TIPPECANOE COUNTRY CLUB

STUART R. SHADE
ARCHITECTURAL THESIS PROJECT
BALL STATE UNIVERSITY
MAY 19, 1979
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INTRODUCTION

Problem: To create a facility for the residents of the Monticello area in order to fulfill their needs for leisure activities and participation in primary group relationships, important to the psychological well-being of the individual.

The country club has developed over the years as a means of escape from the pressures and complexity of city life and society. The club can offer the small group contact needed by everyone, as well as offering a wide variety of leisure activities in a rural environment.

In designing the facilities for the Tippecanoe Country Club, I feel that the two most important ideas that must be examined are:

- defining the club, its atmosphere, what must be present to make it successful as a club
- defining leisure activity, leisure time, how does this activity vary between the different generations, sexes
The Tippecanoe Country Club is a project which involves the creation of a restaurant, pro shop, and club facilities to be adjacent to an existing 18 hole golf course. There are two limiters which make this a unique project. Number one is the fact that the existing building site is extremely small and has pedestrian access on only one side. Two sides are bordered by water and the third by the golf course. The second limiter is that the membership is quite large, around 900 people.

The scheme that I chose is an atrium plan with functions radiating outward. The main reason for using this scheme is to be able to create an open atmosphere inside and to create a sense of activity. The need to create activity is especially important during the winter months when the main drawing card, the golf course, is closed.
<table>
<thead>
<tr>
<th>FACILITY</th>
<th>FUNCTION</th>
<th>AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRO'S OFFICE</td>
<td>PRIVATE WORK SPACE</td>
<td>144 $</td>
</tr>
<tr>
<td>ASST. PRO'S OFFICE</td>
<td>PRIVATE WORK SPACE</td>
<td>144 $</td>
</tr>
<tr>
<td>SECRETARY AREA</td>
<td>WORK AND CONTROL</td>
<td>100 $</td>
</tr>
<tr>
<td>LOBBY</td>
<td>RECEPTION, WAITING</td>
<td>100 $</td>
</tr>
<tr>
<td>CONFERENCE ROOM</td>
<td>MEETINGS</td>
<td>240 $</td>
</tr>
<tr>
<td></td>
<td></td>
<td>728 $</td>
</tr>
<tr>
<td>PRO SHOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SALES</td>
<td>DISPLAY</td>
<td>1200 $</td>
</tr>
<tr>
<td>FITTING ROOMS (2)</td>
<td>TRY ON MERCHANDISE</td>
<td>32 $</td>
</tr>
<tr>
<td>ELECTRIC CART (100)</td>
<td>STORAGE</td>
<td>3200 $</td>
</tr>
<tr>
<td>PUSH CART (60)</td>
<td>STORAGE</td>
<td>400 $</td>
</tr>
<tr>
<td>GOLF BAG AREA</td>
<td>STORAGE</td>
<td>800 $</td>
</tr>
<tr>
<td>MERCHANDISE RM.</td>
<td>STORAGE</td>
<td>144 $</td>
</tr>
<tr>
<td>HEAVY EQUIPMENT</td>
<td>STORAGE &amp; REPAIR</td>
<td>1600 $</td>
</tr>
<tr>
<td>CLUB REPAIR</td>
<td>REPAIR &amp; SERVICE</td>
<td>64 $</td>
</tr>
<tr>
<td>MEN'S LOCKERS</td>
<td>SHOWERS, SAUNA, W. POOL</td>
<td>2400 $</td>
</tr>
<tr>
<td>WOMEN'S LOCKERS</td>
<td>SHOWERS, SAUNA, W. POOL</td>
<td>2000 $</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11,840 $</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL</td>
</tr>
<tr>
<td>FACILITY</td>
<td>FUNCTION</td>
<td>AREA</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------</td>
<td>--------</td>
</tr>
<tr>
<td>DINING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DINING AREA</td>
<td>DINING</td>
<td>4000 $</td>
</tr>
<tr>
<td>BANQUET ROOM</td>
<td>GROUP DINING</td>
<td>1500 $</td>
</tr>
<tr>
<td>BAND PLATFORM</td>
<td>STAGE FOR BAND</td>
<td>280 $</td>
</tr>
<tr>
<td>DANCE FLOOR</td>
<td>DANCING</td>
<td>400 $</td>
</tr>
<tr>
<td>KITCHEN</td>
<td>FOOD PREP.</td>
<td>750 $</td>
</tr>
<tr>
<td>BAR</td>
<td>DINING RM. DRINKS</td>
<td>100 $</td>
</tr>
<tr>
<td>SALAD AREA</td>
<td>PREP &amp; STORAGE</td>
<td>100 $</td>
</tr>
<tr>
<td>DISH AREA</td>
<td>STORAGE &amp; WASHING</td>
<td>200 $</td>
</tr>
<tr>
<td>EXPEDITE</td>
<td>FINAL FOOD PREP.</td>
<td>200 $</td>
</tr>
<tr>
<td>REFRIGERATORS (2)</td>
<td>COLD STORAGE</td>
<td>72 $</td>
</tr>
<tr>
<td>FREEZER</td>
<td>COLD STORAGE</td>
<td>60 $</td>
</tr>
<tr>
<td>STORAGE RM.</td>
<td>FOOD STORAGE</td>
<td>200 $</td>
</tr>
<tr>
<td>GARBAGE RM.</td>
<td>DISPOSAL</td>
<td>36 $</td>
</tr>
<tr>
<td>RESTROOMS (2)</td>
<td>EMPLOYEE</td>
<td>50 $</td>
</tr>
<tr>
<td>DINING AREA</td>
<td>EMPLOYEE</td>
<td>100 $</td>
</tr>
<tr>
<td>RESTROOMS (2)</td>
<td>CUSTOMER</td>
<td>400 $</td>
</tr>
<tr>
<td>COATROOM</td>
<td>STORAGE</td>
<td>100 $</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8548 $ TOTAL</td>
</tr>
</tbody>
</table>

