ACTIVITIES CENTER

White River Recreational Center

Charles M. Brown Jr.
Thesis Project
School of Architecture
Ball State University
October 9, 1978
CHITECTURAL TESIS PROPOSAL

Tering Thesis Studio (Quarter/Year) FALL / '78

Student's Name CHARLES MATTHEW BROWN JR. Studio Critic FISHER **

National Critics KOESTER, TAYLOR

Title of Project ACTIVITIES CENTER

Building Type RECREATIONAL FACILITY

Location INDIANAPOLIS, IN. (the present location of the new tennis arena)

Building size 43,720 sq.ft. Site Size 50,000 sq.ft.

Description of Project: The project (activities center) will include one or two restaurants, lounges, 12 raquetball courts, 6 squash courts a pro shop and support spaces.

Client/User Description: CLIENT: Craig Mullins, a former ESU student who presently is project manager of the new tennis stadium. USER: This building will be open to the public for public and private use.

Context Description

On Site: The site is relatively flat with a slight berm on the West side. Presently a steam uplift building is located on the site, it may or may not be included in the building.

Adjacent environment: Imediately to the North is the future clay practice courts, beyond is IUPUI's law school and parking lot. To the west is the steam building. To the south is IPAIC0 and Acme Evens. To the East will be the tennis complex and park.

Student's background or research in topic area:
For years I have enjoyed the games of tennis and squash. More recently I have enjoyed working at the U.S. Open Clay Court tournament previously held on the North side of Indianapolis.

Reasons for choosing project:

1. I enjoy these sports and have worked around them fora large part of my life.

2. Upon meeting with Craig Mullins I discovered that a facility similar to mine had been planed as a second phase to the project he is working on now.

3. In choosing this project I hope my appreciation of these sports will increase.

Students signature Date

indicate preference
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WHITE RIVER RECREATIONAL CENTER @ (IUPUI)

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INTRODUCTION

CONTENT  The purpose of the architectural thesis is to give the student an opportunity to express and experience the comprehensive responsibilities with which an architect must cope to successfully render the best possible service to his clients. The following document is an abstraction of an actual design experience that has been carried through from the selection of the project to program formation schematic design, and design development. Furthermore, this book is a documented summary of the work completed. From this work it becomes possible to evaluate my work and methods in reaching a design decision.

ORDER  The following pages of context make up the thesis project and for various reasons of simplicity, the product may be broken down into general categories. These breakdown categories consist of: A) The process area, B) The product area and C) The reference section. The process area consists of an introduction, objectives, program and site analysis. The product area consists of the concept design, schematic design, design development and final design. The reference section contains all references and acknowledgments.
Statement of Intended Project (U.S. Open Clay Courts)

I intend to design an Activities Center for residents of Indianapolis, IUPUI, and surrounding areas. This project will include a master site plan and a design in detail of the Activities facility and its immediate surroundings. The design will include major recreational spaces such as tennis, racquetball, squash and various other support areas.

Presently the firm of Browning, Day & Pollak Associates, Inc. have a conceptual model, plans and photographs of a new stadium, tournament tennis courts and youth hockey. Other tentative plans for developing the entire White River Recreational Area are futuristic, however, a master plan of future developmental locations has been compiled by a local architectural firm.

Phase One of construction will include 12,000 permanent seats on three sides at the stadium court and eighteen clay courts, nine of which will be used during the tournament period of the U.S. Open Clay Courts Championship. Phase Two construction is of major interest since it will include my theses project. Briefly, the activities center will include one or two restaurants, lounges, twelve racquetball courts, six squash courts and a pro shop.
OBJECTIVES

1) To generate a facility that is inherently part of the city of Indianapolis.

2) To create a certain understanding within each individual that they are part of the facility.

3) To create more of an awareness between the various activities maintained within the facility.

4) To correlate and reflect all negative and positive qualities of surrounding buildings, into an aesthetically appealing building design.

