mississinewa country club

upland, indiana
william r. pearcy
5-19-81
ACKNOWLEDGEMENTS

It's appropriate to thank certain people at this time as without their help, guidance and inspiration this project would never have materialized.

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Bob Kingsley
Paul Laseau
Henry & Ruth Pearcy
Terri Johnson Pearcy
THE MISSISSINEWA COUNTRY CLUB

The material contained in the following pages attempts to illustrate the problems explored and solutions reached in the process of designing this facility. The information is assembled in a loose chronological order which reflects the order in which the data was collected, analyzed and recorded. The introduction serves to familiarize the reader with the project by providing background information and developing design philosophies incorporated throughout the project. The next section contains that material generated in the first quarter; namely the site analysis, program, and building types analysis. Second quarters' preliminary designs are next, followed by third quarters' final presentation. It is hoped that as one proceeds through the book, significant design issues will become apparent and the solutions will be perceptable. The appendix contains the factual information gathered in the process of design and the bibliography concludes this volume.
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INTRODUCTION

This project consists of developing pasture land no longer in use into an athletic/social facility. The client was perceived as a corporation consisting mainly of people in professional roles (doctors, lawyers, accountants, etc.) interested in both short- and long range goals in dealing with the development of the site.

The Mississinewa Country Club was initially conceived of as a totally private club whose membership would be directed towards executives and professionals of upper middle-class status ($20,000-$60,000) and their families. A membership of four hundred families was considered a minimum requirement to enable the project to be economically feasible. Members are expected to come from Grant, Delaware, Blackford and possibly Madison counties.

The immediate short range goals included the clubhouse/athletic facility, eighteen hole championship golf course, tennis and swimming facilities. The clubhouse itself was required to facilitate a broad range of athletic and recreational activities as well as formal and informal social functions. Long range goals included the accommodation for future residential development to occur, thereby allowing the private club to grow into a private community.

The possibility of allowing public access to the golf course was considered in order to receive more immediate returns upon investment, thus decreasing the financial burden of the members. This idea manifests itself in the separation of the pro shop from the remaining complex, thereby allowing a point of control for all outside activities.

DESIGN PHILOSOPHY

The most important philosophical concern of this project was to achieve the adequate mixture of traditional architectural elements (i.e. textures, materials, natural light, vegetation, views, orientation) to produce a space with a sufficiently strong identity in order to produce an integrated image; and at the same time create enough spatial variety to generate int-
erest in a broad spectrum of personalities. To promote a feeling of possession in each member, this interaction and communication between built environment and user was considered instrumental in attaining success in the project.

**DESIGN INTENT**

The key issues involved in this design process seemed able to be separated into two categories; those dealing with site development and those dealing with the specific built environment. Problems dealt with on the scale of the entire site included:

1. Progression—a controlled and ordered sequence of events, view and vistas as one moved from entry into building as well as from activity to activity.
2. Land use and zoning—the ordering of nodes, events and vistas in such a way as to promote and enhance a perceptible progression.
3. Sympathy toward existing environment—to arrange the building complex in such a way as to allow the natural environment to enhance the built form and vice-versa.

The key issues involved in the design of the building included:

1. Zoning—the ordering of space in such a way as to create nodes of activity and signal the significance of each activity by the interrelation and location of each node.
2. Circulation—the sequence and transitions encountered as one moves from node to node.
3. Image—the club wanted to be perceived as a retreat, or home away from home.

**PROBLEM STATEMENT**

Each architectural element considered in the design process seemed to contribute to a coherent image in varying degrees, but the image as a whole seemed to be more than the sum of its parts. Therefore, the main problem at hand was perceived to be the manipulation of the various conditions existing on the site in addition to the organization of enclosed space in such a manner as to facilitate and enhance a coherent image.
CONCEPT DEVELOPMENT