LOUNGE

| LOUNGE         | MEMBERS                | 1200 $ |
|                | MEETINGS               | 800 $  |
| CARD RM. (2)   | RECREATION             | 400 $  |
| TEEN RM.       | DRINKING LOUNGE        | 1200 $ |
| 19th HOLE      |                        | 3600 $ TOTAL |
SITE SELECTION

The building location was established due to the location of existing course layout and dynamic lake view.
DESIRED ORGANIZATIONAL RELATIONSHIPS
SITE RELATIONSHIPS

A. PRO SHOP
   • ASSOCIATED LOCKER ROOMS
   • PHYSICAL, VISUAL CONNECTION
     TO 9TH, 18TH GREENS (#1, #10 TEES)
   • ACCESS TO PARKING

B. LOUNGES
   • VIEWS (POSSIBLE)
     • LAKE
     • COURSE
   • ACCESS FROM PARKING

C. OFFICES/LOBBY
   • ACCESS FROM PARKING
SITE RELATIONSHIPS

ALTERNATIVES

UNDISPOSABLE

DESIRABLE

VIEWS:
- LAKE
- COURSE
- CENTRAL COURT

DINING ROOM

- VIEW TOWARDS LAKE GIVES NORTH LIGHT EXPOSED LIGHT
- VIEW TOURNAMENT PLAY
- CREATION OF CONSTANT ENVIR.

CORRIDORS
- ACCESS TO Autos
- PROTECTION FROM ELEMENTS
- CIRCULATION FROM OTHER AREAS OF COUNTRY CLUB
- SERVICE TO KITCHEN