5) To create spaces unique with surrounding buildings and unlike any other building similarly designed.
GENERAL INFORMATION

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
GENERAL INFORMATION

A. Location

Indianapolis, the capital of Indiana, is located in the central portion of the State in the heart of the Midwest. It is approximately 114 miles northwest of Cincinnati, Ohio, and 186 miles southeast of Chicago, Illinois. (Refer to Map 1)

B. Utilities

The principal suppliers of utilities are:

- Electricity: Indianapolis Power & Light Company
- Water: Indianapolis Water Company
- Gas: Citizens Gas & Coke Utility
- Sewers: City of Indianapolis
- Telephone: Indiana Bell Telephone Company

C. Fire and Police Protection

The Indianapolis Fire Department provides fire protection for the area in which the project is located. The Fire Department has received a Class 2 rating from the Fire Insurance Underwriters making protection excellent. The Fire Department is staffed by 900 firemen operating more than 100 fire trucks.

The Police Department is staffed by more than 1,000 uniformed officers with a fleet of approximately 735 vehicles and a police helicopter.

D. Transportation

Transportation facilities in the Indianapolis area are considered outstanding. The City is the crossroads of the national interstate highway system, with more interstate highways converging on it than on any other city in the United States. (Refer to Map 2) Complementing the highway system are major rail, air, bus and motor freight services.

E. Education

In addition to the highly rated public and private, elementary and secondary school systems, there are nine private or state supported colleges in the Indianapolis area. The largest of these is the joint Indiana University-Purdue University campus being developed in conjunction with the Indiana University Medical Center. (Refer to Map 3) IU-PUI with an enrollment
MAP 1: REGIONAL LOCATION
MAP 3: REGIONAL CENTER BOUNDARIES
of approximately 20,000 (5th largest in the State) has more than 100 degree programs offering degrees ranging from the two-year associate to the doctorate. The campus also includes the State's only medical-dental schools, the State's largest nursing and law schools and graduate as well as undergraduate training in business, education, science, engineering, arts and sciences and the humanities. The campus which is located approximately two blocks from the project site, has a master plan providing for major expansion over its 200 acre site.

F. Tourist Attractions

Presently in Indianapolis there are several tennis centers. The most popular and famous is the Northside Racquet Club. For the past several years it has been the host of the U.S. Open Clay Courts. However, due to the overcrowding and the necessity to expand, the Indianapolis Sports Center was proposed. Its location is of prime importance since it is one of two tennis facilities located in Urban Indianapolis. The only other is the Tarkington Tennis facility located at 40th and Meridian. Several other facilities are located around the peripheral areas of the city, these facilities are all separated into specific sport activities such as racquetball or tennis. The only facility for squash is located in the Indianapolis Athletic Club at the corner of North Street and Meridian Street. It is my belief that if phase II of development is completed and a recreational center is built that it will attract a great deal of visitors as well as accommodate the general public of urban Indianapolis.

G. Growth/Change

This project is presently being programmed to its fullest extent according to the future plans for prospective growth at IUPUI. If any further expansion is necessary it will be to the southwest of the present project (to be located in the present project's parking lot). Further expansion may possibly be located even further southwest across the New Agnes Street connection in a separate facility.
INDIANAPOLIS SPORTS CENTER

The development needs of the City of Indianapolis were assessed in a professional research project commissioned by the Chamber of Commerce in 1972. This Fantus Report considered the positive and negative factors which impact most heavily on the progress of this City and its inhabitants. The prime area of concern highlighted in the report was the "image of the community." Quite candidly, the report stated that our national image suffered greatly, and surveys substantiated the fact that people throughout the world perceived Indianapolis as a "straightlaced, unglamorous working town."

Since that study was completed, great strides have been made to improve the image of our City, but much work needs to be done. We now have before us a unique opportunity to enhance the image of our City and at the same time provide recreational facilities in the center of our City that will be an integral component in the renaissance of the Indianapolis regional center.

The proposed White River Recreational Complex is a two-phased development effort that will provide year-round public recreational facilities and be the permanent home of the prestigious U.S. Open Clay Court Championships. In Phase I of the project, eighteen (18) new tennis courts will be built. Six of these courts will be enclosed during the winter months, two of them will be surrounded by small stadiums seating 2,000 people each, and one court will be
in a multi-purpose stadium, seating up to 12,000 people. The main stadium court will be converted to an ice rink during the winter for public skating and a youth hockey program. In addition, the stadium can be used for outdoor assemblies, concerts and programs.