In order for myself to come to grips with a perceptible image, various analogies were applied, discarded and reapplied to the organization and manipulation of the design issues. The analogy between the organization of space in the club to that of a medieval castle became a source of great inspiration and vastly affected the resulting form. The initial conception of this analogy came as a result of the building types analysis. Country clubs ranging from St. Andrews in Scotland to various pre-modern clubs in the United States employed a vocabulary reminiscent of medieval manor houses and castles. One publication in particular seemed to promote the vocabulary as a traditional aesthetic. In analyzing the situation it became obvious that the desire to build vertically, thereby exploiting the natural beauty of the landscape, could be accommodated in this analogy and manifest itself in the form of towers. Furthermore, it was rationalized that these towers could signify and visually express certain nodes of activity. This analogy began to surface again and again when approaching design problems. From the intention of producing an overwhelming effect with the towers, to the illusion of the building securing the bend in the river, the castle analogy continuously reappeared and dominates the scheme in an attempt to produce a coherent identity and image.
conceptual organization

social tower

view to lake

river view

social vehicular

service drive

recreational tower

social courtyard

food on roof

athletic tower

athletic courts

tennis court

parking
site analysis
GOALS & OBJECTIVES

The site is a non productive ranch located in the south-eastern corner of Grant County, Indiana (Jefferson Township). The Mississinewa River bounds the southern edge of the site and provides a source of thick vegetation and scenic view. County roads form the northern and eastern boundaries of the main portion of the site and it slopes generally from the North to the South a total distance, in section, of ninety feet.

Existing in its' present state the site possesses a distinct character for its' regional location due to the amount and variety of topographical relief and the type of vegetation. Mature strands of maple, oak, sycamore and elm trees dot the site, creating interesting edge patterns and secluded pastures.

Key issues involving the site included: a sympathetic relation between the building and the natural environment; and the exploitation of existing amenities in the attempt to enhance the conceptual framework established by the design philosophies. The sympathetic attitude toward the natural environment was meant to be a method by which selective clearing of unwanted vegetation would create sequences of vistas and reinforce the conceptual framework.

The exploitation of existing amenities was implied to mean the manipulation of such things as edges, views, slope, elevation and vegetation patterns in an attempt to strengthen the conceptual analogies.
regional location
VEGETATION PATTERNS

Siting of the building complex takes advantage of an existing edge between forest and pasture land. Location of the lake serves to reinforce the seam, signify the change in environments and provide a buffer to enhance views and vistas from the building. Location of the main entry drive provides a source of thick vegetation from which to carve a path. By employing selective clearing techniques, a sequence of views can be established upon entry, vistas toward the river can be exploited, and clear views toward the golf course can be established.
SLOPE/ELEVATION

Patterns created by land sloping greater than twelve percent provided interesting suggestions toward siting the building in that the edge of this pattern closely parallels that of vegetation. By locating the building in this vicinity of overlap, the vistas occurring toward the river are greatly enhanced. The elevation at this pattern overlap happens to be the highest of any other point adjacent to the river and within the boundaries of the site. This location provides an extremely dominating position in relation to the river, in effect overlooking and securing the bend in the river. The amount of slope also acts as a natural flood wall.
FLOOD PLANE & DRAINAGE

The location of lakes, ponds and the waterfall attempt to exploit the existing patterns created by both drainage and topography. The location of the road forces the issue of flood control in that it would necessitate the proper handling of drainage.
CIRCULATION/PRIMARY ENTRY

The location of the main entry was the result of numerous intentions. Initially this is a fairly centralized location in relation to the entire site. The intersection of county roads provides a crest in topography, therefore commanding excellent views in each direction. Thick vegetation and topographical relief allows one to organize the entry sequence in such a way as to allow a glimpse of the clubhouse across the lake, then a glimpse of the river before bursting into the open and the confrontation of the bridge/waterfall scenario.
VIEWS

Primary views are oriented toward the river from practically any point on the site. The building location strives to enhance vista's both toward the river and the golf course. Location of main entry provides the opportunity to practice selective clearing in organizing the sequence of views involving entry progression.
STRATEGY DEVELOPMENT

Early in the design process, the decision was made to confine the golf course to that portion of the site lying to the west of County Road 800 East, thereby preventing the problem of golf circulation interacting with vehicular traffic.

Phased residential construction would be developed along County Road 800 East, continuing a previously developed pattern along that road. Development of residential dwellings would also extend to that portion of the site to east of County Road 800 East. In doing so, access to community developments could occur directly off of the County Road. This would also enhance the conceptual analogy in illusion to a village developing outside the main gates of the castle.

In regards to the natural liabilities existing within the site, the attitude to be adopted would necessitate the investment of energy to improve the future value of the site. For example, the location of the road within the flood plane would necessitate the proper solution to the problem of drainage, the intention being to retain for use that part of the site not originally considered as an amenity. The realization that this would be in all probability be the most expensive approach was outweighed by the long term effects and benefits.