GLASS EXPOSED TO WINTER WINDS

COURSE ONLY PLAYABLE 5 MONTHS OUT OF THE YEAR

NOT MAKING USE OF NATURAL SITE QUALITIES
CONCEPT #1

LINEAR CIRCULATION
LINEAR SPATIAL ORGANIZATION

LAKE VIEW

DINING
LOUNGE
LOBBY
POOL
PRO SHOP

VISUAL

HEAVY EQUIPMENT SEPARATED

CONTROL FROM PARKING AREA

GOLF COURSE

NEAREST GREENS AND TEES

POSSIBLE PROBLEMS

1. SITE PROBLEMS FOR LINEAR ORGANIZATION
2. RELATION TO EXISTING TREE - WILL IT FIT IN
3. LACK OF CONTROLLED OUTDOOR SPACE
4. DISTANCE FROM PARKING TO CLUBHOUSE
EXAMPLES OF EARLY CONCEPTUAL ALTERNATIVES
This is the first floor plan of the concept chosen for development. The various internal functions were relocated to allow for better site adaptation and also better relationships between the other functions.
The drawings on this page are from the preliminary presentation. Site improvements, plan developments, building sections.
AT LEFT IS A REVISION OF THE ORIGINAL CONCEPT SHOWING THE DESIRED RELATIONSHIPS AMONG THE OTHER FUNCTIONS.
Drawings from the design development presentation showing facade development. Wood was chosen for the exterior and structure.
DETAIL DEVELOPMENT OF ROOF STRUCTURE.
THUMBNAIL SKETCHES INVESTIGATING COLOR AND USE OF MATERIAL.
STRUCTURAL DEVELOPMENT
FINALIZATION OF SITE PLAN
EARLY DESIGN FOR ATRIUM SPACE
THE DRAWING ABOVE IS THE BEGINNING OF A COLOR AND INTERIOR DEVELOPMENT STUDY.
The project site is located on the west bank of Lake Shafer, four miles north of Monticello, Indiana. To the thousands of vacationers who flock to this city every summer, Monticello is known as a resort town—a center of recreation and entertainment for people of all ages. This is reflected through the population which climbs from 5000 in the Winter to 36,000 in the Summer vacation months. Aside from being just a summer resort town, it is a stable, complete community with much to offer its year round residents:

- A strong and diversified economy supported by agriculture, industry and recreation.
- Complete city services and ample public utilities.
- A modern accredited hospital coordinated with a well trained and highly efficient emergency ambulance unit. Plus ample additional health-care facilities.
- Good police and fire protection.
- A progressive city administration and school board.
- First-class accredited public schools with Purdue University, Valparaiso University, and St. Joseph College nearby.
- Active churches.
- Downtown and suburban shopping centers.
- Full service banking facilities.
- Local newspaper and radio station.
- Services of major railroads, highways, buses, airlines, trucking firms.
- Desirable housing in attractive residential areas.
- Choice industrial sites and ample labor pool.
- A sensible tax structure.
CLIENT DESCRIPTION

The TCC (Tippecanoe Country Club) was founded in 1920 as a corporation for profit, now supports a membership of 900 area residents (450 families) with 100 stock holders. A nine member board of directors operates the club and it is maintained by a staff of 77* full and part time employees. In this sense the club acts as not only a recreational facility but an important contribution to the area job market. It is a semi-private club catering to members and vacationers (non area residents). The restrictions prohibit the use of the club by any one who is not a member and a resident of the Monticello area (unless as the guest of a member). The main attraction to the club is the 6,775 yard championship golf course; the site of Indiana's two largest golf tournaments. Green fees are $7.50 per day ($45.0 per week) for all non-members, and there is a fleet of 72 golf carts available for those who prefer to ride. The course itself has few equals in the mid west - holes #1, 2, and 3 are boarded by Lake Shafer, and a man made pond fronts the #11 tee and is at the left of #17 green.

This chart is prospective employment for the months in which the golf course is open and vacations are at their peak (summer).

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>3</td>
</tr>
<tr>
<td>Dining</td>
<td>45</td>
</tr>
<tr>
<td>Grounds Crew</td>
<td>10</td>
</tr>
<tr>
<td>Lounge</td>
<td>6</td>
</tr>
<tr>
<td>Pro Shop</td>
<td>3</td>
</tr>
<tr>
<td>Pool</td>
<td>6</td>
</tr>
<tr>
<td>Tennis Courts</td>
<td>2</td>
</tr>
<tr>
<td>Locker Control</td>
<td>2</td>
</tr>
</tbody>
</table>

This arrangement of management/staff leads to probably the most critical issue about the club - what happens to the club during the winter months when the golf course is closed and the vacationers are gone? Income suddenly drops and if summer income was lower than expected or improperly budgeted, the club may be operating in the red. To ease this problem it seems that the logical solution would be to introduce income during the winter months. These winter uses will be further explored in section...
CODES

- Club house needs access to a public street not less than 20' in width.
- The access to the public street shall be a minimum 20' wide right of way unobstructed and maintained only as access to the public street.
- The main entrance to the building shall be located on the public street or on the access way.