Phase II of the project will provide for the private development of an Activities Center that will include a restaurant, pro shop and racquetball courts and squash courts.

The White River Recreational Complex will be built on 16 acres of land immediately adjacent to the IUPUI campus. This location was specifically selected because the re-development of this land will affect the university and be coordinated with the master plan for the revitalization of the regional center of Indianapolis.

The regional center has long experienced the need for adequate recreational facilities. The proposed complex will be open to the public. In addition, the complex will be utilized by IUPUI. The University, presently, does not have any such recreational facilities on the campus for either physical education classes or intramural recreation, including use by the faculty and staff of IUPUI.

IMPACT

The impact of the availability of the amenities offered through the development of the multi-use facility cannot be exaggerated. At a time when downtown is being promoted as an exciting place in which to live, work and recreate, this
facility could be one of the determining factors in the future progress and success of the overall revitalization program.

Thirty-seven percent of the Center Township population is in the 6-13 and over 60 age group - the age groups containing young participants and older spectators. With the development of this proposed facility, the opportunities for both spectator and participant recreational activities will be considerably enhanced.

The impact of the facility on the University area also cannot be understated. The proposed development could trigger the rehabilitation and redevelopment of areas adjacent to the university, creating an economic spin-off which will benefit the total community.

The site selected will also affect development of the downtown river complex and improvement of the historic Military Park.

PROJECTED COSTS

The projected cost of phase II of this facility is approximately 3 million dollars. It is to be completely financed by a private developer. The city is providing a 20 year low lease bond.

SUMMATION

According to the Fantus Report, the ability of a community to appeal to conventions and recreational visitors as well as new business depends largely on local leisure
offerings, high quality professional sports, accommodations and image. This image needs an injection of vitality appropriate for a City of the significance of Indianapolis - a City with a major university within its downtown area. Development of the proposed White River Recreational Complex through private and public sector efforts will help meet the recreational needs of the mid-town community and help to establish for Indianapolis a reputation as a vital and exciting City, equally inviting to developers and residents.
ZONING

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
SPACE RELATIONSHIPS

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
SPACES

ADMINISTRATIVE AREA (offices)

The administrative offices should be located centrally and be adjacent to the main entrance in order to be accessible easily to the general public. The main function of the space will be to act as administrator, controller and information point for the general public.

This space should contain one private office for the manager and a general office for the assistant manager. It may or may not include subsequent spaces for each pro, a bookkeeper and a secretary-receptionist.

LOUNGE

This space should have a seating capacity of approximately 45 for informal drinks and relaxation. This space should be plushly decorated. It should be located near the grill area and kitchen. The main purpose of this space is to promote conversation and relaxation for the player.

DAY CARE CENTER

This space should include enough room to accommodate 20-35 children for a period of 2-4 hours at a time. The space should include an office for the director, play area, toilet and rest area. The day care center should be available for use Monday through Friday from 8:00 a.m. to 4:00 p.m. daily.

EMPLOYEE LOCKER ROOM

This space should include lockers for each employee, some bathing facilities and a toilet. Both male and female employee lounges should have direct access into the employees lounge.

EMPLOYEE LOUNGE

This space should accommodate 8 employees on break. Its location should be adjacent to the employee locker room. The furnishings and character of this space should afford an opportunity for relaxation and small group conversation.
GAME ROOM

This room should be geared toward active type gaming. The space should include billiards, table tennis and smaller gaming tables such as pinball and foosball. Its location should be nearby the grill area with adequate supervision provided by the pro shop.

MEETING ROOM

This space must accommodate a minimum of 50 to 60 people comfortably. Its purpose is to teach various strategies of each game through film, video tape, and/or chalk board talks. The room may or may not be separated by an acoustical barrier to form two separate meeting rooms. These spaces should be located near the administration offices and main entrance. The quality of these spaces is variable to accommodate the atmosphere of a meeting room and a dining-drinking room.