The attitude towards the construction of the golf course itself was to selectively clear unwanted vegetation, then integrate the course with the remaining vegetation pattern. This would allow the course to attain a mature visual appearance immediately after construction.

Large tee areas with several tees per hole would be constructed to reduce the wear and to vary the difficulty of each hole by the tee selection.
program
### SPACE/SUPPORT AREA REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Square Feet</th>
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<tbody>
<tr>
<td>1. Social Entrance- direct visual access to administrative and lobby areas</td>
<td>100</td>
</tr>
<tr>
<td>2. Lobby- direct access to lounge dining and ballroom</td>
<td>1800</td>
</tr>
<tr>
<td>a) Waiting area</td>
<td></td>
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<tr>
<td>b) Maitre' de</td>
<td></td>
</tr>
<tr>
<td>c) Cashier</td>
<td></td>
</tr>
<tr>
<td>d) Coat room</td>
<td></td>
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<tr>
<td>e) Public restrooms</td>
<td></td>
</tr>
<tr>
<td>f) House and public phones</td>
<td></td>
</tr>
<tr>
<td>3. Formal Cocktail Lounge- direct access to lobby, dining room, and ballroom</td>
<td>1235</td>
</tr>
<tr>
<td>and ballroom: Seating for 30 people</td>
<td></td>
</tr>
<tr>
<td>4. Main Dining- direct access to lobby, lounge and ballroom:</td>
<td>3248</td>
</tr>
<tr>
<td>Total seating capacity including ballroom 204 people - 62 people</td>
<td></td>
</tr>
<tr>
<td>main floor, 58 people third floor, 84 people ballroom/dining</td>
<td></td>
</tr>
<tr>
<td>a) Chair/Table storage</td>
<td></td>
</tr>
<tr>
<td>b) Hostess station</td>
<td></td>
</tr>
<tr>
<td>c) Waitress station</td>
<td></td>
</tr>
<tr>
<td>5. Administrative area- direct access to main entry and bar/grill</td>
<td>1385</td>
</tr>
<tr>
<td>a) General Receptionist</td>
<td></td>
</tr>
<tr>
<td>b) Managers' Office</td>
<td></td>
</tr>
<tr>
<td>c) Business Office</td>
<td></td>
</tr>
<tr>
<td>d) Active Record Storage</td>
<td></td>
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<tr>
<td>e) Dead Record Storage</td>
<td></td>
</tr>
<tr>
<td>f) Vault</td>
<td></td>
</tr>
<tr>
<td>6. Recreational Entry- direct access to bar/grill, recreation room, locker</td>
<td>500</td>
</tr>
<tr>
<td>area</td>
<td></td>
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<tr>
<td>7. Bar/Grill/Lounge- direct access to terraces: seating for 105 people</td>
<td></td>
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<tr>
<td>for socializing, eating, drinking</td>
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8. Pro Shop- direct access from parking, visual access to all outdoor athletic activities
   a) Office
   b) Toilet/Shower
   c) Merchandise Sales
   d) Storage
   e) House and Public Phones
   f) Temporary Cart Storage
   g) Golf Bag Storage

   TOTAL 15,568

9. Ballroom/Dining Area—seating for 85 people or adequate chair/table storage for use as dance floor/stage area

10. Kitchen
    a) Chefs' Office
    b) Garbage
    c) Dry Storage
    d) Meat and Vegetable Cooler
    e) Freezers
    f) Hot Food Preparation
    g) Salad/Desert Area
    h) Raw Food Preparation
    i) Bakery
    j) Dishwashing
    k) Milk/Coffee Dispensers
    l) Pot/Pan Washing
    m) Employee Lounge

11. Restrooms—services for public and employees 220

12. Receiving Dock—direct access to kitchen and bar/grill—adequate space for service trucks and trash 1046

13. Bar/Grill—seating for 25 people 1600

14. Recreation Room—activities include cards, billiards, ping pong, shuffle board 1600
SPACE/SUPPORT AREA REQUIREMENTS

15. Athletic Entry- atrium space- 
direct access to recreation, 
bar, lockers
SQUARE FEET

16. Locker Rooms- men and womens' 
  a) Locker Area 
  b) Showers 
  c) Restrooms 
  d) Towel/Toilet Dispensary 
  e) Janitor 
  f) Bulletin Boards 
  g) House and Public Phones 
  h) Saunas 
  i) Jacuzzi