- Restrooms in dining:
  
<table>
<thead>
<tr>
<th># persons</th>
<th>#toilets</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-100</td>
<td>5</td>
</tr>
<tr>
<td>101-125</td>
<td>6</td>
</tr>
<tr>
<td>126-150</td>
<td>7</td>
</tr>
<tr>
<td>151-175</td>
<td>8</td>
</tr>
</tbody>
</table>
  | 176+      | 1 for every 30 over 175
  
  (in mens' room, urinals may be 2/3 of total)

- Sinks - 1 for every 4 toilets/urinals.
- Locker Room - 8 to 12 showers for every 300 lockers.

NIPSCO

The lake is owned and maintained by the Northern Indiana Public Service Company. NIPSCO also owns a 20' strip of land along the lake front. No permanent buildings may be placed on this property but site work, landscaping, and dock facilities can be done by obtaining a lease from NIPSCO.

UTILITIES

- Electric Service - NIPSCO
- Gas Service - NIPSCO gas is available; subject to the size of space
- Water Service - well
- Telephone - United Telephone Company of Indiana Inc.
- Roads maintained by White Co. Highway Dept.
# Cost Analysis

(Dodge const. Syst. Costs)

<table>
<thead>
<tr>
<th></th>
<th>Price / Sq. Ft.</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro Shop</strong> $276,655</td>
<td>$35.65</td>
<td>97.8%</td>
</tr>
<tr>
<td>Net Building Cost</td>
<td>$36.45</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>$.80</td>
<td>2.2%</td>
</tr>
<tr>
<td>Gross Building Cost</td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Lounger $168,591</strong></td>
<td>$35.02</td>
<td>97.4%</td>
</tr>
<tr>
<td>Net Building Cost</td>
<td>$35.97</td>
<td></td>
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<tr>
<td>Equipment</td>
<td>$.95</td>
<td>2.6%</td>
</tr>
<tr>
<td>Gross Building Cost</td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Dining $320,088</strong></td>
<td>$37.36</td>
<td>97.9%</td>
</tr>
<tr>
<td>Net Building Cost</td>
<td>$38.16</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>$.80</td>
<td>2.1%</td>
</tr>
<tr>
<td>Gross Building Cost</td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Locker Room $109,032</strong></td>
<td>$23.39</td>
<td>94.4%</td>
</tr>
<tr>
<td>Net Building Cost</td>
<td>$24.78</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>$1.39</td>
<td>5.6%</td>
</tr>
<tr>
<td>Gross Building Cost</td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Totals**
ACCESSIBILITY

Distance to 4 major Cities outside of Indiana:

Chicago, Ill. - 110 miles
Detroit, Mi. - 200 miles
Louisville, Ky. - 206 miles
Cleveland, Oh. - 290 miles

Distance to main automobile corridors:

Indiana Toll Rd. - 65 miles
Interstate I-65 - 20 miles
US 30 - 55 miles

Rail Lines:

L & N Railroad
Toledo, Peoria, & Western

Air Service:

White Co. Airport
Nearest International Airport is Indianapolis Charter service is available

Bus Service:

Indiana Motor Bus
**MAJOR NODES**

- Indiana Beach Amusement Park (accommodates up to 10,000 people)
- Lake Shafer - swimming, fishing, boating.
- Lake Freeman - swimming, fishing, boating.

**INGRESS - EGRESS**

Access to and from the site is attained by two means:

- County Rd. Lake Shafer West
- Boat access from Shafer

**EDGE CONDITIONS**

At this location, natural boundaries are the primary means of site enclosure. Lake Shafer acts as a hard edge on three sides: West, East, and North, making the boundary image very distinguishable to the observer. The South edge tends more to be a very soft edge. Land on the site, not used for fairways, has been developed into single family housing. The edge appears uncertain and non-enclosed.
SOIL

TYPE:
Sandy loam:

Prominent on the site and most areas around Lake Shafer.