GRILL

This space should accommodate 30 to 50 people having lunch. The grill should be located near the locker room, pro shop, lounge and kitchen. The furnishings should include lunching bar, tables and chairs. The grill should have a strong indoor-outdoor relationship.

PRO SHOP

The pro shop should obviously be located near the entry. As each person enters or leaves the facility he/she must become aware of salable athletic items. The space should especially allocate the merchandising of squash, racquetball, handball and tennis equipment. Nearby auxiliary spaces for the pro's offices, first aid room, racquet stringing room and stock or storage room. This space must be supervised constantly and expensive equipment should be locked up at all times. This space should be located in close proximity with the locker room and grill.

PUBLIC LOCKERS

Capacity for 400 to 500 male and 200 to 300 females with lockers, showers, toilets, sauna, whirlpool and dressing facilities. A control should be included for towel dispensing and locker room supervision. The space should have direct access to the pro shop and all courts. There should also be a lounge in each locker room.
WEIGHT ROOM

The weight room should be centrally located somewhere between the male and female lockers. It will contain at least one universal gym set as well as several free weights. Hours may be set up to accommodate one sex at a time or a coed system may optimize its use. It may, however, be more feasible to have similar sets in each locker room.

KITCHEN

This space should include walk-in cooler, food storage, walk-in freezer, managers office, restroom and sufficient space and equipment for the preparation of a maximum of 600-800 meals daily. Suitable dock area should be adjacent to the kitchen for receiving supplies with storage area to accommodate these supplies and outgoing refuse. The kitchen should be located adjacent to the dining room, grill, and bar in such a way that there is no traffic conflict.

DINING FACILITIES

There should be two dining rooms, one to accommodate 175 people and the other to accommodate 75 people. The one which accommodates 75 should have the capacity to divide into smaller equal spaces. The quality of this space should be plush with the possibility of moving in a portable dance floor. These spaces should include adequate patio space as well as being adjacent to the kitchen. Appropriate spaces for storage of tables, chairs, and dance floor must be provided.
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<th>Entry</th>
<th>Administration</th>
<th>Lounge</th>
<th>Day Care Center</th>
<th>Employee Restrooms</th>
<th>Grill</th>
<th>Pro Shop</th>
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<th>Kitchen</th>
<th>Dining Rm</th>
<th>Indoor Tennis</th>
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USER IDENTIFICATION

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
Users of Facility

City of Indianapolis
   Families
   Men
   Women
   Children

IUPUI students (approx. 35,000)

Secondary Users
   Tourist trade
   Visitors

Captive Users

<table>
<thead>
<tr>
<th>Employees</th>
<th>Administrative office</th>
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<tbody>
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<td>General manager</td>
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<td>Office manager</td>
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<td></td>
<td>Full time pros</td>
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<td>Part time pros</td>
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</table>
Indoor Racquetball  Employee

Director  1
Full time pro  1
Part time pro  2+

Indoor Handball

Director  1
Full time pro  1
Part time pro  2+

Kitchen

Director/Dietician  1
Chef  2
Food Preparation  1
Cooks  2
Assistants  2-3
Waiters/Waitresses  5-8

Pro Shop

1 pro at all times  1
Assistants  2
Helpers  2-3

Desk

Part time help  2-3
Full time help  2
SPECIAL EQUIPMENT

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
SPECIAL EQUIPMENT

ADMINISTRATION
Telephone
Intercom
Music distribution
Safe

BAR/LOUNGE
Telephone
Intercom
Music distribution
Television
Bar-sink
Refrigerator
Ice machine
Light reostat

DAY CARE CENTER
Toilet
Sink
Drinking Fountain
Television
Intercom
Telephone
Music distribution

EMPLOYEE LOCKER ROOM
Intercom
Music distribution
Shower
Toilet

INDOOR SPORTS ARENAS
Intercom
Drinking Fountain

MEETING ROOM(S)
Intercom
Audio visual aids
Projection screens
Blackboard

PRO SHOP
Telephone
Intercom
Music distribution
Drinking Fountain
Sink (first aid)
Display equipment
Cash register
PUBLIC LOCKERS
  Telephone
  Intercom
  Music distribution
  Toilets
  Showers
  Sauna
  Drinking Fountain
  Whirlpool