17. Restrooms- servicing bar/grill 
and recreation

18. Racquetball Courts (4 courts) 
visible from terrace

19. Gymnasium- capable of basketball, 
volleyball, tennis

20. Mechanical Room- 
  a) HVAC equipment 
  b) Hot Water 
  c) Electrical drop 
  d) Maintenance Room

UPPER LEVEL PLAN

21. Third Floor Dining- dining and 
support area seating, 56 people
  a) Waitress Station 
  b) Public Restrooms

TOTAL 33,322

SUPPORT AREAS

22. Swimming Pool

23. Decking- terrace deck with pump & 
filter, facilities below decking & 
temporary cart storage

SQUARE FEET
24. Tennis Courts - 6 courts
25. Parking for 200 cars
26. Maintenance Building - utilizing existing barn
   a) Superintendents Office
   b) Golf Cart Repair Area
   c) Golf Cart Storage
   d) Tool and Crib Storage
   e) Employee Lockers
   f) Oil, Gas, Grease Storage
   g) Machine Shop
27. 18 Hole Champion Golf Course
building types analysis
BUILDING TYPES ANALYSIS

The criteria used for analyzing solutions to similar design projects included: image, zoning, circulation, structure, scale and proportion, with close attention payed to those elements of particular interest. The two clubs illustrated, Guam Golf Club and Montauk Golf and Racquet Club, were chosen due to the fact that they projected the strongest perceptible image of all the projects that were analyzed.
The image of the building is most vividly expressed in the roof forms. The intention was to remind one of the thatched roof huts common to that area. This seems to be an accomplishment in a rather elegant way.
ZONING & CIRCULATION

Zoning of the functions and circulation patterns basically adhere to the structural grid. Each quadrant contains a separate function and circulation occurs on the main axis, creating an interior street.
CORRELATION DIAGRAM

This is a fairly simple plan in terms of zoning, circulation, and function. It was designed with the golfers' line of movement in mind. The plan, organized into quadrants, assigns a different function to each quadrant, creating a bind of street leading through it. Along with the street, are the administrative offices, lockers, restaurant and lounge.
STRUCTURE AS ORDER

The structural materials consist of steel and reinforced concrete. Organization of spatial function is related to the structural grid. The function of each quadrant is expressed as independent elements, each with its own roof, with another separate roof containing the street and providing unity for the whole scheme.
SCALE & PROPORTION

The scale of the building seems to maintain a relation to the human figure. While the roof of the complex is treated as a sculptural element, the proportion of roof to the rest of the building seems to be handled skillfully.
The form of this clubhouse is intended to symbolically represent the many sand dunes that exist upon the site. It seems to work, although one may have a hard time perceiving this analogy out of context.
ZONING & CIRCULATION

The zoning of this club established a vertical hierarchy which designated the upper level to formal/athletic activities. The athletic facilities are zoned in such a fashion as to create a circulation spine while the social areas are organized into a circulation loop, the terraces providing a path to ground level.
CORRELATION DIAGRAM

The relation of spaces on the lower level is strictly defined by the circulation spine with no relation existing at all except by means of the spine. The layering of space seemed to be more of a concern in the social areas as circulation was not so strictly regulated, allowing a more flowing feeling.
STRUCTURE AS ORDER

The structure is handled in a straight-forward manner, but more attention could have been placed on allowing the structure to be a definer of space.
SCALE & PROPORTION

The scale of the building is quite monumental as the roof and earth embankments were used as sculptural elements. Without the embankments, the roof would seem terribly out of scale. But as is, an interesting relationship between ground and building has been established.
second quarter
In this early attempt at organizing the dining area several concepts can be seen. The main concern was to allow the space to be simultaneously oriented to the inside and outside. The vertical organization and layering allows views toward the river to be exploited while at the same time the whole space can be oriented toward the lower level when utilized as a dance floor. Natural lighting and ventilation was a concern as was structural expression.
The main concerns of this drawing are identical to those previously mentioned. The possibility of combining vertical circulation with the wing walls is explored as is construction techniques and systems integration.
third quarter
ballroom/dining perspective
appendix
aerial photograph
NOT IN SCALE

PTG, WK K-81 FLOWN 69 CP YR.
GRANT COUNTY, INDIANA

POTENTIAL UTILITY SERVICE AREA

SANITARY SEWER AND WATER SUPPLY.
bibliography