CHARACTERISTICS:

ENVIRONMENT

In 1923 the Norway Dam on the Tippecanoe River was completed, the result being the creation of Lake Shafer. The land surrounding the lake is gently rolling terrain with flat expanses and valleys cut by streams that feed into the lake. There is a constant string of vacation cottages, developments, and small businesses creating a very densely populated area during the summer. During these months the activity and excitement, on the lake and land, are almost non-stop. There is something for everyone from water skiing to just taking in the scenic views of this beautiful water-front setting.

CLIMATE

Coldest Month:
January, 23 deg. ave.

Hottest Month:
July, 73.5 deg. ave.

Annual Average:
50.3 deg.

Wettest Month:
July, 4.77" rain

Driest Month:
December, 1.56" rain

# Days Under 32 deg.:
43

# Days over 90 deg.:
17

Degree Days per Year:
6200

Annual Ave. Clear Days:
92

Annual Ave. Partly Cloudy:
103

Annual Ave. Cloudy:
170
VEGETATION

The site has an excellent stand of deciduous and coniferous trees. The trees bordering the lake are fully matured hardwoods: mostly oak and maple. The newest trees are located on the golf course: conifers and softwoods. The ground cover is excellent being a fine golf course and expertly maintained.

DRAINAGE

The site is extremely well drained into Lake Shafer, and the fine grass on the course protects against erosion from the water runoff. Because of the control dam, Lake Shafer can be kept at a constant elevation which protects against flooding.
ORIENTATION

On this site the prevailing winds are out of the southwest - cold winter winds come off of the lake. The area is located within the Tornado belt with good possibilities for the storms during the spring months.

SENSORY FEATURES

Because of the motorboat activity on the lake, there is a great amount of unwanted noise generated from the north. From the south, the main access for the west bank of Lake Shafer, cuts through the site producing unwanted automotive noise. The trees on the site produce a more pleasing sound by the rustling of their leaves which acts like a form of white noise to help mask unwanted sounds. The only source of unwanted orders is the inlet on the west edge of the site. Here stagnet water and algae can accumulate. The stagnet water can also be an eyesore.
VIEWS

The TCC has been described as one of the most beautiful courses in the midwest. This man-made environment is extremely sensitive to nature and produces excellent views in all directions. The lake will probably be considered to be the most desirable view if a preference must be made.
DALLAS ATHLETIC CLUB
COUNTRY CLUB
Dallas, Texas
Smith and Mills, Architects

1- Pool Filters
2- Mens' Showers
3- Womens' Showers
4- Pool
5- Management
6- Kitchen
7- Lounge and Dining
8- Bar
9- Womens' Locker
10- Mens' Locker
11- Pro Shop

Block, Brick Veneer
Masonry supported walls with large span beams to allow for large expanses of glass
MISSION VALLEY COUNTRY CLUB
San Diego, California
William F. Cody, Architect

1 - Pro Shop, Cart Storage
2 - Mens' Locker
3 - Womens' Locker
4 - Grill
5 - Bar
6 - Dining
7 - Kitchen
8 - Management
9 - Pool
10 - Locker Rooms

Concrete Column, slab
Glass curtain walls
Very open spatial quality
MIDLAND COUNTRY CLUB
Midland, Texas
Charles Neuhardt, Architect

1- Pro Shop
2- Locker Rooms
3- Lounge
4- Dining, Kitchen, Ballroom
5- Teen Club
6- Pool
7- Showers

Wood, Post and beam
Load bearing walls
COLONIAL COUNTRY CLUB
Fort Worth, Texas
Preston M. Green, Architect

1- Dining
2- Ballroom
3- Kitchen
4- Lounge
5- Great Room
6- Teen Room
7- Women's Lounge
8- Office
9- Mechanical
10- 19th Hole
11- Pro Shop
12- Men's Lounge

Small site required the use of a two-story and partial third story scheme.
WESTMORELAND COUNTRY CLUB
Penn Township
Westmoreland County
Pennsylvania
Harry H. Lefkowitz, Arch.

1- Pro Shop
2- Mens' Locker Room
3- Dining
4- Card Room
5- Kitchen
6- Management
7- Womens' Locker Room
8- Kitchen Storage
9- Boys' Showers
10- Girls' Showers
11- Mechanical

Wood Column and Laminated Wood Beam, Stone Veneer.