WEIGHT ROOM
  Universal gym
  Intercom
  Drinking Fountain
  Free weights

ENTRY DESK
  Light control panel
  Fire alert enunciator
  Cash register
  Court timers
  Registration files & membership display
  Music distribution
  Intercom distribution
  Telephones

KITCHEN
  Plate Warmer
  Steam Table
  Mixing Machine
  Food Cutter
  Butcher Block
  Bake & Roast Oven
  Seamer
  Fryer
  Sinks
  Dishwasher
  Bakers Table
  Freezer
  Cooler
  Intercom
  Music distribution
  Telephone
  Toilet
<table>
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<tr>
<th></th>
<th>Drinking Fountain</th>
<th>Interior/Calix</th>
<th>Music/Distribution</th>
<th>Telephone</th>
<th>Cash Reg.</th>
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<th>Television</th>
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<th># of Staff</th>
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<td>Game Room</td>
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<td>Meeting Room</td>
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ENVIRONMENTAL QUALITIES

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
<table>
<thead>
<tr>
<th>Room</th>
<th>Class</th>
<th>Temp.</th>
<th>Air Circ.</th>
<th>Light</th>
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<tr>
<td>Administration</td>
<td>Y</td>
<td>60-72</td>
<td>70 cfm/pt</td>
<td>100 fc</td>
</tr>
<tr>
<td>Lounge</td>
<td>L</td>
<td>60-72</td>
<td>30 cfm/pt</td>
<td>5-60 fc</td>
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<tr>
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<td>L</td>
<td>60-72</td>
<td>20 cfm/pt</td>
<td>40-70 fc</td>
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<td>30 fc</td>
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<td>50-90 fc</td>
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<td>65-68</td>
<td>30 cfm/pt</td>
<td>30 fc</td>
</tr>
<tr>
<td>Grill</td>
<td>L</td>
<td>60-70</td>
<td>30 cfm/pt</td>
<td>50 fc</td>
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<td>X</td>
<td>40-50</td>
<td>30 cfm/pt</td>
<td>30-50 fc</td>
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<tr>
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<td>40-50</td>
<td>30 cfm/pt</td>
<td>30-50 fc</td>
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<tr>
<td>Kitchen</td>
<td>L</td>
<td>60-70</td>
<td>20 cfm/pt</td>
<td>70 fc</td>
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<tr>
<td>Dining Room</td>
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<td>20 cfm/pt</td>
<td>5-60 fc</td>
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<tr>
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<td>70 fc</td>
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<td>Pro Shop</td>
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<td>100 fc</td>
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<td>L</td>
<td>65-68</td>
<td>20 cfm/pt</td>
<td>30 fc</td>
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<tr>
<td>Weight Room</td>
<td>L</td>
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<td>25 cfm/pt</td>
<td>30 fc</td>
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</table>

Class X and Y do not require an independent ventilation system.

Class L does require individual, independent ventilation.
SPACIAL QUALITY MATRIX

WHITE RIVER RECREATIONAL CENTER @ (IUPUI).
<table>
<thead>
<tr>
<th>Location</th>
<th>Quiet</th>
<th>Semi-Quiet</th>
<th>Noisy</th>
<th>View In From Public</th>
<th>View Out Of Private</th>
<th>Nat'l Light</th>
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<tbody>
<tr>
<td>Entry</td>
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<td>Lounge</td>
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<tr>
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<td>Employee Lock</td>
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<td>Meeting Rm.</td>
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<tr>
<td>Grill</td>
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<td>Dining Room</td>
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<td>Indoor Tennis</td>
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<td>Indoor Squash</td>
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<td>Maintenance</td>
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</tbody>
</table>
SPACE / AREA SQUARE FEET

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
WHITE RIVER RECREATIONAL COMPLEX
PRELIMINARY PROGRAM DEVELOPMENT

1) U.S.T.A. Administrative Room
   - View to Clay Tournament Courts.
   - This space would not have 12 month use so it could be a shared use of another space.
   - This space could serve as a meeting room and delete the need for item 16.
   3600 S.F.

