.) One of the eight lakes in the project.
- 44.) Distant picture of the sales office taken from the elevated seventh tee.
- 45.) One of the many beach facilities.
- 46.) Practice green with pro shop at left. This is a view the clubhouse overlooks.
- 47.) Future site of condominiums. Lake is over the hill in the background. (See map for vicinity)
- 48.) Tennis courts and shuffleboard near the clubhouse.
- 49.) Plane parked near runway, which is now lighted.

Slide 1.

The Toronto Dominion Centre was jointly conceived and carried out by Toronto Dominion Bank and Cemp Investments Ltd. It is located in the heart of Toronto's financial district. The centre is an imaginative composition of great structures and open space designed to revitalize downtown Toronto.

Slide 2.

On ground level there are three structures. One is a single story Banking Pavilion which is Toronto Dominion Bank's main branch. However, the most impressive part of the centre is its two massive towers. The tower to the left is the Toronto Dominion Bank Tower. It is presently the tallest structure in the British Commonwealth at 56 stories (740 ft.) high. The building was completed in 1967, with 8,500 people working in the tower daily. There is a total of 1,311,000 sq. ft. of legsable space and 6.7 acres of tinted glass was used in this structure.

The tower to the right is the Royal Trust Tower which was completed in 1969. It is 600 feet tall (46 stories). There is 917,700 sq. ft. of leasable space and 6,500 people are employed there. Glass takes up 4.7 acres of the building!s surface.

Slides 3 and 4.

This is inside the banking pavilion. The structure is 150 feet square. It has 22,500 sq. ft. of column-free space, which makes it one of the largest column-free areas in Canada.

Slide 5.

The banking pavilion is connected by the hallway shown here. Note again the extensive use of glass and the massive support: columns.

Slide 6.

A large quantity of marble was used throughout the centre entrance. The first level of each of the two towers shown in this slide is no exception. Note the receptionist in the foreground. Many of these information hostesses and uniformed security police roam the complex to insure harmony.

Slide 7.

The Dominion Tower is serviced by a bank of 24 high-speed elevators; the Trust Tower has 20. The elevators are in the central core of the building as are all of the heat, electric and air conditioning facilities.

Slides 8 and 9.

The two towers house approximately 14,000 office workers. The offices are all very modern and have a great view. Thus office space in either of the towers is a status symbol.

Slides 10, 11 and 12.

On the top of the Dominion Tower is an extensive observation deck covering an entire floor. The view is fantastic! On a clear day you can see Niagra Falls, which is over 100 miles away. This view attracts scores of people daily. There is a 50¢ admission charge per person for the observation deck which includes a souvenir gift shop.

Slide 13.

relow the observation gallery is the Fifty-Fourth, a very elegant dining room. The complex includes eight restaurants ranging from the sophistication of the Fifty-Fourth to the Cafe a Go-Go in the shopping mall, which provides quickie snacks and ice-cream cones for the shoppers.

Slides 14, 15 and 16.

Beneath the towers is a shopping mall consisting of 56 shops from leading women's shops to bakeries. The majority of the shops, however, sell convenience products that are bought by the towers 14,000 employees who are almost a captive market. The mall utilized indirect lighting, terrazo floors and marble and glass walls. All the shops have uniform storefronts and signs.

There is also a modern 700 seat cinema in the mall.

Slides 17 and 18.

There is easy access to the shopping concourse from escalators within the towers and a stairway from outside. These small signs are the only signs advertising the shopping mall, but in spite of this the mall is doing a very good business.

In addition to the 14,000 working in the centre, approximately 70,000 people visit the centre daily. Ample underground parking is available for both customers and employees of the tower.

Slide 19.

The concept of the centre was recommended by the late Mies: van der Rohe. The architectual team included John B. Parkin Associates and Pregman and Hamann.

Construction is currently underway on the Dominion Centre's third tower, scheduled for completion in early 1974. The tower will be 32 stories and already has a ace rented by two major tennants.

The open-air plaza will also be expanded to 4 1/2 acres with the building of the new tower. This open area is acclaimed for its lawn, flowers and regular summer concerts.

The Dominion Centre is truly a 'super block'. Besides providing Toronto with a large amount of office space and a shopping mall, it is an excellent tourist attraction and a city landmark.