2) Pro Shop
   - 1500 S.F. for sales
   - 1000 S.F. Maintenance, Repair, Storage
   2500 S.F.

3) Players Lounges and Observation Areas

4) First Aid Room
   100 S.F.

5) Restaurant 250 Seats Total
   - 175 Seats moderate priced (viewed to tournament courts) 3500 S.F.
   - 75 Seats high priced (viewed to tournament courts) 1500 S.F.
   - If open during tournament, no common entrance with activities center.
   - Kitchen, storage, cooler, freezer, trash, etc.
   - Waiting Lounge
   - Bar view to outdoor tennis & racquetball 400 S.F.
   - 2 private dining rooms
   - Kitchen delivery area
   - 1600 S.F.

6) Grounds Maintenance Room & Storage
   - Access to outside (court area to north)
   - To hold nets, rollers, brushes, tape, hartru bags, brooms, etc.
   400 S.F.

7) 12 Racquetball - Handball Courts
   - Viewing area 2nd level
   - Two courts to have spectator viewing area for tournaments 12,000 S.F.

8) 6 Squash Courts
   - Viewing area 2nd level
   - One court to have spectator viewing area for tournaments (glass) 6000 S.F.
9) **Racquetball Control Office/Tennis Courts Office (Scheduling)**
   - Private Office 420 S.F.
   - Nursery 200 S.F.
   - Concessions/Lounge/Waiting 200 S.F.
   - Close proximity to outside courts
     for winter use and racquetball courts.

10) **Mens Locker Room**
    - Private Showers
    - Sauna
    - Steam Bath
    - Whirlpool/Jacuzzi
    - Close proximity to outside courts
      for winter use and racquetball courts.

11) **Womens Locker Room**
    - Private Showers
    - Sauna
    - Steam Bath
    - Whirlpool/Jacuzzi
    - Close proximity to outside courts
      for winter use and racquetball courts.

12) **Mechanical Room(s) – Janitor Rooms – Electrical Rooms**
    - 500 S.F.

13) **Ticket Office**

14) **Circulation**

15) **Men and Womens Restrooms**
    - More than one location
    - Potential to have outdoor entry
      and exit for tournament and summer
      courts use.

16) **Meeting Room**
    - 600-900 S.F.

17) **Bar Lounge**
    - Seating for 50 (500 S.F.)
    - Bar seating for 10 (200 S.F.)
    - Storage area (150 S.F.)

18) **Game Room**
    - Pinball/Poolball
    - Billiards
    - Table Tennis

19) **Grill**
    - 900 S.F.
20) **Weight Room**

21) **Entry**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td></td>
<td><strong>400-500 S.F.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>600 S.F.</strong></td>
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</table>

**TOTAL**

**43,720 S.F.**
CRITICAL ISSUES

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
CRITICAL ISSUES IN DESIGN

1) **Circulation** - Obviously in a sports facility of this magnitude, circulation becomes a main priority especially during the Clay Court Tournament. Separation of spaces and spacial relationships become the most critical issues when dealing with circulation. Separation of primary users, secondary users, and captive users becomes equally as important when dealing with intra-structural circulation. Exterior separation of vehicular and pedestrian circulation is also necessary.

2) **Structure** - The structure must immediately convey the importance and uniqueness of this recreational center. Exteriorly it will reflect the spaces located within yet, not dominate the nearby Law School and Sports Center Arena. Its massing should portray the boldness involved with the sports that take place inside. The structure should not overemphasize the entrance or human scale.

3) **Views** - Several areas within the facility call for very distinct vantage points or views.
   a. Dining areas must view tennis courts.
   b. Viewing areas for Tournament Racquetball.
   c. Viewing areas for Tournament Squash.
   d. Viewing areas for Tournament Tennis.
   e. Towel dispensers must view locker rooms.
   f. Pro shop must view entry/exit.
   g. Various athletic events must view each other.
BUILDINGS TYPE ANALYSIS

WHITE RIVER RECREATIONAL CENTER @ (IUPUI).
Lawn tennis club in Dublin

**Fitzwilliam Tennis Club**

At Appian Way, Dublin 6
for Fitzwilliam Lawn Tennis Club
by Stephenson Gibney & Associates
partner in charge Sam Stephenson;
associates in charge Jim Smyth design production,
P. J. Rigney project management, Aine Lawlor
interior design;
assistant architects Barry Gillen, Edward J. Horan;
assistants John Dempsey Catherine Duffy,
Jim Malcolm, George

---

**Major Elements**

**Club**

**Tennis**

---

**Spatial Theme**

**Major Social Spaces (front)**

**Ancillary Accommodation**

**Activity Spaces (back)**

---

**First Floor Level**

**Squash Courts**

**Kitchen**

**Foyer**

**Bar**

**Billiards**

**Dining/Lounge**

---

**Ground Level Arrangement**

**Staff**

**Change**

**Swimming Pool**

**Foyer**

**Terrace**

**Tennis**

---

**Second Floor Level**

**Viewing Gallery**

**Living**

**Tail**

**Roof**

**Viewing**

**Tennis**

---

A Location plan (1:500)
Squash cordial

Architect Pierre Powell Associates
Job architect Richard Falconer
Contractor N. Prat & Sons

PLAN

ORGANIZATION

COURTS
CIRCULATION
CLUB

GEOMETRY/FORM

COURT

CIRCULATION

LIGHT

VIEW

FORM & FUNCTION

COURT
Air and light seem to flow freely throughout Racquet Club space. Ceiling height contributes to this effect by not being enclosed, save for nets that stop stray shots and protect luminaires overhead. Courts themselves are designed for heavy duty use with walls of resin-bonded composition board with white and red painted markings. Section of building looking east (parallel to main thoroughfare) shows designer's ingenuity in using all available space for Club activities.

Key to section:
1. Information desk and pro shop
2. 1st floor exhibition court
3. Bar and restaurant
4. Backgammon room
5. Observatory lounge
6. 3rd floor courts
7. 4th floor catwalk
8. 5th floor courts
9. Director's office

Special Changes:

Structure:

Exterior Views:

Order:

Future

Private

Public

Gallery

Entry

Maint
COST ANALYSIS

WHITE RIVER RECREATIONAL CENTER @ (IUPUI)
<table>
<thead>
<tr>
<th>ITEM</th>
<th>SUB-TOTAL</th>
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<tbody>
<tr>
<td>Building Cost</td>
<td>... Bldg. $43/sf. X 50,278 gsf ... 2,161,954</td>
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<tr>
<td>Fixed Equipment</td>
<td>Bldg. $2,161,954 @ 8% ... 172,956</td>
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<tr>
<td>Site Development</td>
<td>... Bldg. $2,161,954 @ 5% ... 108,098</td>
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<tr>
<td>Movable Equip</td>
<td>... Bldg. $2,443,008 @ 10% ... 244,300</td>
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<tr>
<td>Bldg. Total</td>
<td>... Bldg. Net Total ... 3,273,629</td>
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<tr>
<td>Courts</td>
<td>... Courts Net Total ... 784,672</td>
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<tr>
<td>Combined Net Total</td>
<td>... Combined Net Total ... 4,058,301</td>
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THE SITE

WHITE RIVER RECREATIONAL CENTER & (IUPUI)
**LEGEND**

FOR GENERALIZED SOIL PROFILES

U.S. OPEN CLAY COURTS
CHAMPIONSHIP FACILITY
INDIANAPOLIS, INDIANA

**Boring Number**

**Existing Ground Surface**

**Trash or Cinder Fill**

**Clay Fill**

**Concrete Slab**

**Clayey Sand**

**Silt**

**Fine Sand**

**Outwash Sand & Gravel**

**FEET**

**ELEVATION**

**STANDARD PENETRATION TEST N-VALUES**

**LONG TERM WATER LEVEL READING**